

Monday, February 15, 2010

**LOS ALAMOS**  
**NATIONAL LABORATORY**

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.  
2040 Savage Rd  
Charleston, SC 29407

These Samples are on:  
LANL Request Number: 10-1863  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/15/2010  
TURNAROUND/REPORT DUE: 3/17/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background  
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



| PRIORITY     | METHOD CODE | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|--------------|-------------|-------|--------------|---------------|--------------|----------------------|
| SW-846:6010B |             | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8187 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8188 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8189 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8190 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8191 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8192 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8193 | R             | 2/10/2010    |                      |
|              |             | 1     | RE15-10-8194 | R             | 2/10/2010    |                      |

Monday, February 15, 2010

| PRIORITY     | METHOD CODE | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|--------------|-------------|-------|--------------|---------------|--------------|----------------------|
| SW-846:6010B | 1           | 1     | RE15-10-8195 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8196 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8197 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8211 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8226 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
| SW-846:6850  | 1           | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8187 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8188 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8189 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8190 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8191 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8192 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8193 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8194 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8195 | R             | 2/10/2010    |                      |
| SW-846:9012A | 1           | 1     | RE15-10-8196 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8197 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8211 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8226 | R             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |
|              |             |       | RE15-10-8235 | W             | 2/10/2010    |                      |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8188

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |      |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|------|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | OBT3   |              | OK   |
| TIME COLLECTED (HH:MM)      |           | 11:02        |  | SUB-MEDIA:               | TUFF 1 |              | OK   |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | HA     |              | CB-5 |
| LOCATION ID:                | 15-610817 |              |  | FIELD QC TYPE:           | NA     |              | OK   |
| LOCATION TYPE:              | GENERIC   |              |  | FIELD PREP:              | NA     |              |      |
| TOP DEPTH:                  | 0         | 34.0 ft      |  | SAMPLE USAGE:            | INV    |              |      |
| BOTTOM DEPTH:               | 0         | 35.0 ft      |  | SCREEN/PORT DESC:        | NA     |              |      |
| FIELD MATRIX:               | R         | OK           |  | EXCAVATED: YES (NO) NA   |        |              |      |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA     |              |      |
| BOREHOLE: YES/NO/NA         |           |              |  | WATER FLOWING: YES/NO/NA |        |              |      |
| BOREHOLE DECLINATION:       | -90°      |              |  | BOREHOLE DIRECTION:      | NA     |              |      |

| # | PRIORITY | ORDER                         | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM 2/10/10<br>8082 NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                            | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                   | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Medium gray non indurated, locally partially indurated, dehydrified  
dry, ash flow tuff

## SAMPLE COMMENTS:

NA

LOCATION DESC: 7C-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 33 dpm

Beta/Gamma = 224 dpm

ARM 2/10/10  
PID Ambient Reading = ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

|   |                              |  |                             |
|---|------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time                    | RECEIVED BY<br>(Printed Name)<br>(Signature)                               | Date/Time                   |
| RELINQUISHED BY<br>(Printed Name) Estwan Lujon<br>(Signature) E. Lujon  | Date/Time<br>2/4/10<br>08:46 | RECEIVED BY<br>(Printed Name) Sherri Newwood<br>(Signature) Sherri Newwood | Date/Time<br>2/11/10<br>846 |

Monday, February 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1863C

**LOS ALAMOS**

REQUEST NUMBER: 10-1863

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/17/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

## LAB REQUEST COMMENTS:

| SAMPLE ID    | CTNR | CTNR DESC | ORDER          | PRESERV          | MATRIX |
|--------------|------|-----------|----------------|------------------|--------|
| RE15-10-8196 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8186 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8194 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8189 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8188 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8187 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8197 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8190 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8193 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8191 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8192 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8195 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8226 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8211 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8235 | 1    | POLY      | METALS-GEL     | Nitric Acid      | W      |
| RE15-10-8235 | 1    | POLY      | SW-846:6850    | Ice              | W      |
| RE15-10-8235 | 1    | POLY      | TCN            | Sodium Hydroxide | W      |

Relinquished By:

Date

Time

Received By:

Date

Time



2/15/10

3:00

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8197

WORK ORDER:

|                             | AS PLANNED | AS COLLECTED |                          | AS PLANNED | AS COLLECTED |
|-----------------------------|------------|--------------|--------------------------|------------|--------------|
| DATE COLLECTED(MM/DD/YYYY): |            | 02/10/2010   | MEDIA:                   | QBT3       | QBT1         |
| TIME COLLECTED (HH:MM)      |            | 16:30        | SUB-MEDIA:               | TUFF 1     | OK           |
| PRS ID:                     | 15-007(c)  | OK           | SAMPLE TECH CODE:        | HA         | CBS          |
| LOCATION ID:                | 15-610817  | +            | FIELD QC TYPE:           | NA         | OK           |
| LOCATION TYPE:              | GENERIC    | +            | FIELD PREP:              | NA         | +            |
| TOP DEPTH:                  | 0          | 171.5 ft     | SAMPLE USAGE:            | INV        | +            |
| BOTTOM DEPTH:               | 0          | 172.5 ft     | SCREEN/PORT DESC:        |            | NA           |
| FIELD MATRIX:               | R          | OK           | EXCAVATED: YES/NO/NA     |            |              |
| COMPOSITE TYPE:             | NA         |              | COMPOSITE TIME INTERVAL: | NA         |              |
|                             |            |              | WATER FLOWING: YES/NO/NA |            |              |
| BOREHOLE:                   | YES/NO/NA  |              | BOREHOLE DECLINATION:    | -90°       |              |
|                             |            |              | BOREHOLE DIRECTION:      | NA         |              |

| # | PRIORITY | ORDER                          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|--------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM 2/10/10<br>80827-NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                 | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry  
ash flow tuff

## SAMPLE COMMENTS:

NA

## LOCATION DESC:

7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 38 dpm

Beta/Gamma = 322 dpm

ARM 2/10/10  
PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

## COLLECTED BY (PRINT)

R. Saunders

## REVIEWED BY (PRINT)

J. MARIN

| RELINQUISHED BY   | Date/Time                      | RECEIVED BY  | Date/Time                     |
|---|--------------------------------|--|-------------------------------|
| (Printed Name) JON MARIN<br>(Signature) Jon R. Marin                    |                                | (Printed Name)<br>(Signature)  |                               |
| RELINQUISHED BY<br>(Printed Name) Estevan Lujan<br>(Signature) E. Lujan | Date/Time<br>02/10/10<br>18:46 | RECEIVED BY<br>(Printed Name) Sherrif Newwood<br>(Signature) Sherrif Newwood | Date/Time<br>02/11/10<br>0846 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8189

WORK ORDER:

| AS PLANNED                  |               | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |                              |
|-----------------------------|---------------|--------------|--|--------------------------|--------|--------------|------------------------------|
| DATE COLLECTED(MM/DD/YYYY): |               | 02/10/2010   |  | MEDIA:                   | QBT3   |              | OK                           |
| TIME COLLECTED (HH:MM)      |               | 11:23        |  | SUB-MEDIA:               | TUFF 1 |              | OK                           |
| PRS ID:                     | 15-007(c)     | OK           |  | SAMPLE TECH CODE:        | HA     |              | CBS                          |
| LOCATION ID:                | 15-610817     |              |  | FIELD QC TYPE:           | NA     |              | OK                           |
| LOCATION TYPE:              | GENERIC       |              |  | FIELD PREP:              | NA     |              |                              |
| TOP DEPTH:                  | 0             | 49.0 ft      |  | SAMPLE USAGE:            | INV    |              |                              |
| BOTTOM DEPTH:               | 0             | 50.0 ft      |  | SCREEN/PORT DESC:        | NA     |              |                              |
| FIELD MATRIX:               | R             | OK           |  | EXCAVATED: YES (NO) / NA |        |              |                              |
| COMPOSITE TYPE:             | NA            |              |  | COMPOSITE TIME INTERVAL: | NA     |              | WATER FLOWING: YES (NO) / NA |
| BOREHOLE:                   | YES (NO) / NA |              |  | BOREHOLE DECLINATION:    | -90°   |              | BOREHOLE DIRECTION:          |
|                             |               |              |  |                          |        |              | NA                           |

| # | PRIORITY | ORDER                          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|--------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM-2/10/10<br>20827-NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                 | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff.

## SAMPLE COMMENTS:

NA

## LOCATION DESC:

7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 48 dpm  
Beta/Gamma = 2980 dpm

ARM 2/10/10  
PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

|   |                               |  |                              |
|---|-------------------------------|--|------------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time                     | RECEIVED BY<br>(Printed Name)<br>(Signature)                               | Date/Time                    |
| RELINQUISHED BY<br>(Printed Name) Estevan Lujan<br>(Signature) E. Lujan | Date/Time<br>2/11/10<br>08:48 | RECEIVED BY<br>(Printed Name) Sherri Newwood<br>(Signature) Sherri Newwood | Date/Time<br>2/11/10<br>0848 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8194

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |  |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | QBT3   | QBT 2        |  |
| TIME COLLECTED (HH:MM)      |           | 14:15        |  | SUB-MEDIA:               | TUFF 1 | OK           |  |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | HA     | CBS          |  |
| LOCATION ID:                | 15-610817 |              |  | FIELD QC TYPE:           | NA     | OK           |  |
| LOCATION TYPE:              | GENERIC   |              |  | FIELD PREP:              | NA     |              |  |
| TOP DEPTH:                  | 0         | 124.0 ft     |  | SAMPLE USAGE:            | INV    |              |  |
| BOTTOM DEPTH:               | 0         | 126.0 ft     |  | SCREEN/PORT DESC:        |        | NA           |  |
| FIELD MATRIX:               | R         | OK           |  | EXCAVATED: YES/NO/NA     |        |              |  |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA     |              |  |
| BOREHOLE: YES/NO/NA         |           |              |  | WATER FLOWING: YES/NO/NA |        |              |  |
| BOREHOLE DECLINATION:       |           | -90°         |  | BOREHOLE DIRECTION:      |        | NA           |  |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | 2082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+CIO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Medium grayish pink, moderately indurated, partially welded  
dehydrified, dry, ark flow tuff.

## SAMPLE COMMENTS:

NA

LOCATION DESC: 7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 38 dpm  
Beta/Gamma = 2660 dpm

PID Ambient Reading = 1200 ppm  
2/2 2/10/10  
1200 ppm 2/10/10

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

|   |                               |  |                              |
|---|-------------------------------|--|------------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin   | Date/Time                     | RECEIVED BY<br>(Printed Name)<br>(Signature)                                 | Date/Time                    |
| RELINQUISHED BY<br>(Printed Name) Estwan Lujan<br>(Signature) [Signature] | Date/Time<br>2/11/10<br>08:46 | RECEIVED BY<br>(Printed Name) Sherin Sherwood<br>(Signature) Sherin Sherwood | Date/Time<br>2/11/10<br>0846 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8196

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |                         | AS PLANNED               |        | AS COLLECTED |  |
|-----------------------------|-----------|--------------|-------------------------|--------------------------|--------|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |                         | MEDIA:                   | QBT3   | QBT2         |  |
| TIME COLLECTED (HH:MM)      |           | 15:54        |                         | SUB-MEDIA:               | TUFF 1 | OK           |  |
| PRS ID:                     | 15-007(c) | OK           |                         | SAMPLE TECH CODE:        | HA     | CBS          |  |
| LOCATION ID:                | 15-610817 |              |                         | FIELD QC TYPE:           | NA     | OK           |  |
| LOCATION TYPE:              | GENERIC   |              |                         | FIELD PREP:              | NA     |              |  |
| TOP DEPTH:                  | 0         | 156.0        | 136.0 ft + 1.5m 2/10/10 | SAMPLE USAGE:            | INV    |              |  |
| BOTTOM DEPTH:               | 0         | 157.5        | 137.5 ft + 1.5m 2/10/10 | SCREEN/PORT DESC:        |        | NA           |  |
| FIELD MATRIX:               | R         | OK           |                         | EXCAVATED: YES/NO/NA     |        |              |  |
| COMPOSITE TYPE:             | NA        |              |                         | COMPOSITE TIME INTERVAL: | NA     |              |  |
| BOREHOLE: YES/NO/NA         |           |              |                         | BOREHOLE DECLINATION:    | -90°   |              |  |
|                             |           |              |                         | BOREHOLE DIRECTION:      | NA     |              |  |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | 8882+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light pinkish gray, moderately indurated, slightly welded, devitrified, dry, ash flow tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 24 dpm  
Beta/Gamma = 2410 dpm

PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$  1.5m 2/10/10

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

R. Saunders

|                             |           |                                 |           |
|-----------------------------|-----------|---------------------------------|-----------|
| RELINQUISHED BY             | Date/Time | RECEIVED BY                     | Date/Time |
| (Printed Name) JON MARIN    |           | (Printed Name)                  |           |
| (Signature) Jon R. Marin    |           | (Signature)                     |           |
| RELINQUISHED BY             | Date/Time | RECEIVED BY                     | Date/Time |
| (Printed Name) Estuan Lujan | 2/11/10   | (Printed Name) Sherrish Newwood | 2/11/10   |
| (Signature) E. Lujan        | 08:46     | (Signature) Sherrish Newwood    | 0846      |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8195

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |      |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|------|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | OBT3   |              | QBT2 |
| TIME COLLECTED (HH:MM)      |           | 15:05        |  | SUB-MEDIA:               | TUFF 1 |              | OK   |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | HA     |              | CBS  |
| LOCATION ID:                | 15-610817 |              |  | FIELD QC TYPE:           | NA     |              | OK   |
| LOCATION TYPE:              | GENERIC   |              |  | FIELD PREP:              | NA     |              |      |
| TOP DEPTH:                  | 0         | 139.0 ft     |  | SAMPLE USAGE:            | INV    |              |      |
| BOTTOM DEPTH:               | 0         | 140.0 ft     |  | SCREEN/PORT DESC:        |        |              | NA   |
| FIELD MATRIX:               | R         | OK           |  | EXCAVATED: YES/NO/NA     |        |              |      |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA     |              |      |
| BOREHOLE: YES/NO/NA         |           |              |  | BOREHOLE DECLINATION:    | -90°   |              |      |
|                             |           |              |  | BOREHOLE DIRECTION:      | NA     |              |      |

| # | PRIORITY | ORDER                         | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM 2/10/10<br>8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                            | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                   | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light reddish gray, strongly indurated, slightly welded, devitrified  
dry, ark flow tuff.

## SAMPLE COMMENTS:

NA

## LOCATION DESC:

7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 19 dpm

Beta/Gamma = 2350 dpm

ARM 2/10/10  
PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

## COLLECTED BY (PRINT)

R. Saunders

## REVIEWED BY (PRINT)

J. MARIN

|   |                               |  |                             |
|---|-------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time                     | RECEIVED BY<br>(Printed Name)<br>(Signature)                                 | Date/Time                   |
| RELINQUISHED BY<br>(Printed Name) Estwan Lujan<br>(Signature) E Lujan   | Date/Time<br>2/11/10<br>08:46 | RECEIVED BY<br>(Printed Name) Sherry Sherwood<br>(Signature) Sherry Sherwood | Date/Time<br>2/11/10<br>846 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8193

WORK ORDER:

| AS PLANNED                  |  | AS COLLECTED |  | AS PLANNED               |  | AS COLLECTED |  |
|-----------------------------|--|--------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |  | 02/10/2010   |  | MEDIA:                   |  | QBT3         |  |
| TIME COLLECTED (HH:MM)      |  | 13:15        |  | SUB-MEDIA:               |  | TUFF 1       |  |
| PRS ID:                     |  | 15-007(c)    |  | SAMPLE TECH CODE:        |  | HA           |  |
| LOCATION ID:                |  | 15-610817    |  | FIELD QC TYPE:           |  | NA           |  |
| LOCATION TYPE:              |  | GENERIC      |  | FIELD PREP:              |  | NA           |  |
| TOP DEPTH:                  |  | 0            |  | SAMPLE USAGE:            |  | INV          |  |
| BOTTOM DEPTH:               |  | 0            |  | SCREEN/PORT DESC:        |  | NA           |  |
| FIELD MATRIX:               |  | R            |  | EXCAVATED: YES           |  | NO           |  |
| COMPOSITE TYPE:             |  | NA           |  | COMPOSITE TIME INTERVAL: |  | NA           |  |
| BOREHOLE: YES/NO/NA         |  | YES          |  | WATER FLOWING: YES/NO/NA |  | YES          |  |
| BOREHOLE DECLINATION:       |  | -90°         |  | BOREHOLE DIRECTION:      |  | NA           |  |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | 2082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light pinkish gray, nonindurated, non welded, devitrified, dry, and flow tuff.

## SAMPLE COMMENTS:

NA

## LOCATION DESC:

7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 19 dpm

Beta/Gamma = 228 dpm

PID <sup>Ambient</sup> Reading = ppm

## COLLECTED BY (PRINT)

R. Saunders

## REVIEWED BY (PRINT)

J. Marin

|   |                               |  |                             |
|---|-------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time                     | RECEIVED BY<br>(Printed Name) Sheri Sherwood<br>(Signature) Sheri Sherwood | Date/Time<br>2/11/10<br>846 |
| RELINQUISHED BY<br>(Printed Name) Estwan Lujan<br>(Signature) E. Lujan  | Date/Time<br>2/11/10<br>08:46 | RECEIVED BY<br>(Printed Name)<br>(Signature)                               | Date/Time                   |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8191

WORK ORDER:

| AS PLANNED   |           | AS COLLECTED          |      | AS PLANNED  |        | AS COLLECTED |   |
|--|-----------|-----------------------|------|---|--------|--------------|---|
| DATE COLLECTED(MM/DD/YYYY):  |           | 02/10/2010            |      | MEDIA:  | QBT3   |              | OK  |
| TIME COLLECTED (HH:MM)   |           | 12:12                 |      | SUB-MEDIA:  | TUFF 1 |              | OK  |
| PRS ID:  | 15-007(c) | OK                    |      | SAMPLE TECH CODE:   | HA     |              | CB S  |
| LOCATION ID:   | 15-610817 |                       |      | FIELD QC TYPE:  | NA     |              | OK  |
| LOCATION TYPE:   | GENERIC   |                       |      | FIELD PREP:   | NA     |              |   |
| TOP DEPTH:   | 0         | 79.0                  |      | SAMPLE USAGE:   | INV    |              |   |
| BOTTOM DEPTH:  | 0         | 80.0                  |      | SCREEN/PORT DESC:   |        | NA           |   |
| FIELD MATRIX:  | R         | OK                    |      | EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA |        |              |   |
| COMPOSITE TYPE:  | NA        |                       |      | COMPOSITE TIME INTERVAL:  | NA     |              | WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA |
| BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA |           | BOREHOLE DECLINATION: | -90° | BOREHOLE DIRECTION:   | NA     |              |   |

| # | PRIORITY | ORDER                         | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM 2/10/10<br>8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                            | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                   | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff.

## SAMPLE COMMENTS:

NA

LOCATION DESC: 7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 27 dpm  
Beta/Gamma = 2230 dpm

PID Ambient Reading = 2110/10 ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

|   |                               |  |                             |
|---|-------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin   | Date/Time                     | RECEIVED BY<br>(Printed Name)<br>(Signature)                                   | Date/Time                   |
| RELINQUISHED BY<br>(Printed Name) Estevan Lucian<br>(Signature) E. Lucian | Date/Time<br>2/11/10<br>08:47 | RECEIVED BY<br>(Printed Name) Sherrig Sherwood<br>(Signature) Sherrig Sherwood | Date/Time<br>2/11/10<br>847 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8192

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |                          |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | QBT3   |              | OK                       |
| TIME COLLECTED (HH:MM)      |           | 12:47        |  | SUB-MEDIA:               | TUFF 1 |              | OK                       |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | HA     |              | C135                     |
| LOCATION ID:                | 15-610817 |              |  | FIELD QC TYPE:           | NA     |              | OK                       |
| LOCATION TYPE:              | GENERIC   |              |  | FIELD PREP:              | NA     |              |                          |
| TOP DEPTH:                  | 0         | 94.0 ft      |  | SAMPLE USAGE:            | INV    |              |                          |
| BOTTOM DEPTH:               | 0         | 95.0 ft      |  | SCREEN/PORT DESC:        |        |              | NA                       |
| FIELD MATRIX:               | R         | OK           |  | EXCAVATED: YES/NO/NA     |        |              |                          |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA     |              | WATER FLOWING: YES/NO/NA |
| BOREHOLE:                   | YES/NO/NA |              |  | BOREHOLE DECLINATION:    | -90°   |              | BOREHOLE DIRECTION:      |
|                             |           |              |  |                          |        |              | NA                       |

| # | PRIORITY | ORDER                         | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | ARM 2/10/10<br>8882+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3                            | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN                | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G                   | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray, non indurated, non welded, desitritified, dry, ash flow tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 24 dpm

Beta/Gamma = 2210 dpm

PID Ambient Reading = 1RM 2/10/10 ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

J. MARIN

R. Saunders

| RELINQUISHED BY              | Date/Time | RECEIVED BY                   | Date/Time |
|------------------------------|-----------|-------------------------------|-----------|
| (Printed Name) JON MARIN     |           | (Printed Name)                |           |
| (Signature) Jon R. Marin     |           | (Signature)                   |           |
| RELINQUISHED BY              | Date/Time | RECEIVED BY                   | Date/Time |
| (Printed Name) Estevan Lujan | 2/11/10   | (Printed Name) Sheri Sherwood | 2/11/10   |
| (Signature) E Lujan          | 08:49     | (Signature) Sheri Sherwood    | 849       |



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8235

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |       | AS COLLECTED |                          |
|-----------------------------|-----------|--------------|--|--------------------------|-------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | NA    |              | OK                       |
| TIME COLLECTED (HH:MM)      |           | 14:30        |  | SUB-MEDIA:               | OTHER |              |                          |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | DC    |              |                          |
| LOCATION ID:                | UNK       | 15-610817    |  | FIELD QC TYPE:           | ER    |              |                          |
| LOCATION TYPE:              | GENERIC   | OK           |  | FIELD PREP:              | UF    |              |                          |
| TOP DEPTH:                  | 0         | 0            |  | SAMPLE USAGE:            | QC    |              |                          |
| BOTTOM DEPTH:               | 0         | 0            |  | SCREEN/PORT DESC:        |       |              | NA                       |
| FIELD MATRIX:               | W         | OK           |  | EXCAVATED: YES/NO/NA     |       |              |                          |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA    |              | WATER FLOWING: YES/NO/NA |
| BOREHOLE: YES/NO/NA         |           |              |  | BOREHOLE DECLINATION:    | -90°  |              | BOREHOLE DIRECTION: NA   |

| # | PRIORITY | ORDER       | CNTNR        | PRESERVATIVE     | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------|--------------|------------------|---------------|----------------------|
| 1 | Normal   | METALS-GEL  | 1 LITER POLY | Nitric Acid      | Y             |                      |
| 1 |          | SW-846:6850 | 250 ML POLY  | Ice              | Y             |                      |
| 1 |          | TCN         | 500 ML POLY  | Sodium Hydroxide | Y             |                      |

SAMPLE DESC: QC Sample of RE15-10-8194

SAMPLE COMMENTS:

LOCATION DESC: 7c-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = ~~\_\_\_\_\_ dpm~~Beta/Gamma = ~~\_\_\_\_\_ dpm~~PID ~~Ambient Reading~~ = ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

J. MARIN

|                              |           |                                |           |
|------------------------------|-----------|--------------------------------|-----------|
| RELINQUISHED BY              | Date/Time | RECEIVED BY                    | Date/Time |
| (Printed Name) JON MARIN     |           | (Printed Name)                 |           |
| (Signature) Jon R. Marin     |           | (Signature)                    |           |
| RELINQUISHED BY              | Date/Time | RECEIVED BY                    | Date/Time |
| (Printed Name) Estevan Lujan | 2/11/10   | (Printed Name) Sherry Sherwood | 2/11/10   |
| (Signature) E. Lujan         | 08:42     | (Signature) Sherry Sherwood    | 0842      |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8211

WORK ORDER:

| AS PLANNED                  |  | AS COLLECTED                |  | AS PLANNED                 |  | AS COLLECTED |  |
|-----------------------------|--|-----------------------------|--|----------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): |  | 02/10/2010                  |  | MEDIA: QBT3                |  | QBT 1        |  |
| TIME COLLECTED (HH:MM)      |  | 16:48                       |  | SUB-MEDIA: TUFF 1          |  | OK           |  |
| PRS ID: 15-007(c)           |  | OK                          |  | SAMPLE TECH CODE: HA       |  | CBS          |  |
| LOCATION ID: UNK            |  | 15-610817                   |  | FIELD QC TYPE: NA          |  |              |  |
| LOCATION TYPE: GENERIC      |  | OK                          |  | FIELD PREP: NA             |  |              |  |
| TOP DEPTH: 0                |  | 181.5 ft                    |  | SAMPLE USAGE: INV          |  |              |  |
| BOTTOM DEPTH: 0             |  | 182.5 ft                    |  | SCREEN/PORT DESC:          |  | NA           |  |
| FIELD MATRIX: R             |  | OK                          |  | EXCAVATED: YES (NO) NA     |  |              |  |
| COMPOSITE TYPE: NA          |  | COMPOSITE TIME INTERVAL: NA |  | WATER FLOWING: YES (NO) NA |  |              |  |
| BOREHOLE: (YES) NO / NA     |  | BOREHOLE DECLINATION: -90°  |  | BOREHOLE DIRECTION: NA     |  |              |  |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | 8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+CIO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray, non indurated, non welded, devitrified, dry, ash flow tuff

## SAMPLE COMMENTS:

NA

## LOCATION DESC:

7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 28 dpm

Beta/Gamma = 223 dpm

PID  $\frac{\text{Ambient Reading}}{\text{ppm}} = \text{ppm}$  <sup>from 2/10/10</sup>

## COLLECTED BY (PRINT)

R. Saunders

## REVIEWED BY (PRINT)

JON MARIN

|   |                               |  |                             |
|---|-------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time<br>2/1              | RECEIVED BY<br>(Printed Name)<br>(Signature)                                   | Date/Time                   |
| RELINQUISHED BY<br>(Printed Name) Estevan Lujan<br>(Signature) E Lujan  | Date/Time<br>2/11/10<br>08:42 | RECEIVED BY<br>(Printed Name) Sherrif Sherwood<br>(Signature) Sherrif Sherwood | Date/Time<br>2/11/10<br>842 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8226

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED     |  | AS PLANNED                     |        | AS COLLECTED |         |
|-----------------------------|-----------|------------------|--|--------------------------------|--------|--------------|---------|
| DATE COLLECTED(MM/DD/YYYY): |           | 10<br>02/02/2010 |  | MEDIA:                         | QBT3   |              |         |
| TIME COLLECTED (HH:MM)      |           | 10:42            |  | SUB-MEDIA:                     | TUFF 1 |              | OK<br>↓ |
| PRS ID:                     | 15-007(c) | OK               |  | SAMPLE TECH CODE:              | HA     |              | CBS     |
| LOCATION ID:                | UNK       | 15-610817        |  | FIELD QC TYPE:                 | FD     |              | ↓       |
| LOCATION TYPE:              | GENERIC   | OK               |  | FIELD PREP:                    | NA     |              | ↓       |
| TOP DEPTH:                  | 0         | 18.0 ft          |  | SAMPLE USAGE:                  | QC     |              | ↓       |
| BOTTOM DEPTH:               | 0         | 20.0 ft          |  | SCREEN/PORT DESC:              | NA     |              |         |
| FIELD MATRIX:               | R         | OK               |  | EXCAVATED: YES/NO/NA           |        |              |         |
| COMPOSITE TYPE:             | NA        |                  |  | COMPOSITE TIME INTERVAL:       | NA     |              |         |
|                             |           |                  |  | WATER FLOWING: YES( )/NO( )/NA |        |              |         |
| BOREHOLE: ( )YES( )NO/NA    |           |                  |  | BOREHOLE DECLINATION: -90°     |        |              |         |
|                             |           |                  |  | BOREHOLE DIRECTION: NA         |        |              |         |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ↓        | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC: QC Sample of RE15-10-8187

SAMPLE COMMENTS: Light gray, non indurated to weakly indurated, devitrified, dry, ash flow tuff

NA

LOCATION DESC:

7c-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = .009 dpm

Beta/Gamma = 2121 dpm

RS  
PID  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$   
02/02/10

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

J. MARIN

|   |                              |  |                              |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY<br>(Printed Name)<br>(Signature)                        | Date/Time                    | RECEIVED BY<br>(Printed Name)<br>(Signature)                                 | Date/Time                    |
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time<br>2/11/10<br>8:46 | RECEIVED BY<br>(Printed Name) Sherri Sherwood<br>(Signature) Sherri Sherwood | Date/Time<br>2/11/10<br>8:46 |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8187

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED              |  | AS PLANNED               |        | AS COLLECTED |                          |
|-----------------------------|-----------|---------------------------|--|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): |           | RS 02/10/10<br>02/08/2010 |  | MEDIA:                   | QBT3   |              | OK                       |
| TIME COLLECTED (HH:MM)      |           | 10:42                     |  | SUB-MEDIA:               | TUFF 1 |              | ✓                        |
| PRS ID:                     | 15-007(c) | OK                        |  | SAMPLE TECH CODE:        | HA     |              | CBS                      |
| LOCATION ID:                | 15-610817 | ↓                         |  | FIELD QC TYPE:           | NA     |              | OK                       |
| LOCATION TYPE:              | GENERIC   | ↓                         |  | FIELD PREP:              | NA     |              | ↓                        |
| TOP DEPTH:                  | 0         | 18.0 Ft                   |  | SAMPLE USAGE:            | INV    |              | ✓                        |
| BOTTOM DEPTH:               | 0         | 20.0 ft                   |  | SCREEN/PORT DESC:        | NA     |              |                          |
| FIELD MATRIX:               | R         | OK                        |  | EXCAVATED: YES/NO/NA     | NO     |              |                          |
| COMPOSITE TYPE:             | NA        |                           |  | COMPOSITE TIME INTERVAL: | NA     |              | WATER FLOWING: YES/NO/NA |
| BOREHOLE: YES/NO/NA         | YES       |                           |  | BOREHOLE DECLINATION:    | -90°   |              | BOREHOLE DIRECTION: NA   |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 | ↓        | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ↓        | Metals+CIO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | ↓        | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray non indurated to wkly indurated, dehydrified, dry  
ash flow tuff

## SAMPLE COMMENTS:

NA

LOCATION DESC: 7C-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = .009 dpm

Beta/Gamma = 2121 dpm

$$PID \frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$$

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

J. MARIN

|  |                                  |  |                             |
|--|----------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JORIE MARIN<br>(Signature) Jorie Marin | Date/Time<br>2/11/10<br>08:46 AM | RECEIVED BY<br>(Printed Name) Sherri Sherwood<br>(Signature) Sherri Sherwood | Date/Time<br>2/11/10<br>846 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature)                         | Date/Time                        | RECEIVED BY<br>(Printed Name)<br>(Signature)                                 | Date/Time                   |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8186

WORK ORDER:

|                             | AS PLANNED | AS COLLECTED              |                              | AS PLANNED | AS COLLECTED |
|-----------------------------|------------|---------------------------|------------------------------|------------|--------------|
| DATE COLLECTED(MM/DD/YYYY): |            | 02/10/2010<br>RS 02-10-10 | MEDIA:                       | QBT3       | OK           |
| TIME COLLECTED (HH:MM)      |            | 10:12                     | SUB-MEDIA:                   | TUFF 1     | OK           |
| PRS ID:                     | 15-007(c)  | OK                        | SAMPLE TECH CODE:            | HA         | CBS          |
| LOCATION ID:                | 15-610817  | ↓                         | FIELD QC TYPE:               | NA         | OK           |
| LOCATION TYPE:              | GENERIC    | ↓                         | FIELD PREP:                  | NA         | ↓            |
| TOP DEPTH:                  | 0          | 4.0 ft                    | SAMPLE USAGE:                | INV        | ↓            |
| BOTTOM DEPTH:               | 0          | 5.0 ft                    | SCREEN/PORT DESC:            | NA         |              |
| FIELD MATRIX:               | R          | OK                        | EXCAVATED: YES (NO) NA       |            |              |
| COMPOSITE TYPE:             | NA         |                           | COMPOSITE TIME INTERVAL:     | NA         |              |
| BOREHOLE: (YES) NO / NA     |            |                           | WATER FLOWING: YES / (NO) NA |            |              |
| BOREHOLE DECLINATION:       |            | -90°                      | BOREHOLE DIRECTION:          |            | NA           |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | normal   | 8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 | normal   | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | normal   | Metals+ClO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 | normal   | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

SAMPLE DESC:

Light gray nonindurated, nonwelded, devitrified, ash flow tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 7C-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 14 dpm

Beta/Gamma = 2040 dpm

RS  
 ID Ambient Reading = ppm  
 02-02-10

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

|   |                                 |  |                             |
|---|---------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time<br>2/11/10<br>08:46pm | RECEIVED BY<br>(Printed Name) Sherri Sherwood<br>(Signature) Sherri Sherwood | Date/Time<br>2/11/10<br>846 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature)                        | Date/Time                       | RECEIVED BY<br>(Printed Name)<br>(Signature)                                 | Date/Time                   |

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2503

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(c) - Threemile Canyon

SAMPLE ID: RE15-10-8190

WORK ORDER:

| AS PLANNED                  |           | AS COLLECTED |  | AS PLANNED               |        | AS COLLECTED |     |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|-----|
| DATE COLLECTED(MM/DD/YYYY): |           | 02/10/2010   |  | MEDIA:                   | QBT3   |              | OK  |
| TIME COLLECTED (HH:MM)      |           | 11:47        |  | SUB-MEDIA:               | TUFF 1 |              | OK  |
| PRS ID:                     | 15-007(c) | OK           |  | SAMPLE TECH CODE:        | HA     |              | CBS |
| LOCATION ID:                | 15-610817 |              |  | FIELD QC TYPE:           | NA     |              | OK  |
| LOCATION TYPE:              | GENERIC   |              |  | FIELD PREP:              | NA     |              |     |
| TOP DEPTH:                  | 0         | 64.0 ft      |  | SAMPLE USAGE:            | INV    |              |     |
| BOTTOM DEPTH:               | 0         | 65.0 ft      |  | SCREEN/PORT DESC:        | NA     |              |     |
| FIELD MATRIX:               | R         | OK           |  | EXCAVATED: YES/NO/NA     | NO     |              |     |
| COMPOSITE TYPE:             | NA        |              |  | COMPOSITE TIME INTERVAL: | NA     |              |     |
|                             |           |              |  | WATER FLOWING: YES/NO/NA | NO     |              |     |
| BOREHOLE:                   | YES/NO/NA |              |  | BOREHOLE DECLINATION:    | -90°   |              |     |
|                             |           |              |  | BOREHOLE DIRECTION:      | NA     |              |     |

| # | PRIORITY | ORDER          | CNTNR                         | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal   | 8082+NMED-HEXP | 250 ML AMBER GLASS            | Ice          | Y             |                      |
| 1 |          | H3             | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | Metals+ClO4+CN | 500 ML POLY                   | Ice          | Y             |                      |
| 1 |          | RADVANA+B+G    | 1 EA 8 IN RESEALABLE POLY BAG | None         | Y             |                      |

## SAMPLE DESC:

Light gray non indurated, non welded, devitrified ash flow tuff

## SAMPLE COMMENTS:

NA

LOCATION DESC: 7c-4

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 72 dpm  
Beta/Gamma = 427 dpm

1/10/10  
PID Ambient Reading = ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) J. MARIN

|   |                               |  |                             |
|---|-------------------------------|--|-----------------------------|
| RELINQUISHED BY<br>(Printed Name) JON MARIN<br>(Signature) Jon R. Marin | Date/Time                     | RECEIVED BY<br>(Printed Name) Sheri Sherwood<br>(Signature) Sheri Sherwood | Date/Time<br>2/11/10<br>847 |
| RELINQUISHED BY<br>(Printed Name) Estwan Lujan<br>(Signature) E Lujan   | Date/Time<br>2/11/10<br>08:47 | RECEIVED BY<br>(Printed Name)<br>(Signature)                               | Date/Time                   |

## Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

|              |              |              |
|--------------|--------------|--------------|
| RE15-10-7996 | RE15-10-8235 | RE15-10-8186 |
| " "7997      | " "8197      | " "8187      |
| " "7999      | " "8194      | " "8226      |
| " "8000      | " "8195      |              |
| " "8064      | " "8194      |              |
| " "7903      | " "8193      |              |
| " "7904      | " "8192      |              |
| " "7993      | " "8191      |              |
| " "7994      | " "8190      |              |
| " "7995      | " "8189      |              |
|              | " "8188      |              |

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

.....

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE15-10-8087  
RE15-10-8235

Reason:

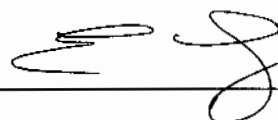
Field Rinsate

.....

Print Last Name


Lupin

Signature



Date

2/11/10

| DATA VALIDATION COVER SHEET  |   |
|--|---|
| <b>5116-1</b><br><br><p style="text-align: center;"><b>Data Validation Cover Sheet</b></p> | Records Use only<br><br> |

| Section I.  |  |  |   |
|---|--|--|---|
| REQUEST NUMBER: <u>10-1863</u>                        | VALIDATION DATE: <u>04/01/10</u>         | LAB CODE: <u>GEL</u>                                     |   |
| CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u> |  |  |   |
| VALIDATOR: <u>Ellen McEntee</u>                       |  | ORGANIZATION: <u>Analytical Quality Associates, Inc.</u> |   |
| ANALYTICAL SUITE (CHECK ALL THAT APPLY):              |  |  |   |
| <input type="checkbox"/> TPH-GRO                      | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS                   | <input checked="" type="checkbox"/> LCMSMS PERCHLORATES       |
| <input type="checkbox"/> TPH-DRO                      | <input type="checkbox"/> METALS          | <input type="checkbox"/> PCB CONGENERS                   | <input type="checkbox"/> ORGANOCHLORINE                       |
| <input type="checkbox"/> GENERAL CHEMISTRY            | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES          | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): _____      |  |  |   |

| Section II. Completeness Check      |                          |                                     |                             |                                     |                          |                                     |                          |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| YES                                 | NO                       | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 6. RAW/BSS DATA          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 2. CASE NARRATIVE           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 3. SAMPLE RESULT FORMS      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 8. QUANTITATION REPORTS  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 4. SAMPLE CHROMATOGRAMS     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA    |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the MS/MSD associated with the water sample was performed on a LANL sample from another RN. No sample data was qualified as a result.


Reviewed by: Mary Donovan

Level: I


Date: 04/02/10

VALIDATOR'S SIGNATURE: Ellen McEntee DATE: 04/01/10




| LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST                         |   |
|---|---|
| <b>5121-2</b><br><b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b> | Records Use only<br> |

| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.  | R, PERC0   | J, PERC0         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, PERC0b  | R, PERC0b        |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 3. The IS are count is <25% of the expected value.  | UJ, PERC1a                                       | J, PERC1a        |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.   | UJ, PERC1b                                       | J, PERC1b        |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. The IS area count is >130% of the average of that obtained from the calibration standards.   | UJ, PERC1c                                       | J, PERC1c        |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, PERC1d  | R, PERC1d        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.   | U, PERC4   | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ .   | N/A  | J+, PERC4a       |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.  | U, PERC4d  | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.   | R, PERC4e  | R, PERC4e        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.   | UJ, PERC7  | J, PERC7         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is $<0.99$ . | UJ, R, PERC7a                                    | J, PERC7a        |

| LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST   |                  |
|---|------------------|
| 5121-2  | Records Use only |
| LC/MS/MS Perchlorate Analytical Data Validation Checklist  |                  |

| Yes No N/A               |                                     |                          |   | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|--------------------------|-------------------------------------|--------------------------|---|---|---------------------|
| (Check One)              |                                     |                          |   | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. The ICV and/or CCV were recovered outside the method limits.  | UJ, R,<br>PERC7c                                    | J, PERC7c           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. The ICV and/or CCV were not analyzed at the appropriate method frequency.   | UJ, R,<br>PERC7d                                    | J, PERC7d           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information. | R, PERC7f   | R, PERC7f           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.   | N/A   | R, PERC8            |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                     | N/A   | R, PERC8a           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 18. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ PERC9  | J-, PERC9           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 19. The holding time was > 2 times the applicable holding time requirement.   | R, PERC9a   | J-, PERC9a          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20. The LCS percent recovery was <10%. Follow the external laboratory limits.   | R, PERC12   | J-, PERC12          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.  | UJ, PERC12a   | J-, PERC12a         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.   | N/A   | J+, PERC12b         |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                           | R, PERC12c  | R, PERC12c          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. The MS/MSD percent recovery was <10%  | R, PERC12d  | R, PERC12d          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 25. The MS/MSD percent recovery was >10% but <75%   | UJ, PERC12e   | J, PERC12e          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. The MS/MSD percent recovery was >125%.  | N/A   | J+, PERC12f         |

| LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5121-2</b><br><br><b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                                     |   | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|-------------------------------------|---|--|------------------|
| (Check One)              |                                     |                                     |   | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 27. The MS/MSD relative percent difference was >20%.  | UJ, PERC12g                                      | J, PERC12g       |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference. | UJ, R, PERC15                                    | N/A              |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 29. The sample was diluted because target analytes were > the initial verification calibration.   | UJ, PERC15a                                      | J, PERC15a       |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.  | UJ, R, PERC16                                    | J, PERC16        |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 31. The Interference Check Sample was not within $\pm 20\%$ of the known value.   | UJ, PERC16a                                      | J, PERC16a       |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.   | R, PERC16c                                       | R, PERC16c       |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.   | UJ, R, PERC19                                    | J, R, PERC19     |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 34. Duplicate, dilution, or reanalysis.   | UJ, PERC88                                       | J, PERC88        |

## Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 955708Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8196Date Received: 16-FEB-10GEL Job No (SDG): 10-1863GEL Sample ID: 247188001Date Filtered: 03-MAR-10Injection Volume (uL): 20%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:07 | per0306031a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate-O(18)         |      |      | 4.81  | ug/kg |   | 1               | 06-MAR-10 19:07 | per0306031a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8186

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188002

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:34 | per0306034a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate-O(18)         |      |      | 4.90  | ug/kg |   | 1               | 06-MAR-10 19:34 | per0306034a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8194  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188003  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 99

| CAS No.    | Analyte <sup>A</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:16 | per0305064a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate-O(18)         |      |      | 4.50  | ug/kg |   | 1               | 05-MAR-10 23:16 | per0305064a |

<sup>A</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8189

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188004

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

% Solids: 99

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.533 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate Isotope Ratio |      |      | 3.09  |       |   | 1               | 05-MAR-10 23:26 | per0305065a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.562 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate-O(18)         |      |      | 4.49  | ug/kg |   | 1               | 05-MAR-10 23:26 | per0305065a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{ Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8188  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188005  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.4

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate Isotope Ratio |      |      | 3.26  |       |   | 1               | 05-MAR-10 23:36 | per0305066a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate-O(18)         |      |      | 4.66  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
 Aliquot %Solids



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8187

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188006

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 97.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:46 | per0305067a |
| 14797-73-0 | Perchlorate-101           | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate-O(18)         |      |      | 4.54  | ug/kg |   | 1               | 05-MAR-10 23:46 | per0305067a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 255708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8197  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188007  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.5

| CAS No.    | Analyte^                  | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:56 | per0305068a |
| 14797-73-0 | Perchlorate-101           | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate-O(18)         |      |      | 4.53  | ug/kg |   | 1               | 05-MAR-10 23:56 | per0305068a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8190

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188008

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99.07

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:06 | per0305069a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate-Ox(18)        |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:06 | per0305069a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8193

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188009

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.7

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:16 | per0305070a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate-O(18)         |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:16 | per0305070a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. REL5-10-8191  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188010  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 99.33

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:26 | per0305071a |
| 14797-73-0 | Perchlorate-101           | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate-O(18)         |      |      | 4.63  | ug/kg |   | 1               | 06-MAR-10 00:26 | per0305071a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

**P perchlorate Analysis Data Sheet**

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 255708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8192

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188011

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:36 | per0305072a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate-O(18)         |      |      | 4.68  | ug/kg |   | 1               | 06-MAR-10 00:36 | per0305072a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

## Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 255708Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8195Date Received: 16-FEB-10GEL Job No (SDG): 10-1863GEL Sample ID: 247188012Date Filtered: 03-MAR-10Injection Volume (uL): 20%Solids: 98.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:46 | per0305073a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate-O(18)         |      |      | 4.64  | ug/kg |   | 1               | 06-MAR-10 00:46 | per0305073a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

**Perchlorate Analysis Data Sheet**

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 255708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0

Client Sample No. RE15-10-8226  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188013  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 % Solids: 97.6

| CAS No.    | Analyte <sup>a</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:27 | per0305077a |
| 14797-73-0 | Perchlorate-101           | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate-O(18)         |      |      | 4.71  | ug/kg |   | 1               | 06-MAR-10 01:27 | per0305077a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8211  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188014  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MIDL | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:37 | per0305078a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate-O(18)         |      |      | 4.62  | ug/kg |   | 1               | 06-MAR-10 01:37 | per0305078a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: WATERExtraction Batch ID: 255726Extraction Type: Filter/DAISample Volume/Weight: 10.0 mLConcentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8235Date Received: 16-FEB-10GEL Job No (SDG): 10-1863-1GEL Sample ID: 247192001Date Filtered: 02-MAR-10Injection Volume (uL): 20

% Solids:

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate Isotope Ratio |     |    |       |       |   | 1               | 06-MAR-10 20:20 | per0306039a |
| 14797-73-0 | Perchlorate-101           | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate-O(18)         |     |    | 0.479 | ug/L  |   | 1               | 06-MAR-10 20:20 | per0306039a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

**DATA VALIDATION COVER SHEET**

5118-1

**Data Validation Cover Sheet**

Records Use only

**Section I.**

REQUEST NUMBER: 10-1863      VALIDATION DATE: 04/01/10      LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee      ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> TPH-GRO           | <input type="checkbox"/> HIGH EXPLOSIVES   | <input type="checkbox"/> DIOXIN FURANS          | <input type="checkbox"/> LCMSMS PERCHLORATES                  |
| <input type="checkbox"/> TPH-DRO           | <input checked="" type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS          | <input type="checkbox"/> ORGANOCHLORINE                       |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY    | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |

☐ OTHER (DESCRIBE):**Section II. Completeness Check**

- | YES                                 | NO                       | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 6. RAW/BSS DATA          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 2. CASE NARRATIVE           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 3. SAMPLE RESULT FORMS      | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS  |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA    |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- In the MB associated with the soil samples, Fe and Ca were detected. The results for Ca in samples RE15-10-8189, -8188, -8187, -8190, -8193, -8191, -8192, and -8226 were detects >5X but ≤50X the MB concentration and, thus, were qualified J,I4a. All other associated results were detects >50X the MB concentration and, thus, were not qualified based on professional judgment.
- In the CCB associated with the water sample, Tl was detected. The associated result for Tl was an ND and, thus, was not qualified. In the CCB associated with the soil samples, Pb was detected. The associated results were detects >5X the blank concentration and, thus were not qualified.
- In the FR blank, sample -8235 associated with all soil samples, Cr, K, and Na were detected. All associated sample results were detects >5X the FR concentrations and, thus, were not qualified.
- The soil LCS %R was < the laboratory LAL but ≥10% for Sb. The associated sample results were NDs and, thus, were qualified UJ,I12a.
- The soil MS %R was < the laboratory LAL but ≥10% for Cr. The associated sample results were detects and, thus, were qualified J-,I6a. The soil MS %R was > the laboratory UAL for K, Na, and Al. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %R was also > the laboratory UAL for Mn, however, the sample concentration was >4X the spike concentration. Data were not qualified, based on professional judgment.
- The soil replicate RPD was >35% and both the parent and duplicate sample results were ≥5X the PQL for Cr. The associated sample results were detects and, thus, were qualified J,I10a.

7. It should be noted that the matrix QC for CVAA associated with the water sample was performed on a LANL sample from another RN. In addition, the FR blank was used for the matrix QC for the ICP-AES and ICP-MS analysis associated with the water sample. No sample data was qualified as a result.

Reviewed by: Mary Donovan

Level: I


Date: 04/02/10

VALIDATOR'S SIGNATURE: *John McKittrick*


DATE: 04/01/10

Form 5118-1, Revision 0.0


LOS ALAMOS  
Environmental Restoration Project

| METALS ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5118-2</b><br><br><b>Metals Analytical Data Validation Checklist</b> | Records Use only<br><br> |


| Yes No N/A               |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|--------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
| (Check One)              |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, I9  | J-, I9              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. The holding time was >2 times the applicable holding time requirement.  | R, I9a  | J-, I9a             |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 3. The instrument performance sample did not pass method acceptance criteria.  | R, I16  | R, I16              |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).   | UJ, I16a  | J, I16a             |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 5. Samples were analyzed outside specific method tune time criteria.   | N/A   | J, I16b             |
| <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.  | R, I16c   | R, I16c             |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.   | UJ, R, I7   | J, I7               |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. | UJ, I7a   | J, I7a              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.  | UJ, I7c   | J, I7c              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 10. The ICV and/or CCV were not analyzed at the appropriate method frequency.  | UJ, I7d   | J, I7d              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.                              | R, I7f  | R, I7f              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. Metals Interference check sample percent recover value is <50%.  | R, I2   | J-, I2              |

| METALS ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5118-2</b><br><br><b>Metals Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A                          |                                     |                          |  | Assign Qualifier Listed Below If Criterion = Yes |                  |
|-------------------------------------|-------------------------------------|--------------------------|--|--|------------------|
| (Check One)                         |                                     |                          |  | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$  | UJ, I2a  | J-, I2a          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. Metals interference check sample percent recovery value is $> 120\%$ .   | N/A  | J+, I2b          |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15. Metals interference check sample was not analyzed with the samples.  | R, I2c   | R, I2c           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.   | U, I4  | N/A              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | 17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$ .                      | N/A  | J, I4a           |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | 18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.                            | U, I4b   | N/A              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 19. Continuing calibration blanks were not analyzed at the appropriate method frequency.   | UJ, I4c  | J, I4c           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.                                | U, I4d   | N/A              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                    | R, I4e   | R, I4e           |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 22. The associated matrix spike recovery was $< 10\%$ . Follow the external laboratory limits located within the associated data package.                        | R, I6  | R, I6            |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | 23. The associated matrix spike recovery was $< \text{the LAL}$ but $> 10\%$ . Follow the external laboratory limits located within the associated data package. | UJ, I6a  | J+, I6a          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | 24. The associated matrix spike recovery was $> \text{the UAL}$ . Follow the external laboratory limits located within the associated data package.              | UJ, I6b  | J+, I6b          |

| METALS ANALYTICAL DATA VALIDATION CHECKLIST               |   |
|---|---|
| 5118-2<br><br>Metals Analytical Data Validation Checklist | Records Use only<br><br> |

| Yes No N/A<br>(Check One)           |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|-------------------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
|                                     |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS Information is present, do not Reject. Qualify data based on the LCS Information. | R, I6c  | R, I6c              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.  | UJ, I10a  | J, I10a             |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.      | UJ, I10d  | J, I10d             |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 28. The LCS percent recovery was $<10\%$ . Follow the external laboratory limits located within the associated data package.   | R, I12  | R, I12              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 29. The LCS percent recover was $<$ the LAL but $>10\%$ . Follow the external laboratory limits located within the associated data package.  | UJ, I12a  | J-, I12a            |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.  | N/A   | J+, I12b            |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.                    | R, I12c   | R, I12c             |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.  | R, I1a  | J, I1a              |

| METALS ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|---|---|
| <b>5118-2</b><br><br><b>Metals Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A                          |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|-------------------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
| (Check One)                         |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.   | UJ, I1b   | J, I1b              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.  | UJ, I1c   | J, I1c              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, I1d  | R, I1d              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.  | UJ, I18   | J, I18              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 37. Serial dilution sample was not analyzed with the samples.  | UJ, I18a  | J, I18              |
| <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 38. The sample result was reported as detected between the IDL and the EDL.  | N/A   | J, I1               |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 39. Duplicate, dilution, or reanalysis.  | UJ, I88   | J, I88              |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | 40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory. | U, U_LAB  | J, J_LAB, NQ, NQ    |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.  | UJ, R, I19  | J, R, I19           |



**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188001

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8196

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 919000  | ug/kg | *N   | 6480 | 19100 | 19100 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 953     | ug/kg | U    | 314  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic          | 327     | ug/kg | J    | 197  | 986   | 986   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 13500   | ug/kg | E    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 462     | ug/kg |      | 19.7 | 98.6  | 98.6  | 2  | MS | BAJ     | 03/15/10 12:41 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 476     | ug/kg | U    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-70-2 | Calcium          | 597000  | ug/kg | *    | 7620 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 16100   | ug/kg | *EN  | 143  | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 450     | ug/kg | J    | 143  | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1640    | ug/kg |      | 286  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5930000 | ug/kg |      | 7620 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 4440    | ug/kg |      | 238  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 126000  | ug/kg |      | 8100 | 28600 | 28600 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 279000  | ug/kg | E    | 191  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 10.4    | ug/kg | U    | 3.55 | 10.4  | 10.4  | 1  | AV | JXL1    | 03/02/10 13:39 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 493     | ug/kg |      | 98.6 | 394   | 394   | 2  | MS | BAJ     | 03/15/10 12:41 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 507000  | ug/kg | N    | 6100 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 986     | ug/kg | U    | 493  | 986   | 986   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 476     | ug/kg | U    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 365000  | ug/kg | *N   | 6670 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 197     | ug/kg | U    | 59.2 | 197   | 197   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1940    | ug/kg |      | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 45300   | ug/kg |      | 314  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.531            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.513            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.581            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188002

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8186

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte           | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+, I6b  | 1560000 | ug/kg | *N   | 6770 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ, I12a | 996     | ug/kg | U    | 329  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic           | 407     | ug/kg | J    | 202  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-39-3 | Barium            | 22400   | ug/kg | E    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium         | 212     | ug/kg |      | 20.2 | 101   | 101   | 2  | MS | BAJ     | 03/15/10 12:53 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium           | 498     | ug/kg | U    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-70-2 | Calcium           | 471000  | ug/kg | *    | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-, I6a  | 1660    | ug/kg | *EN  | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt            | 601     | ug/kg |      | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-50-8 | Copper            | 1350    | ug/kg |      | 299  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-89-6 | Iron              | 6830000 | ug/kg |      | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-92-1 | Lead              | 3680    | ug/kg |      | 249  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium         | 264000  | ug/kg |      | 8460 | 29900 | 29900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-96-5 | Manganese         | 247000  | ug/kg | E    | 199  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-97-6 | Mercury           | 11.7    | ug/kg | U    | 3.98 | 11.7  | 11.7  | 1  | AV | JXL1    | 03/02/10 13:49 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel            | 1720    | ug/kg |      | 101  | 404   | 404   | 2  | MS | BAJ     | 03/15/10 12:53 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+, I6b | 368000  | ug/kg | N    | 6370 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7782-49-2 | Selenium          | 1010    | ug/kg | U    | 505  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-22-4 | Silver            | 498     | ug/kg | U    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+, I6b    | 223000  | ug/kg | *N   | 6970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-28-0 | Thallium          | 202     | ug/kg | U    | 60.6 | 202   | 202   | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium          | 2630    | ug/kg |      | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-66-6 | Zinc              | 35600   | ug/kg |      | 329  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.508            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.501            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.518            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188003

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8194

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 848000  | ug/kg | *N   | 6750 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 993     | ug/kg | U    | 328  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic          | 741     | ug/kg | J    | 196  | 979   | 979   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 17200   | ug/kg | E    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 429     | ug/kg |      | 19.6 | 97.9  | 97.9  | 2  | MS | BAJ     | 03/15/10 12:55 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 496     | ug/kg | U    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-70-2 | Calcium          | 450000  | ug/kg | *    | 7940 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 2330    | ug/kg | *EN  | 149  | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 482     | ug/kg | J    | 149  | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1670    | ug/kg |      | 298  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 6630000 | ug/kg |      | 7940 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 4050    | ug/kg |      | 248  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 148000  | ug/kg |      | 8440 | 29800 | 29800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 298000  | ug/kg | E    | 199  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11      | ug/kg | U    | 3.75 | 11    | 11    | 1  | AV | JXL1    | 03/02/10 13:51 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 536     | ug/kg |      | 97.9 | 392   | 392   | 2  | MS | BAJ     | 03/15/10 12:55 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 455000  | ug/kg | N    | 6350 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 979     | ug/kg | U    | 490  | 979   | 979   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 496     | ug/kg | U    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 334000  | ug/kg | *N   | 6950 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 196     | ug/kg | U    | 58.7 | 196   | 196   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1880    | ug/kg |      | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 44300   | ug/kg |      | 328  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.509            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.516            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.549            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188004

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8189

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyt | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|--------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 938000  | ug/kg | *N   | 6350 | 18700 | 18700 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 4670    | ug/kg | U    | 1540 | 4670  | 4670  | 5  | P  | HSC    | 03/15/10 14:08 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 198     | ug/kg | J    | 188  | 939   | 939   | 2  | MS | BAJ    | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 16000   | ug/kg | E    | 93.4 | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 407     | ug/kg |      | 18.8 | 93.9  | 93.9  | 2  | MS | BAJ    | 03/15/10 12:57 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 467     | ug/kg | U    | 93.4 | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,14a    | 321000  | ug/kg | *    | 7470 | 23300 | 23300 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 15400   | ug/kg | *EN  | 140  | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 600     | ug/kg |      | 140  | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1480    | ug/kg |      | 280  | 934   | 934   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 7550000 | ug/kg |      | 7470 | 23300 | 23300 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 3700    | ug/kg |      | 233  | 934   | 934   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 213000  | ug/kg |      | 7940 | 28000 | 28000 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 262000  | ug/kg | E    | 187  | 934   | 934   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.8    | ug/kg | U    | 4    | 11.8  | 11.8  | 1  | AV | JXL1   | 03/02/10 13:53 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 2260    | ug/kg |      | 93.9 | 376   | 376   | 2  | MS | BAJ    | 03/15/10 12:57 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 424000  | ug/kg | N    | 5980 | 23300 | 23300 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 939     | ug/kg | U    | 469  | 939   | 939   | 2  | MS | BAJ    | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 467     | ug/kg | U    | 93.4 | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 292000  | ug/kg | *N   | 6540 | 23300 | 23300 | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 188     | ug/kg | U    | 56.3 | 188   | 188   | 2  | MS | BAJ    | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 2400    | ug/kg |      | 93.4 | 467   | 467   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 43100   | ug/kg |      | 308  | 934   | 934   | 1  | P  | HSC    | 03/11/10 12:30 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.541            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.515            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188005

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8188

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 759000  | ug/kg | *N   | 6780 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 997     | ug/kg | U    | 329  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic          | 231     | ug/kg | J    | 192  | 961   | 961   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 12100   | ug/kg | E    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 268     | ug/kg |      | 19.2 | 96.1  | 96.1  | 2  | MS | BAJ     | 03/15/10 12:58 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 498     | ug/kg | U    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,14a    | 273000  | ug/kg | *    | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 947     | ug/kg | *EN  | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 435     | ug/kg | J    | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1070    | ug/kg |      | 299  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5840000 | ug/kg |      | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 3310    | ug/kg |      | 249  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 158000  | ug/kg |      | 8470 | 29900 | 29900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 236000  | ug/kg | E    | 199  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 12      | ug/kg | U    | 4.07 | 12    | 12    | 1  | AV | JXL1    | 03/02/10 13:59 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 524     | ug/kg |      | 96.1 | 384   | 384   | 2  | MS | BAJ     | 03/15/10 12:58 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 394000  | ug/kg | N    | 6380 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 961     | ug/kg | U    | 480  | 961   | 961   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 498     | ug/kg | U    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 295000  | ug/kg | *N   | 6980 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 192     | ug/kg | U    | 57.6 | 192   | 192   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1910    | ug/kg |      | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 35200   | ug/kg |      | 329  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.51             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.529            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.51             | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188006

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8187

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 97.5

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 788000  | ug/kg | *N   | 6970 | 20500 | 20500 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 5130    | ug/kg | U    | 1690 | 5130  | 5130  | 5  | P  | HSC     | 03/15/10 14:12 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 256     | ug/kg | J    | 200  | 998   | 998   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 12400   | ug/kg | E    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 314     | ug/kg |      | 20   | 99.8  | 99.8  | 2  | MS | BAJ     | 03/15/10 13:00 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 513     | ug/kg | U    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,14a    | 245000  | ug/kg | *    | 8200 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 4790    | ug/kg | *EN  | 154  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 408     | ug/kg | J    | 154  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 960     | ug/kg | J    | 308  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5570000 | ug/kg |      | 8200 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 1890    | ug/kg |      | 256  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 157000  | ug/kg |      | 8720 | 30800 | 30800 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 183000  | ug/kg | E    | 205  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.1    | ug/kg | U    | 3.77 | 11.1  | 11.1  | 1  | AV | JXL1    | 03/02/10 14:01 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 870     | ug/kg |      | 99.8 | 399   | 399   | 2  | MS | BAJ     | 03/15/10 13:00 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 307000  | ug/kg | N    | 6560 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 998     | ug/kg | U    | 499  | 998   | 998   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 513     | ug/kg | U    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 237000  | ug/kg | *N   | 7180 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 200     | ug/kg | U    | 59.9 | 200   | 200   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1770    | ug/kg |      | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 33800   | ug/kg |      | 338  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.5              | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.514            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.555            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188007

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8197

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,I6b  | 730000  | ug/kg | *N   | 6510 | 19100 | 19100 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,I12a | 4790    | ug/kg | U    | 1580 | 4790  | 4790  | 5  | P  | HSC     | 03/15/10 14:16 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 259     | ug/kg | J    | 197  | 987   | 987   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 11000   | ug/kg | E    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 462     | ug/kg |      | 19.7 | 98.7  | 98.7  | 2  | MS | BAJ     | 03/15/10 13:02 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 479     | ug/kg | U    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-70-2 | Calcium          | 579000  | ug/kg | *    | 7660 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,I6a  | 1710    | ug/kg | *EN  | 144  | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 324     | ug/kg | J    | 144  | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1420    | ug/kg |      | 287  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5970000 | ug/kg |      | 7660 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 4500    | ug/kg |      | 239  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 119000  | ug/kg |      | 8140 | 28700 | 28700 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 266000  | ug/kg | E    | 191  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.8    | ug/kg | U    | 4.03 | 11.8  | 11.8  | 1  | AV | JXL     | 03/02/10 14:03 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 383     | ug/kg | J    | 98.7 | 395   | 395   | 2  | MS | BAJ     | 03/15/10 13:02 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,I6b | 442000  | ug/kg | N    | 6130 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 987     | ug/kg | U    | 494  | 987   | 987   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 479     | ug/kg | U    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,I6b    | 314000  | ug/kg | *N   | 6700 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 197     | ug/kg | U    | 59.2 | 197   | 197   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1760    | ug/kg |      | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 46000   | ug/kg |      | 316  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.53             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.514            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.514            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188008

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8190

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99.07

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 690000  | ug/kg | *N   | 6400 | 18800 | 18800 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,112a | 4710    | ug/kg | U    | 1550 | 4710  | 4710  | 5  | P  | HSC     | 03/15/10 14:19 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 965     | ug/kg | U    | 193  | 965   | 965   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 8210    | ug/kg | E    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 283     | ug/kg |      | 19.3 | 96.5  | 96.5  | 2  | MS | BAJ     | 03/15/10 13:04 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 471     | ug/kg | U    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,14a    | 223000  | ug/kg | *    | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 2090    | ug/kg | *EN  | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 378     | ug/kg | J    | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1050    | ug/kg |      | 282  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5820000 | ug/kg |      | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 3850    | ug/kg |      | 235  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 138000  | ug/kg |      | 8000 | 28200 | 28200 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 175000  | ug/kg | E    | 188  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.4    | ug/kg | U    | 3.86 | 11.4  | 11.4  | 1  | AV | JXL1    | 03/02/10 14:05 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 573     | ug/kg |      | 96.5 | 386   | 386   | 2  | MS | BAJ     | 03/15/10 13:04 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 391000  | ug/kg | N    | 6030 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 965     | ug/kg | U    | 482  | 965   | 965   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 471     | ug/kg | U    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 258000  | ug/kg | *N   | 6590 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 193     | ug/kg | U    | 57.9 | 193   | 193   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1500    | ug/kg |      | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 34100   | ug/kg |      | 311  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt/vol. | Units | Final wt/vol. | Units | Date     | Analyst |
|------------------|------------|------------------|-----------------|-------|---------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.536           | g     | 50            | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.523           | g     | 50            | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.533           | g     | 30            | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10



**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188009

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8193

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,I6b  | 458000  | ug/kg | *N   | 6400 | 18800 | 18800 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,I12a | 941     | ug/kg | U    | 311  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic          | 255     | ug/kg | J    | 199  | 997   | 997   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 7520    | ug/kg | E    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 314     | ug/kg |      | 19.9 | 99.7  | 99.7  | 2  | MS | BAJ     | 03/15/10 13:09 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 471     | ug/kg | U    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,I4a    | 207000  | ug/kg | *    | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,I6a  | 1200    | ug/kg | *EN  | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 414     | ug/kg | J    | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1000    | ug/kg |      | 282  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5810000 | ug/kg |      | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 2290    | ug/kg |      | 235  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 113000  | ug/kg |      | 8000 | 28200 | 28200 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 201000  | ug/kg | E    | 188  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 10.7    | ug/kg | U    | 3.64 | 10.7  | 10.7  | 1  | AV | JXL1    | 03/02/10 14:07 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 509     | ug/kg |      | 99.7 | 399   | 399   | 2  | MS | BAJ     | 03/15/10 13:09 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,I6b | 215000  | ug/kg | N    | 6020 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 997     | ug/kg | U    | 498  | 997   | 997   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 471     | ug/kg | U    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,I6b    | 138000  | ug/kg | *N   | 6590 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 199     | ug/kg | U    | 59.8 | 199   | 199   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1530    | ug/kg |      | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 39800   | ug/kg |      | 311  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.508            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.568            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188010

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8191

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99.33

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,I6b  | 616000  | ug/kg | *N   | 6170 | 18100 | 18100 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,I12a | 4530    | ug/kg | U    | 1500 | 4530  | 4530  | 5  | P  | HSC     | 03/15/10 14:23 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 1000    | ug/kg | U    | 200  | 1000  | 1000  | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 10200   | ug/kg | E    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 246     | ug/kg |      | 20   | 100   | 100   | 2  | MS | BAJ     | 03/15/10 13:11 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 453     | ug/kg | U    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,I4a    | 238000  | ug/kg | *    | 7260 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,I6a  | 2090    | ug/kg | *EN  | 136  | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 470     | ug/kg |      | 136  | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1230    | ug/kg |      | 272  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 6370000 | ug/kg |      | 7260 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 3000    | ug/kg |      | 227  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 133000  | ug/kg |      | 7710 | 27200 | 27200 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 203000  | ug/kg | E    | 181  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.5    | ug/kg | U    | 3.9  | 11.5  | 11.5  | 1  | AV | JXL1    | 03/02/10 14:09 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 421     | ug/kg |      | 100  | 400   | 400   | 2  | MS | BAJ     | 03/15/10 13:11 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,I6b | 318000  | ug/kg | N    | 5800 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 1000    | ug/kg | U    | 500  | 1000  | 1000  | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 453     | ug/kg | U    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,I6b    | 210000  | ug/kg | *N   | 6350 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 200     | ug/kg | U    | 60   | 200   | 200   | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 2110    | ug/kg |      | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 43200   | ug/kg |      | 299  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.555            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.503            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.527            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188011

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8192

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,I6b  | 577000  | ug/kg | *N   | 6630 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,I12a | 4880    | ug/kg | U    | 1610 | 4880  | 4880  | 5  | P  | HSC     | 03/15/10 14:26 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 955     | ug/kg | U    | 191  | 955   | 955   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 8710    | ug/kg | E    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 312     | ug/kg |      | 19.1 | 95.5  | 95.5  | 2  | MS | BAJ     | 03/15/10 13:12 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 488     | ug/kg | U    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,I4a    | 209000  | ug/kg | *    | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,I6a  | 2200    | ug/kg | *EN  | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 421     | ug/kg | J    | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1340    | ug/kg |      | 293  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 6350000 | ug/kg |      | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 3330    | ug/kg |      | 244  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 119000  | ug/kg |      | 8290 | 29300 | 29300 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 206000  | ug/kg | E    | 195  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.4    | ug/kg | U    | 3.87 | 11.4  | 11.4  | 1  | AV | JXL1    | 03/02/10 14:11 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 460     | ug/kg |      | 95.5 | 382   | 382   | 2  | MS | BAJ     | 03/15/10 13:12 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,I6b | 327000  | ug/kg | N    | 6240 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 955     | ug/kg | U    | 477  | 955   | 955   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 488     | ug/kg | U    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,I6b    | 221000  | ug/kg | *N   | 6830 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 191     | ug/kg | U    | 57.3 | 191   | 191   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1610    | ug/kg |      | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 43000   | ug/kg |      | 322  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.519            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.53             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.534            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188012

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8195

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 870000  | ug/kg | *N   | 6630 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,12a  | 4870    | ug/kg | U    | 1610 | 4870  | 4870  | 5  | P  | HSC     | 03/15/10 14:30 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 415     | ug/kg | J    | 192  | 960   | 960   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 13400   | ug/kg | E    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 476     | ug/kg |      | 19.2 | 96    | 96    | 2  | MS | BAJ     | 03/15/10 13:14 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 487     | ug/kg | U    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-70-2 | Calcium          | 642000  | ug/kg | *    | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 4930    | ug/kg | *EN  | 146  | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 592     | ug/kg |      | 146  | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1120    | ug/kg |      | 292  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 5690000 | ug/kg |      | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 4340    | ug/kg |      | 244  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 113000  | ug/kg |      | 8290 | 29200 | 29200 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 272000  | ug/kg | E    | 195  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 10.4    | ug/kg | U    | 3.53 | 10.4  | 10.4  | 1  | AV | JXLI    | 03/02/10 14:13 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 417     | ug/kg |      | 96   | 384   | 384   | 2  | MS | BAJ     | 03/15/10 13:14 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 509000  | ug/kg | N    | 6240 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 960     | ug/kg | U    | 480  | 960   | 960   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 487     | ug/kg | U    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 353000  | ug/kg | *N   | 6820 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 192     | ug/kg | U    | 57.6 | 192   | 192   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1440    | ug/kg |      | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 42700   | ug/kg |      | 322  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.521            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.529            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.587            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188013

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8226

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 97.6

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 844000  | ug/kg | *N   | 6640 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,12a  | 4880    | ug/kg | U    | 1610 | 4880  | 4880  | 5  | P  | HSC     | 03/15/10 14:33 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 211     | ug/kg | J    | 202  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 12000   | ug/kg | E    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 262     | ug/kg |      | 20.2 | 101   | 101   | 2  | MS | BAJ     | 03/15/10 13:16 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 488     | ug/kg | U    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-70-2 | Calcium J,14a    | 285000  | ug/kg | *    | 7810 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 5350    | ug/kg | *EN  | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 481     | ug/kg | J    | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1140    | ug/kg |      | 293  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 6660000 | ug/kg |      | 7810 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 2580    | ug/kg |      | 244  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 165000  | ug/kg |      | 8300 | 29300 | 29300 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 220000  | ug/kg | E    | 195  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 11.9    | ug/kg | U    | 4.04 | 11.9  | 11.9  | 1  | AV | JXL     | 03/02/10 14:15 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 804     | ug/kg |      | 101  | 404   | 404   | 2  | MS | BAJ     | 03/15/10 13:16 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 380000  | ug/kg | N    | 6250 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 1010    | ug/kg | U    | 505  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 488     | ug/kg | U    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 302000  | ug/kg | *N   | 6830 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 202     | ug/kg | U    | 60.6 | 202   | 202   | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 1980    | ug/kg |      | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 40800   | ug/kg |      | 322  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.525            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.507            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.517            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188014

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8211

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte          | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum J+,16b  | 714000  | ug/kg | *N   | 6370 | 18700 | 18700 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-36-0 | Antimony UJ,12a  | 4690    | ug/kg | U    | 1550 | 4690  | 4690  | 5  | P  | HSC     | 03/15/10 14:37 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic          | 288     | ug/kg | J    | 188  | 941   | 941   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-39-3 | Barium           | 12100   | ug/kg | E    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium        | 440     | ug/kg |      | 18.8 | 94.1  | 94.1  | 2  | MS | BAJ     | 03/15/10 13:18 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium          | 469     | ug/kg | U    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-70-2 | Calcium          | 580000  | ug/kg | *    | 7500 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-47-3 | Chromium J-,16a  | 1590    | ug/kg | *EN  | 141  | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt           | 418     | ug/kg | J    | 141  | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-50-8 | Copper           | 1580    | ug/kg |      | 281  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-89-6 | Iron             | 6270000 | ug/kg |      | 7500 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-92-1 | Lead             | 4910    | ug/kg |      | 234  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium        | 163000  | ug/kg |      | 7970 | 28100 | 28100 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-96-5 | Manganese        | 317000  | ug/kg | E    | 187  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-97-6 | Mercury          | 10.9    | ug/kg | U    | 3.72 | 10.9  | 10.9  | 1  | AV | JXL1    | 03/02/10 14:17 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel           | 375     | ug/kg | J    | 94.1 | 376   | 376   | 2  | MS | BAJ     | 03/15/10 13:18 | 100315-4       | 954678           |
| 7440-09-7 | Potassium J+,16b | 437000  | ug/kg | N    | 6000 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7782-49-2 | Selenium         | 941     | ug/kg | U    | 470  | 941   | 941   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-22-4 | Silver           | 469     | ug/kg | U    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-23-5 | Sodium J+,16b    | 291000  | ug/kg | *N   | 6560 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-28-0 | Thallium         | 188     | ug/kg | U    | 56.5 | 188   | 188   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium         | 2110    | ug/kg |      | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-66-6 | Zinc             | 52400   | ug/kg |      | 309  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.54             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.555            | g     | 30             | mL    | 03/01/10 | TXB3    |

EJM  
04/01/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247192001

BASIS: As Received

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8235

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: WATER

%SOLIDS: 0

| CAS No.   | Analyte   | Result | Units | Qual | MDL   | PQL | CRDL | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|--------|-------|------|-------|-----|------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 200    | ug/L  | U    | 68    | 200 | 200  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-36-0 | Antimony  | 3      | ug/L  | U    | 1     | 3   | 3    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-38-2 | Arsenic   | 30     | ug/L  | U    | 5     | 30  | 30   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-39-3 | Barium    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-41-7 | Beryllium | 0.50   | ug/L  | U    | 0.1   | 0.5 | 0.5  | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-43-9 | Cadmium   | 1      | ug/L  | U    | 0.11  | 1   | 1    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-70-2 | Calcium   | 200    | ug/L  | U    | 50    | 200 | 200  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-47-3 | Chromium  | 1.62   | ug/L  | J    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-48-4 | Cobalt    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-50-8 | Copper    | 10     | ug/L  | U    | 3     | 10  | 10   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-89-6 | Iron      | 100    | ug/L  | U    | 30    | 100 | 100  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-92-1 | Lead      | 2      | ug/L  | U    | 0.5   | 2   | 2    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7439-95-4 | Magnesium | 300    | ug/L  | U    | 85    | 300 | 300  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-96-5 | Manganese | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | MS | BAJ     | 03/14/10 09:52 | 100313-5       | 954670           |
| 7439-97-6 | Mercury   | 0.20   | ug/L  | U    | 0.066 | 0.2 | 0.2  | 1  | AV | JXL1    | 02/25/10 12:52 | 022510W1-6     | 957034           |
| 7440-02-0 | Nickel    | 5      | ug/L  | U    | 1.5   | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-09-7 | Potassium | 204    | ug/L  |      | 50    | 150 | 150  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7782-49-2 | Selenium  | 30     | ug/L  | U    | 5     | 30  | 30   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-22-4 | Silver    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-23-5 | Sodium    | 251    | ug/L  | J    | 100   | 300 | 300  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-28-0 | Thallium  | 1      | ug/L  | U    | 0.3   | 1   | 1    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-62-2 | Vanadium  | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-66-6 | Zinc      | 10     | ug/L  | U    | 3.3   | 10  | 10   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954668           | 954667     | SW846 3005A      | 50               | mL    | 50             | mL    | 02/24/10 | AXG2    |
| 954670           | 954669     | SW846 3005A      | 50               | mL    | 50             | mL    | 02/24/10 | AXG2    |
| 957034           | 957032     | SW846 7470A Prep | 20               | mL    | 20             | mL    | 02/24/10 | TXB3    |

EJM  
04/01/10

## DATA VALIDATION COVER SHEET

5120-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1863 VALIDATION DATE: 04/01/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> TPH-GRO                      | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS          | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO                      | <input type="checkbox"/> METALS          | <input type="checkbox"/> PCB CONGENERS          | <input type="checkbox"/> ORGANOCHLORINE      |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS         |

☐ OTHER (DESCRIBE): total cyanide only

## Section II. Completeness Check

- | YES                                 | NO                       | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 6. RAW/BSS DATA          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 2. CASE NARRATIVE           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 3. SAMPLE RESULT FORMS      | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS  |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA    |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. It should be noted that the QC associated with the water sample was performed on a LANL sample from another RN. No sample data was qualified as a result.

Reviewed by: Mary Donovan

Level: I

Date: 04/02/10


VALIDATOR'S SIGNATURE: Ellen McEntee

DATE: 04/01/10


Form 5120-1, Revision 0.0

LOS ALAMOS  
Environmental Restoration Project




| GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST               |   |
|--|---|
| 5120-2<br><br>General Chemistry Analytical Data Validation Checklist | Records Use only<br><br> |

| Yes No N/A<br>(Check One) |                                     |                                     |  | Assign Qualifier Listed Below If<br>Criterion = Yes |                     |
|---------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
|                           |                                     |                                     |  | Non-detected<br>Analyte                             | Detected<br>Analyte |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. The holding time was >1 and ≤2 times the applicable holding time requirement.   | UJ, I9  | J-, I9              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. The holding time was >2 times the applicable holding time requirement.  | R, I9a  | J-, I9a             |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.  | R, I9b  | R, I9b              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.   | UJ, R, I7   | J, I7               |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. | UJ, I7a   | J, I7a              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 6. The ICV and/or CCV were recovered outside the method specific limits.   | UJ, I7c   | J, I7c              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 7. The ICV and/or CCV were not analyzed at the appropriate method frequency.   | UJ, I7d   | J, I7d              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.                               | R, I7f  | R, I7f              |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 9. The interference check sample percent recovery value is <50%.   | R, I2   | J-, I2              |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 10. The interference check sample percent recovery value is ≥50% and <80%.   | UJ, I2a   | J-, I2a             |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 11. The interference check sample percent recovery value is >120%.   | N/A   | J+, I2b             |
| <input type="checkbox"/>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 12. The interference check sample was not analyzed with the samples.   | R, I2c  | R, I2c              |
| <input type="checkbox"/>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. The sample result is ≤5X the concentration of the related analyte in the method blank.   | U, I4   | N/A                 |

| GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST                             |   |
|--|---|
| <b>5120-2</b><br><br><b>General Chemistry Analytical Data Validation Checklist</b> | Records Use only<br><br> |

| Yes No N/A               |                                     |                          |  | Assign Qualifier Listed Below If Criterion = Yes |                  |
|--------------------------|-------------------------------------|--------------------------|--|--|------------------|
| (Check One)              |                                     |                          |  | Non-detected Analyte                             | Detected Analyte |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.  | N/A  | J, I4a           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.  | U, I4b   | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 16. Continuing calibration blanks were not analyzed at the appropriate method frequency.   | UJ, I4c  | J, I4c           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.  | U, I4d   | N/A              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.  | R, I4e   | R, I4e           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.  | R, I6  | R, I6            |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.  | UJ, I6a  | J-, I6a          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.   | UJ, I6b  | J+, I6b          |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information. | R, I6c   | R, I6c           |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.  | UJ, I10b   | J, I10b          |

| GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST               |   |
|--|---|
| 5120-2<br><br>General Chemistry Analytical Data Validation Checklist | Records Use only<br><br> |

| Yes No N/A<br>(Check One)           |                                     |                          |   | Assign Qualifier Listed Below If<br>Criterion = Yes |  |
|-------------------------------------|-------------------------------------|--------------------------|---|---|--|
|                                     |                                     |                          |   | Non-detected<br>Analyte                             | Detected<br>Analyte                      |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.                           | UJ, I10d  | J, I10d                                  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.  | R, I12  | R, I12                                   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.   | UJ, I12a  | J-, I12a                                 |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.   | N/A   | J+, I12b                                 |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD Information is present. Qualify according to MS/MSD criteria.   | R, I12c   | R, I12c                                  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 29. Duplicate, dilution, or reanalysis  | UJ, I88   | J, I88                                   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.   | UJ, R, I19  | J, R, I19                                |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | 31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory. | U, U_LAB  | J, J_LAB<br>NQ, NQ<br>(no qualification) |

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8187  
Sample ID: 247188006  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 2.49%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 65.8 | 242 | ug/kg | 1 | AXC2 | 02/24/10 | 1337 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8197  
Sample ID: 247188007  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.46%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 61.6 | 227 | ug/kg | 1  | AXC2    | 02/24/10 | 1338 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8190  
Sample ID: 247188008  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: .925%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 68.6 | 252 | ug/kg | 1 | AXC2 | 02/24/10 | 1339 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8193  
Sample ID: 247188009  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.27%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 68.9 | 253 | ug/kg | 1  | AXC2    | 02/24/10 | 1339 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8191  
Sample ID: 247188010  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: .666%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 59.0 | 217 | ug/kg | 1 | AXC2 | 02/24/10 | 1340 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |



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Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8192  
Sample ID: 247188011  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.2%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 64.9 | 239 | ug/kg | 1  | AXC2    | 02/24/10 | 1341 | 954524 | 1      |

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

**Certificate of Analysis**

Company : Los Alamos National Laboratory  
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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8195  
Sample ID: 247188012  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.55%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 62.8 | 231 | ug/kg | 1  | AXC2    | 02/24/10 | 1342 | 954524 | 1      |

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8226  
Sample ID: 247188013  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 2.43%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 67.0 | 246 | ug/kg | 1  | AXC2    | 02/24/10 | 1343 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

**Certificate of Analysis**

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8211  
Sample ID: 247188014  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.23%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 64.9 | 239 | ug/kg | 1  | AXC2    | 02/24/10 | 1344 | 954524 | 1      |

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

**Certificate of Analysis**

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8196  
Sample ID: 247188001  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.17%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 59.3 | 218 | ug/kg | 1  | AXC2    | 02/24/10 | 1323 | 954524 | 1      |

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8186  
Sample ID: 247188002  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.16%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 66.2 | 243 | ug/kg | 1 | AXC2 | 02/24/10 | 1327 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8194  
Sample ID: 247188003  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.03%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 61.3 | 226 | ug/kg | 1 | AXC2 | 02/24/10 | 1331 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

**Certificate of Analysis**

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8189  
Sample ID: 247188004  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.02%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 68.7 | 253 | ug/kg | 1  | AXC2    | 02/24/10 | 1331 | 954524 | 1      |

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |



## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8188  
Sample ID: 247188005  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.63%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

**Flow Injection Analysis**

*SW9012A Cyanide, Total "Dry Weight Corrected"*

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 60.6 | 223 | ug/kg | 1 | AXC2 | 02/24/10 | 1336 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

**The following Prep Methods were performed**

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

**The following Analytical Methods were performed**

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 8, 2010

Client SDG: 10-1863-1

Client Sample ID: RE15-10-8235  
Sample ID: 247192001  
Matrix: W  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

| Parameter                                   | Qualifier | Result | DL   | RL   | Units | DF | Analyst | Date     | Time | Batch  | Method |
|---|-----------|--------|------|------|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>              |           |        |      |      |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "As Received"</i> |           |        |      |      |       |    |         |          |      |        |        |
| Cyanide, Total                              | U         | ND     | 1.66 | 5.00 | ug/L  | 1  | AXC2    | 02/23/10 | 1319 | 954529 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/22/10 | 1346 | 954526     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

Monday, February 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1863C

LOS ALAMOS

REQUEST NUMBER: 10-1863

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/17/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2471887, 2471927

| SAMPLE ID    | CTNR | CTNR DESC | ORDER          | PRESERV          | MATRIX |
|--------------|------|-----------|----------------|------------------|--------|
| RE15-10-8196 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8186 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8194 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8189 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8188 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8187 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8197 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8190 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8193 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8191 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8192 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8195 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8226 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8211 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8235 | 1    | POLY      | METALS-GEL     | Nitric Acid      | W      |
| RE15-10-8235 | 1    | POLY      | SW-846:6850    | Ice              | W      |
| RE15-10-8235 | 1    | POLY      | TCN            | Sodium Hydroxide | W      |

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

2/15/10

3:00

Printed Name

Signature

Greg Tyler

[Signature]

2-16-10 0850

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, February 15, 2010  
**LOS ALAMOS**  
NATIONAL LABORATORY

ATTN: Valerie Davis  
General Engineering Laboratories, Inc., Charleston, SC.  
2040 Savage Rd  
Charleston, SC 29407

These Samples are on:  
LANL Request Number: 10-1863  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/15/2010  
TURNAROUND/REPORT DUE: 3/17/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background  
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

| PRIORITY | METHOD CODE  | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846:6010B | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8187 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8188 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8189 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8190 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8191 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8192 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8193 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8194 | R             | 2/10/2010    |                      |

Monday, February 15, 2010 Page 2 of 2  
 REQUEST NUMBER: 10-1863

| PRIORITY | METHOD CODE  | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846:6010B | 1     | RE15-10-8195 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8196 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8197 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8211 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8226 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:6020  | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:8850  | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:9012A | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8187 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8188 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8189 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8190 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8191 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8192 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8193 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8194 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8195 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8196 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8197 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8211 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8226 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |

Final Page of REQUEST NUMBER 10-1863



February 19, 2010

[www.gel.com](http://www.gel.com)

Ms. Joylene Valdez  
Los Alamos National Laboratory  
PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545

Re: LANL ER Project  
Work Orders: 247188 247192  
SDG: 10-1863

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 16, 2010, and analyzed for General Chemistry, Metals and Perchlorates by LCMSMS. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis  
Project Manager

Purchase Order: 72733-001-09  
Chain of Custody: 10-1863  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 247188 and 247192**  
**SDG: 10-1863**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 247188 and 247192  
SDG # : 10-1863**

**February 19, 2010**

**Laboratory Identification:**

GEL Laboratories LLC  
2040 Savage Road  
Charleston, South Carolina 29407  
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 16, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

**Sample Identification** The laboratory received the following samples:

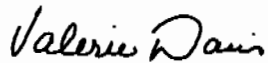
| <u>Laboratory ID</u> | <u>Client ID</u> |
|----------------------|------------------|
| 247188001            | RE15-10-8196     |
| 247188002            | RE15-10-8186     |
| 247188003            | RE15-10-8194     |
| 247188004            | RE15-10-8189     |
| 247188005            | RE15-10-8188     |
| 247188006            | RE15-10-8187     |
| 247188007            | RE15-10-8197     |
| 247188008            | RE15-10-8190     |
| 247188009            | RE15-10-8193     |
| 247188010            | RE15-10-8191     |
| 247188011            | RE15-10-8192     |
| 247188012            | RE15-10-8195     |
| 247188013            | RE15-10-8226     |
| 247188014            | RE15-10-8211     |
| 247192001            | RE15-10-8235     |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package** The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry, Metals and Perchlorates by LCMSMS.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.



Valerie Davis

Project Manager

**List of current GEL Certifications as of 19 February 2010**

| <b>State</b>              | <b>Certification</b> |
|---------------------------|----------------------|
| Arizona                   | AZ0668               |
| Arkansas                  | 88-0651              |
| CLIA                      | 42D0904046           |
| California – NELAP        | 01151CA              |
| Colorado                  | GEL                  |
| Connecticut               | PH-0169              |
| Dept. of Navy             | NFESC 413            |
| EPA Region 5              | WG-15J               |
| Florida – NELAP           | E87156               |
| Georgia                   | E87156 (FL/NELAP)    |
| Georgia DW                | 967                  |
| Hawaii                    | N/A                  |
| ISO 17025                 | 2567.01              |
| Idaho                     | SC00012              |
| Illinois – NELAP          | 200029               |
| Indiana                   | C-SC-01              |
| Kansas – NELAP            | E-10332              |
| Kentucky                  | 90129                |
| Louisiana – NELAP         | 03046                |
| Maryland                  | 270                  |
| Massachusetts             | M-SC012              |
| Nevada                    | SC00012              |
| New Jersey – NELAP        | SC002                |
| New Mexico                | FL NELAP E87156      |
| New York – NELAP          | 11501                |
| North Carolina            | 233                  |
| North Carolina DW         | 45709                |
| Oklahoma                  | 9904                 |
| Pennsylvania – NELAP      | 68-00485             |
| South Carolina            | 10120001/10120002    |
| Tennessee                 | TN 02934             |
| Texas – NELAP             | T104704235-07B-TX    |
| U.S. Dept. of Agriculture | S-52597              |
| Utah – NELAP              | GEL                  |
| Vermont                   | VT87156              |
| Virginia                  | 00151                |
| Washington                | C1641                |

# **Chain of Custody and Supporting Documentation**

Monday, February 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1863C

LOS ALAMOS

REQUEST NUMBER: 10-1863

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/17/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2471887, 2471927

| SAMPLE ID    | CTNR | CTNR DESC | ORDER          | PRESERV          | MATRIX |
|--------------|------|-----------|----------------|------------------|--------|
| RE15-10-8196 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8186 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8194 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8189 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8188 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8187 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8197 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8190 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8193 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8191 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8192 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8195 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8226 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8211 | 1    | POLY      | Metals+ClO4+CN | Ice              | R      |
| RE15-10-8235 | 1    | POLY      | METALS-GEL     | Nitric Acid      | W      |
| RE15-10-8235 | 1    | POLY      | SW-846:6850    | Ice              | W      |
| RE15-10-8235 | 1    | POLY      | TCN            | Sodium Hydroxide | W      |

Relinquished By:

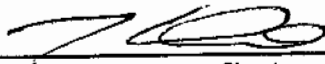
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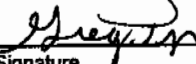
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Date

Time

  
 Printed Name      Signature

2/15/10      3:00

 Greag Tyler  2-16-10 0850  
 Printed Name      Signature

Printed Name      Signature

Printed Name      Signature

Printed Name      Signature

Printed Name      Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name      Signature

Monday, February 15, 2010

**LOS ALAMOS**  
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.  
2040 Savage Rd  
Charleston, SC 29407

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/15/2010**

**TURNAROUND/REPORT DUE: 3/17/2010**

**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**

**LAB REQUEST COMMENTS:**

LANLER SMO CONTACT:

Signature: 

Page 1 of 2  
REQUEST NUMBER: 10-1863

These Samples are on:  
LANL Request Number: 10-1863  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

| PRIORITY | METHOD CODE  | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846.6010B | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8187 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8188 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8189 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8190 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8191 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8192 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8193 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8194 | R             | 2/10/2010    |                      |



Monday, February 15, 2010

Page 2 of 2

REQUEST NUMBER: 10-1863

| PRIORITY | METHOD CODE  | CNTNR | SAMPLE ID    | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
|          | SW-846:6010B | 1     | RE15-10-8195 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8196 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8197 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8211 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8226 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:6020  | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:6850  | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |
|          | SW-846:9012A | 1     | RE15-10-8186 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8187 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8188 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8189 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8190 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8191 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8192 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8193 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8194 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8195 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8196 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8197 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8211 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8226 | R             | 2/10/2010    |                      |
|          |              | 1     | RE15-10-8235 | W             | 2/10/2010    |                      |

Final Page of REQUEST NUMBER 10-1863



## SAMPLE RECEIPT &amp; REVIEW FORM

|                                     |     |                              |   |
|-------------------------------------|-----|------------------------------|---|
| Client: LANL                        |     | SDG/ARCO/Work Order: 10-1863 |   |
| Received By: Greg Tyler             |     | Date Received: 2/16/10       |   |
| Suspected Hazard Information        | Yes | No                           | *If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation. |
| COC/Samples marked as radioactive?  |     | X                            | Maximum Counts Observed*: 60cpm   |
| Classified Radioactive II by RSO?   |     | X                            |   |
| COC/Samples marked containing PCBs? |     | X                            |   |
| Shipped as a DOT Hazardous?         |     | X                            | Hazard Class Shipped: UN#:  |
| Samples identified as Foreign Soil? |     | X                            |   |

| Sample Receipt Criteria   | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items)  |
|---|-----|----|----|--|
| 1 Shipping containers received intact and sealed?                 | X   |    |    | Circle Applicable:<br>seals broken    damaged container    leaking container    other (describe) |
| 2 Samples requiring cold preservation within 0 ≤ 6 deg. C?        | X   |    |    | Preservation Method:<br>ice bags    blue ice    dry ice    none    other<br>1-6    9-11          |
| 3 Chain of custody documents included with shipment?              | X   |    |    |  |
| 4 Sample containers intact and sealed?                            | X   |    |    | Circle Applicable:<br>seals broken    damaged container    leaking container    other (describe) |
| 5 Samples requiring chemical preservation at proper pH?           | X   |    |    | Sample ID's, containers affected and observed pH:<br>If Preservation added, Lot#:                |
| 6 VOA vials free of headspace (defined as < 6mm bubble)?          |     | X  |    | Sample ID's and containers affected:   |
| 7 Are Encore containers present?                                  |     |    | X  | (If yes, immediately deliver to Volatiles laboratory)  |
| 8 Samples received within holding time?                           | X   |    |    | Id's and tests affected:   |
| 9 Sample ID's on COC match ID's on bottles?                       | X   |    |    | Sample ID's and containers affected:   |
| 10 Date & time on COC match date & time on bottles?               |     | X  |    | Sample ID's affected:<br><b>No time on Chain of Custody.</b>                                     |
| 11 Number of containers received match number indicated on COC?   | X   |    |    | Sample ID's affected:  |
| 12 COC form is properly signed in relinquished/received sections? | X   |    |    |  |

## Comments:

## Fed Ex Tracking Numbers:

7209 7850 0680 1C    7209 7850 0750 3C    7209 7850 0809 6C  
 7209 7850 0831 1C    7209 7850 0706 4C    7209 7850 0647 9C  
 7209 7850 0783 1C    7209 7850 0739 4C    7209 7850 0636 9C  
 7209 7850 0740 2C    7209 7850 0717 4C    7209 7850 0670 10C  
 7209 7850 0820 2C    7209 7850 0728 4C    7209 7850 0658 11C  
 7209 7850 0794 2C    7209 7850 0772 5C    7209 7850 0669 11C  
 7209 7850 0810 2C    7209 7850 0691 5C  
 7209 7850 0842 3C    7209 7850 0761 5C

PM (or PMA) review: Initials

ms

Date

2/17/10

JOYLENE VALDEZ (505) 665-9968  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 51.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 53.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0532VA00

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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

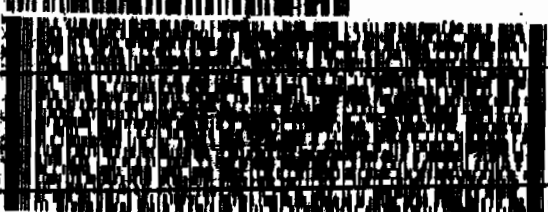
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CHS

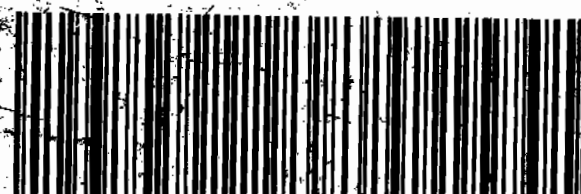


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TUE - 16FEB A1  
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 50.0 LB MAN  
CAD: 0014176/CAFE2449

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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
T800 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 51.0 LB MAN  
CAD: 0014176/CAFE2449

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GENERAL ENGINEERING LAB  
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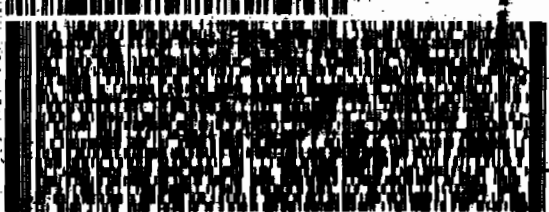
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PRIORITY OVERNIGHT

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TUE - 16FEB A1  
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 50.0 LB MAN  
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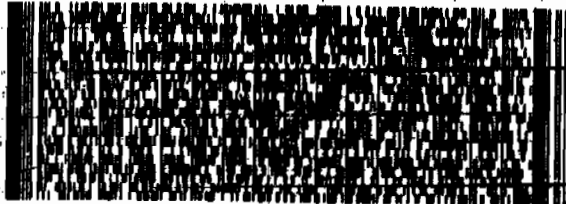
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CHS

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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 52.0 LB MAN  
CAD: 0014176/CAPE2449

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PRIORITY OVERNIGHT

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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
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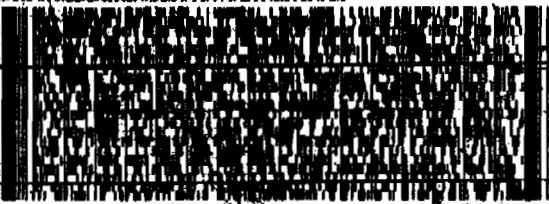
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
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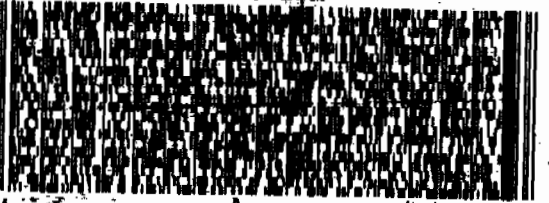
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1 of 2  
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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 47.8 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
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GENERAL ENGINEERING LAB  
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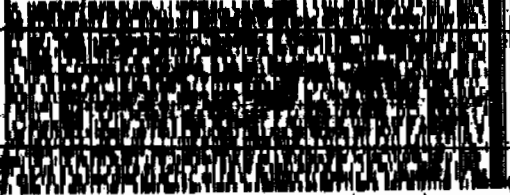
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3 of 3  
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PRIORITY OVERNIGHT

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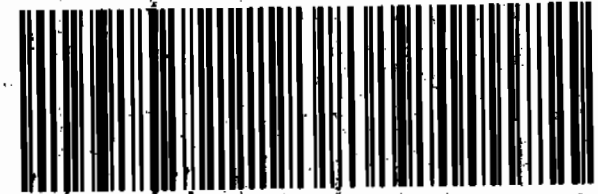
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JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
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SHIP DATE: 15FEB10  
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ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGG BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 15FEB10  
ACTWGT: 39.8 LB MAN  
CAD: 0014176/CAFE2449  
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2 of 3  
MPS# 7209 7850 0761  
Matr# 7209 7850 0750 [0201]

TUE - 16FEB A1  
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9966  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

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ACTNGT: 64.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

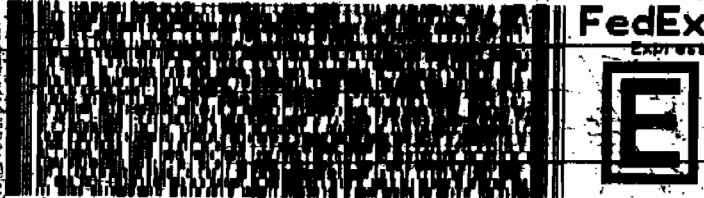
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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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(843) 556-8171  
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TUE - 16FEB A1  
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9966  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

SHIP DATE: 15FEB10  
ACTNGT: 72.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

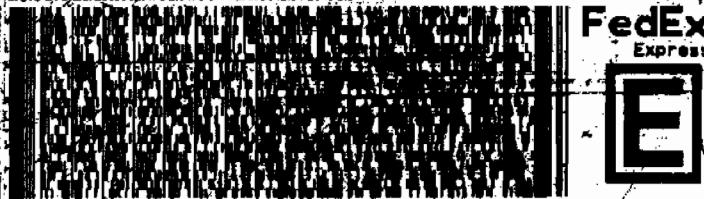
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GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 68010AMR3A0532VA00

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1 of 2  
TRKH 7209 7850 0670  
0201  
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TUE - 16FEB A1  
PRIORITY OVERNIGHT

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29407  
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ORIGIN ID: SAFA (505) 665-9966  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

SHIP DATE: 15FEB10  
ACTNGT: 49.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

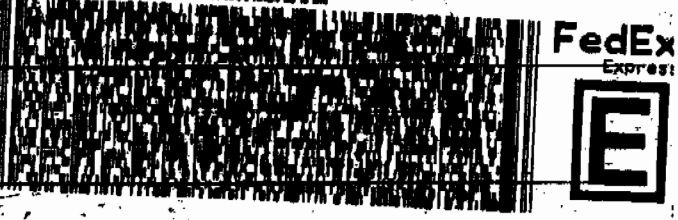
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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
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0014176/CAFE2449



3 of 3  
MPS# 7209 7850 0809  
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TUE - 16FEB A1  
PRIORITY OVERNIGHT

XX CHSA

29407  
SC-US  
CHS



ORIGIN ID: SAFA (505) 665-9966  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

SHIP DATE: 15FEB10  
ACTNGT: 71.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

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VALERIE DAVIS  
GENERAL ENGINEERING LAB  
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REF: 68010AMR2A0515BYD0

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2 of 3  
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0263  
Mstr# 7209 7850 0825 0201

TUE - 16FEB A1  
PRIORITY OVERNIGHT

XX CHSA

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# **Data Review Qualifier Flag Definition Sheet**

## Data Review Qualifier Definitions

Qualifier    Explanation

\*    A quality control analyte recovery is outside of specified acceptance criteria

\*\*    Analyte is a surrogate compound

<    Result is less than value reported

>    Result is greater than value reported

^    RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

A    The TIC is a suspected aldol-condensation product

B    Target analyte was detected in the associated blank

B    Metals-Either presence of analyte detected in the associated blank, or  
MDL/IDL < sample value < PQL

BD    Results are either below the MDC or tracer recovery is low

C    Analyte has been confirmed by GC/MS analysis

D    Results are reported from a diluted aliquot of the sample

d    5-day BOD-The 2:1 depletion requirement was not met for this sample

E    Organics-Concentration of the target analyte exceeds the instrument calibration range

E    Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

H    Analytical holding time was exceeded

h    Preparation or preservation holding time was exceeded

J    Value is estimated

N    Metals-The Matrix spike sample recovery is not within specified control limits

N    Organics-Presumptive evidence based on mass spectral library search to make a tentative  
identification of the analyte (TIC). Quantitation is based on nearest internal standard  
response factor

N/A    Spike recovery limits do not apply. Sample concentration exceeds spike concentration  
by 4X or more

ND    Analyte concentration is not detected above the reporting limit

UI    Gamma Spectroscopy-Uncertain identification

X    Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y    QC Samples were not spiked with this compound

Z    Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

# LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1863**

**Method/Analysis Information**

**Procedure:** **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**

**Analytical Method:** SW846 6850 Modified

**Prep Method:** SW846 6850 Modified

**Analytical Batch Number:** 955709

**Prep Batch Number:** 955708

**Sample Analysis**

| <b>Sample ID</b> | <b>Client ID</b> |
|------------------|------------------|
| 247188001        | RE15-10-8196     |
| 247188002        | RE15-10-8186     |
| 247188003        | RE15-10-8194     |
| 247188004        | RE15-10-8189     |
| 247188005        | RE15-10-8188     |
| 247188006        | RE15-10-8187     |
| 247188007        | RE15-10-8197     |
| 247188008        | RE15-10-8190     |
| 247188009        | RE15-10-8193     |
| 247188010        | RE15-10-8191     |
| 247188011        | RE15-10-8192     |
| 247188012        | RE15-10-8195     |
| 247188013        | RE15-10-8226     |
| 247188014        | RE15-10-8211     |

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|            |  |
|------------|--|
| 1202049043 | Interference Check Sample (ICS)                      |
| 1202049039 | Method Blank (MB)                                    |
| 1202049040 | Laboratory Control Sample (LCS)                      |
| 1202049041 | 247188001(RE15-10-8196) Matrix Spike (MS)            |
| 1202049042 | 247188001(RE15-10-8196) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

#### **Preparation/Analytical Method Verification**

##### **SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

#### **Calibration Information**

##### **Initial Calibration**

All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

##### **CCV Requirements**

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

##### **CCB Requirements**

All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

##### **CCV Requirements**

All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

##### **Low Level Standard (CRI) Requirements**

All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

#### **Quality Control (QC) Information**

##### **Method Blank (MB) Statement**

The MB(s) analyzed with this SDG met the acceptance criteria.

##### **Interference Check Sample (ICS)**

The interference check sample (ICS) met all recovery acceptance criteria.

##### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

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**QC Sample Designation**

Sample 247188001 (RE15-10-8196) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**

The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**

During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

**Technical Information****Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**

Samples 1202049039 (MB), 1202049040 (LCS), 1202049041 (RE15-10-8196MS), 1202049042 (RE15-10-8196MSD), 1202049043 (ICS), 247188001 (RE15-10-8196) and 247188002 (RE15-10-8186) were re-analyzed due to a CVS failing acceptance criteria. The re-analysis passed acceptance criteria and is reported.

**Miscellaneous Information****Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

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### Manual Integrations

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

### Method Comments

The samples in this SDG were not originally analyzed using EPA Method 314.0.

### Additional Comments

The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

### Perchlorate Isotope Ratio

The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

### System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

### Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

### Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

### Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert M. Mauer Date: 03/12/10

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# SAMPLE DATA SUMMARY



## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8196  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188001  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.8

| CAS No.    | Analyte <sup>a</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:07 | per0306031a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate-O(18)         |      |      | 4.81  | ug/kg |   | 1               | 06-MAR-10 19:07 | per0306031a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 255708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8186

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188002

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:34 | per0306034a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate-O(18)         |      |      | 4.90  | ug/kg |   | 1               | 06-MAR-10 19:34 | per0306034a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 255708Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8194Date Received: 16-FEB-10GEL Job No (SDG): 10-1863GEL Sample ID: 247188003Date Filtered: 03-MAR-10Injection Volume (uL): 20%Solids: 99

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:16 | per0305064a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate-O(18)         |      |      | 4.50  | ug/kg |   | 1               | 05-MAR-10 23:16 | per0305064a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8189

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188004

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.533 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate Isotope Ratio |      |      | 3.09  |       |   | 1               | 05-MAR-10 23:26 | per0305065a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.562 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate-O(18)         |      |      | 4.49  | ug/kg |   | 1               | 05-MAR-10 23:26 | per0305065a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8188

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188005

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.4

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate Isotope Ratio |      |      | 3.26  |       |   | 1               | 05-MAR-10 23:36 | per0305066a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate-O(18)         |      |      | 4.66  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8187

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188006

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 97.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:46 | per0305067a |
| 14797-73-0 | Perchlorate-101           | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate-O(18)         |      |      | 4.54  | ug/kg |   | 1               | 05-MAR-10 23:46 | per0305067a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8197

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188007

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:56 | per0305068a |
| 14797-73-0 | Perchlorate-101           | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate-O(18)         |      |      | 4.53  | ug/kg |   | 1               | 05-MAR-10 23:56 | per0305068a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X <sup>1</sup>  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8190

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188008

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99.07

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:06 | per0305069a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate-O(18)         |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:06 | per0305069a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8193  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188009  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.7

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:16 | per0305070a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate-O(18)         |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:16 | per0305070a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8191

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188010

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99.33

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:26 | per0305071a |
| 14797-73-0 | Perchlorate-101           | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate-O(18)         |      |      | 4.63  | ug/kg |   | 1               | 06-MAR-10 00:26 | per0305071a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8192  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188011  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 28.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:36 | per0305072a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate-O(18)         |      |      | 4.68  | ug/kg |   | 1               | 06-MAR-10 00:36 | per0305072a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 255708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8195

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188012

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:46 | per0305073a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate-O(18)         |      |      | 4.64  | ug/kg |   | 1               | 06-MAR-10 00:46 | per0305073a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8226

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188013

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 97.6

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:27 | per0305077a |
| 14797-73-0 | Perchlorate-101           | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate-O(18)         |      |      | 4.71  | ug/kg |   | 1               | 06-MAR-10 01:27 | per0305077a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8211  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188014  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:37 | per0305078a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate-O(18)         |      |      | 4.62  | ug/kg |   | 1               | 06-MAR-10 01:37 | per0305078a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

# QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1863

Extract Batch Code: 955708

Date Filtered: 03-MAR-10

Matrix: SOIL

Sample ID: 1202049040

| Analyte <sup>^</sup>      | True | Found | Units | %Rec | Q | Control Limits |
|---------------------------|------|-------|-------|------|---|----------------|
| Perchlorate               | 2.00 | 2.09  | ug/kg | 105  |   | 70 - 130       |
| Perchlorate Isotope Ratio |      | 3.26  |       |      |   | -              |
| Perchlorate-101           | 2.00 | 2.04  | ug/kg | 102  |   | 70 - 130       |
| Perchlorate-O(18)         |      | 4.93  | ug/kg |      |   | -              |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.



Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1863

Extract Batch Code: 955708 Date Filtered: 03-MAR-10

Matrix: SOIL Sample ID: 1202049043

| Analyte^                  | True | Found | Units | %Rec | Q | Control Limits |
|---------------------------|------|-------|-------|------|---|----------------|
| Perchlorate               | 2.00 | 2.19  | ug/kg | 109  |   | 70 - 130       |
| Perchlorate Isotope Ratio |      | 3.16  |       |      |   |                |
| Perchlorate-101           | 2.00 | 2.2   | ug/kg | 110  |   | 70 - 130       |
| Perchlorate-O(18)         |      | 5.26  | ug/kg |      |   |                |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

uantify Sample Report MassLynx 4.0 SP4  
he GEL Group, LLC Analyst: Charliers W. Wilson

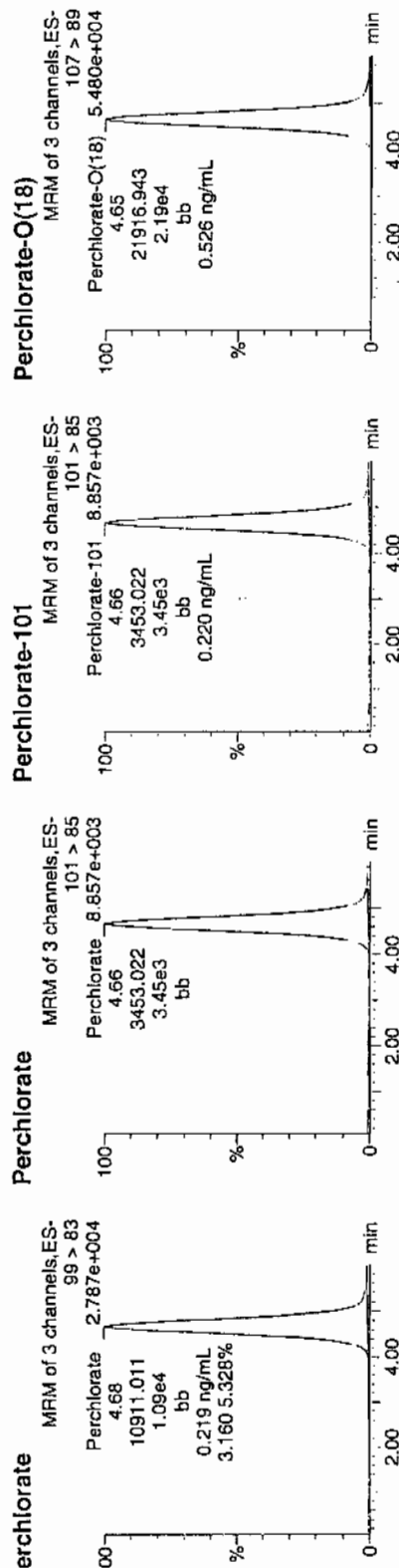
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ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306027a  
ate: 06-Mar-2010  
ime: 18:31:19  
i: 1202049043  
ial: 1:5,C

03-07-10

LANU | 955701 | 30000 | 105 | 11



| Name      | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N     | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|---------|-----------|
| 202049043 | Perchlorate       | 99 > 83  | 4.68 | 10911.011 | 10911.011 | bb       |          | 0.2188 | 109.41 | 9.41  | 818.797 | 3.16      |
| 202049043 | Perchlorate-101   | 101 > 85 | 4.66 | 3453.022  | 3453.022  | bb       |          | 0.2201 | 110.06 | 10.06 | 839.863 |           |
| 202049043 | Perchlorate-O(18) | 107 > 89 | 4.65 | 21916.943 | 21916.943 | bb       |          | 0.5260 | 105.19 | 5.19  | 504.170 |           |

4/11/10 03/08/10

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1863

Extract Batch Code: 955708

Date Extracted: 03-MAR-10

GEL MS/PS ID: 1202049041

Client ID: RE15-10-8196

GEL MSD/PSD ID: 1202049042

QC Type: MS

| Compound^                 | Spike Added | Sample Conc | Units | MS Conc | MS Rec | # | MSD Conc | MSD Rec | # | RPD  | # | RPD Limit | Recovery Limit |
|---------------------------|-------------|-------------|-------|---------|--------|---|----------|---------|---|------|---|-----------|----------------|
| Perchlorate               | 2.02        | 0.0457      | ug/kg | 2.20    | 106    |   | 2.07     | 100     |   | 6.03 |   | 30        | 75 - 125       |
| Perchlorate Isotope Ratio | 0           | 0.00        |       | 3.19    |        |   | 3.18     |         |   | 0    |   |           | -              |
| Perchlorate-101           | 2.02        | 0.0375      | ug/kg | 2.19    | 106    |   | 2.07     | 100     |   | 5.67 |   | 30        | 75 - 125       |
| Perchlorate-Q(18)         | 0           | 4.81        | ug/kg | 4.82    |        |   | 4.98     |         |   | 3.17 |   |           | -              |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305001a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305001a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305002a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305002a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306001a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306001a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306002a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306002a | IPB001        |

Identify Sample Report MassLynx 4.0 SP4

Analyst: Charlers W. Wilson

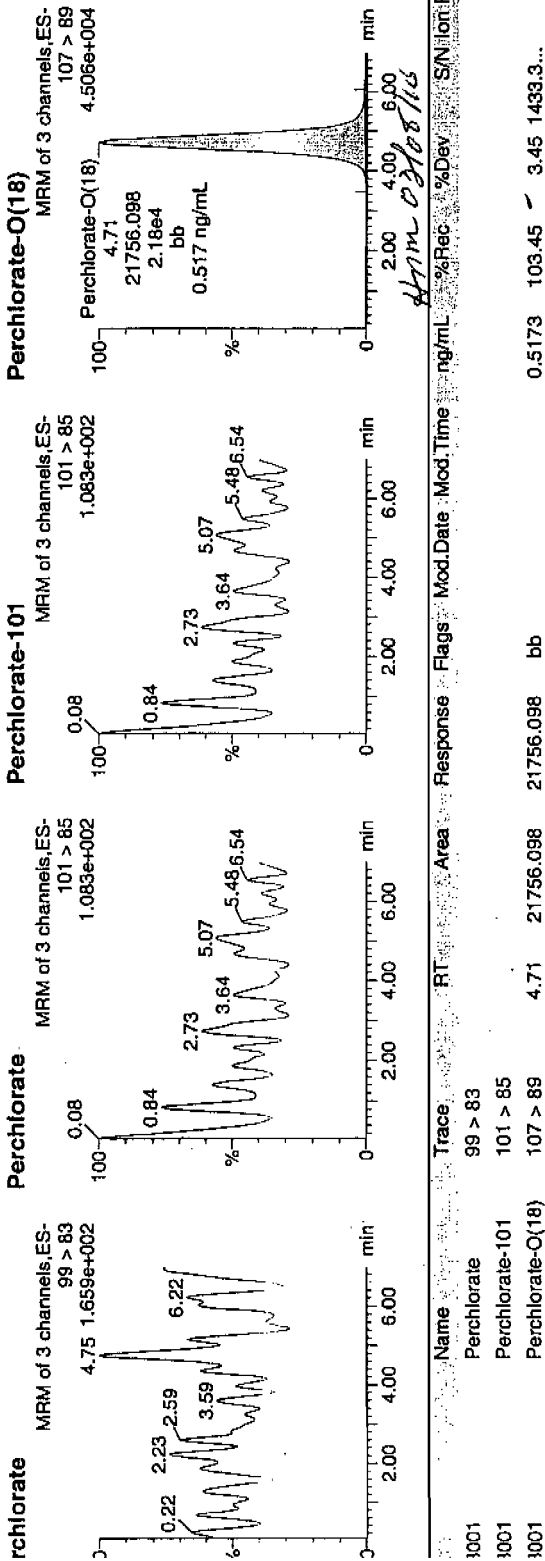
File: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Acquired: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Processed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19  
 File: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

Sample: per0305001a  
 Date: 05-Mar-2010  
 Time: 12:39:45  
 IPB001  
 IL: 1:1,A

0305001-D



| Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev | S/N       | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |        |      |           | 0.00      |
| Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |        |      |           |           |
| Perchlorate-O(18) | 107 > 89 | 4.71 | 21756.098 | 21756.098 | bb    |          |          | 0.5173 | 103.45 | 3.45 | 1433.3... |           |

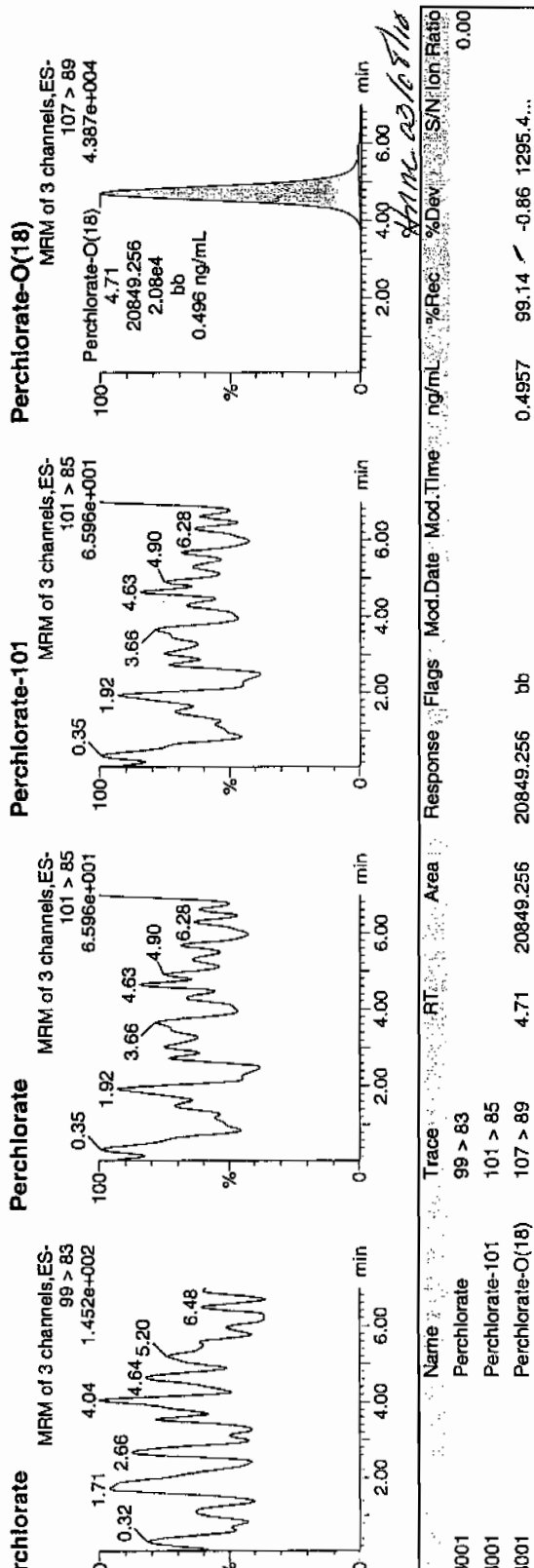
antify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Date: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

me: per0305002a  
 te: 05-Mar-2010  
 ne: 12:50:06  
 IPB001  
 il: 1:1,A

03-06-10



Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

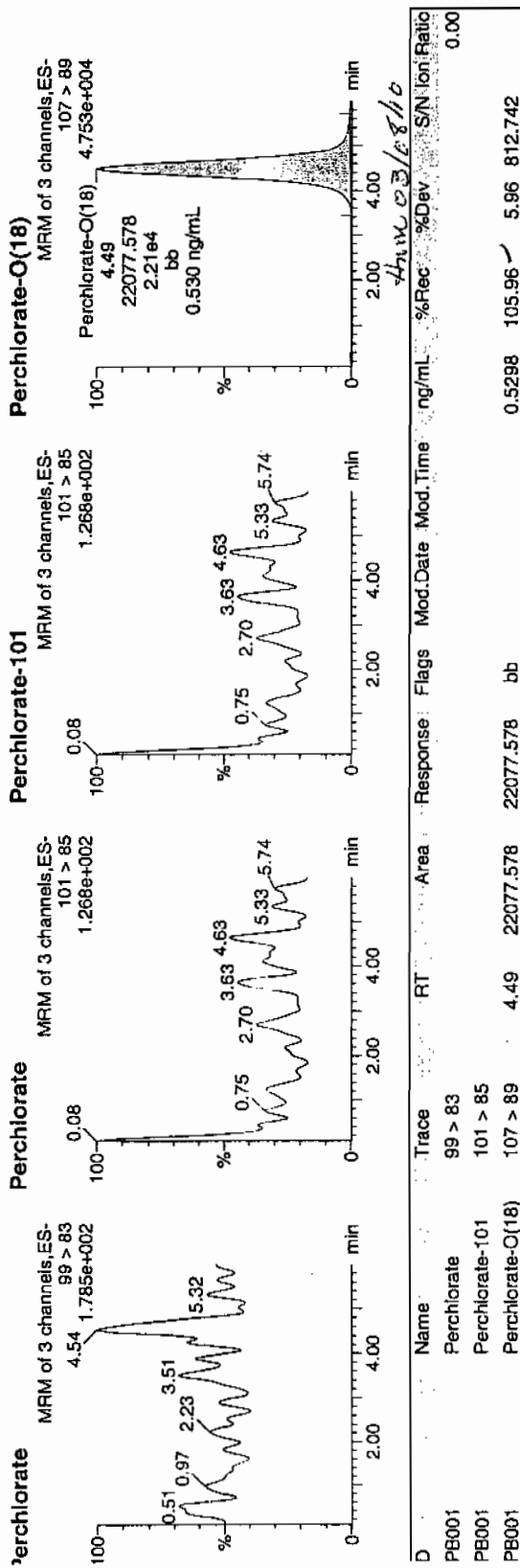
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030610a.mdb 07 Mar 2010 10:54:54  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030610a.cdb 07 Mar 2010 11:00:09

Name: per0306001a  
Date: 06-Mar-2010  
Time: 14:34:56  
D: IPB001  
/ial: 1:1,A

0307-10



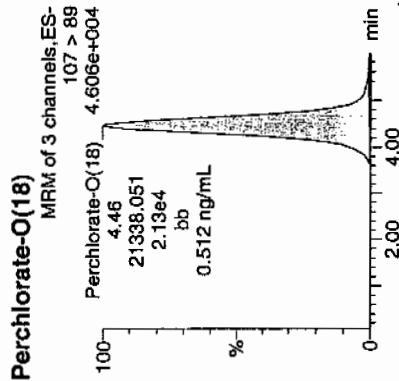
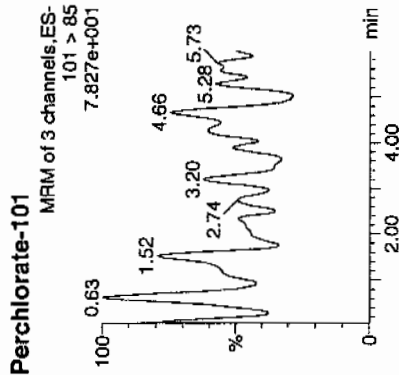
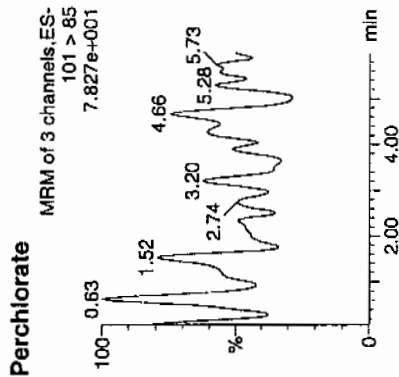
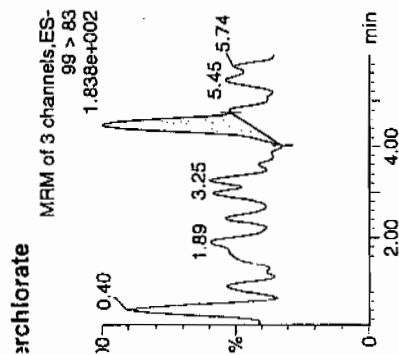
uantify Sample Report MassLynx 4.0 SP4  
ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

List Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Intend: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

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ate: 06-Mar-2010  
me: 14:43:58  
: IPB001  
al: 1:1,A

03 of 10



| Name                   | Trace    | RT   | Area     | Response | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev | S/N       | Ion Ratio |
|------------------------|----------|------|----------|----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| B001 Perchlorate       | 99 > 83  | 4.46 | 33.306   | 33.306   | bb    |          |          | 0.0007 |        |      | 5.502     | 0.00      |
| B001 Perchlorate-101   | 101 > 85 |      |          |          |       |          |          |        |        |      |           |           |
| B001 Perchlorate-O(18) | 107 > 89 | 4.46 | 2138.051 | 2138.051 | bb    |          |          | 0.5121 | 102.41 | 2.41 | 1800.9... |           |



Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305008a | IPB002        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305008a | IPB002        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305010a | IPB003        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305010a | IPB003        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305023a | IPB004        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305023a | IPB004        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305036a | IPB005        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305036a | IPB005        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305062a | IPB008        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305062a | IPB008        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305075a | IPB009        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305075a | IPB009        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305079a | IPB010        |

## Perchlorate Continuing Calibration Blank

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units:  $\mu\text{g/kg}$

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305079a | IPB010        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305088a | IPB011        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305088a | IPB011        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306008a | IPB002        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306008a | IPB002        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306010a | IPB003        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306010a | IPB003        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306015a | IPB004        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306015a | IPB004        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306023a | IPB005        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306023a | IPB005        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306036a | IPB006        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306036a | IPB006        |

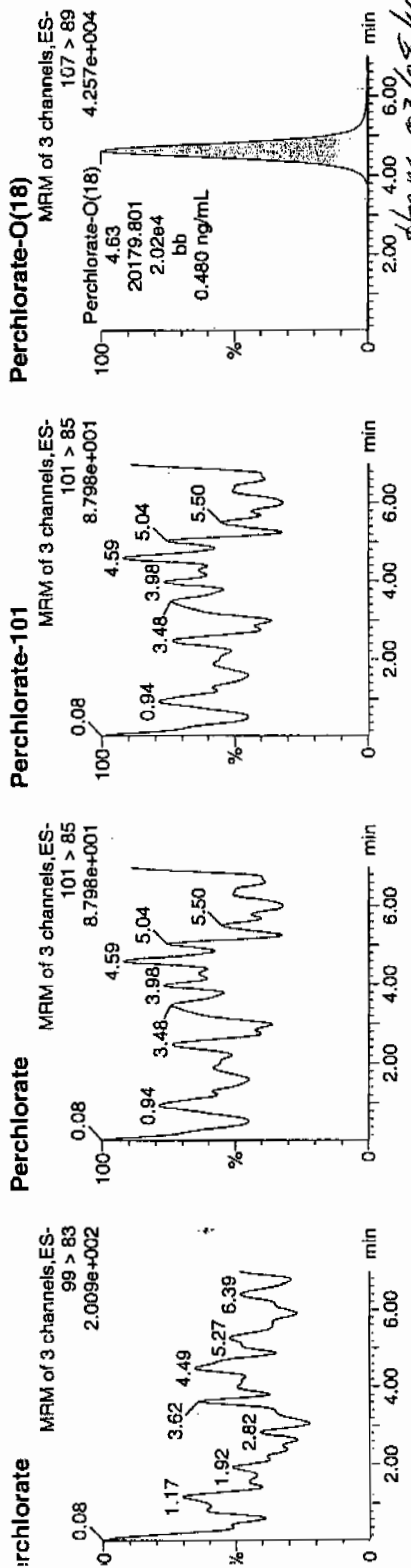
Quantity Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

File Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 File Created: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

File Name: per0305008a  
 Date: 05-Mar-2010  
 Time: 13:50:47  
 User: IPB002  
 Label: 1:1,A

03-06-10



| Name | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N     | Ion Ratio |
|------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| 3002 | Perchlorate       | 99 > 83  |      |           |       |          |          |        |       |       |         | 0.00      |
| 3002 | Perchlorate-101   | 101 > 85 |      |           |       |          |          |        |       |       |         |           |
| 3002 | Perchlorate-O(18) | 107 > 89 | 4.63 | 20179.801 | bb    |          |          | 0.4798 | 95.96 | -4.04 | 336.982 |           |

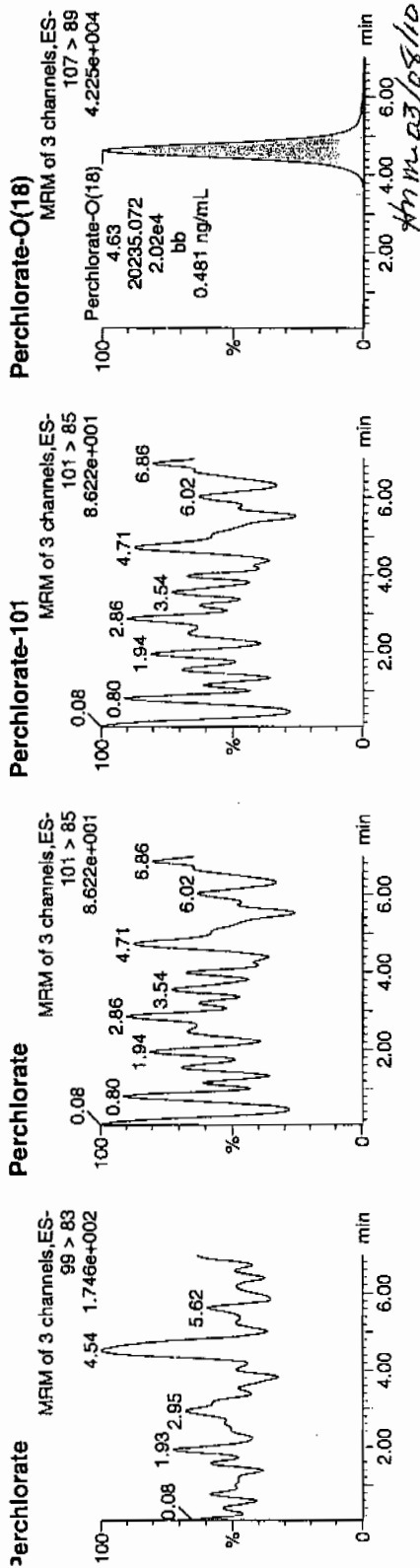
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305010a  
Date: 05-Mar-2010  
Time: 14:11:00  
D: IPB003  
Vial: 1:1,A

0706-10



| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| PB003 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |           | 0.00      |
| PB003 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |           |           |
| PB003 | Perchlorate-O(18) | 107 > 89 | 4.63 | 20235.072 | 20235.072 | bb    |          |          | 0.4811 | 96.22 | -3.78 | 3040.0... |           |

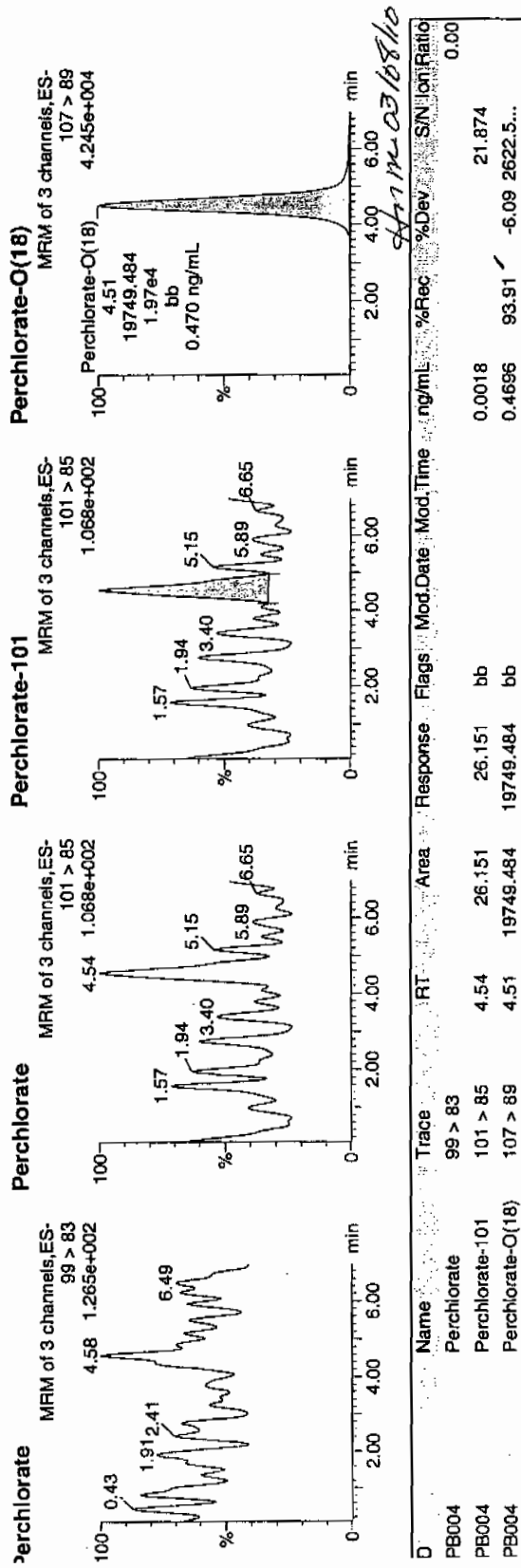
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305023a  
Date: 05-Mar-2010  
Time: 16:21:48  
D: IPB004  
/ial: 1:1,A

CW2  
03-06-10



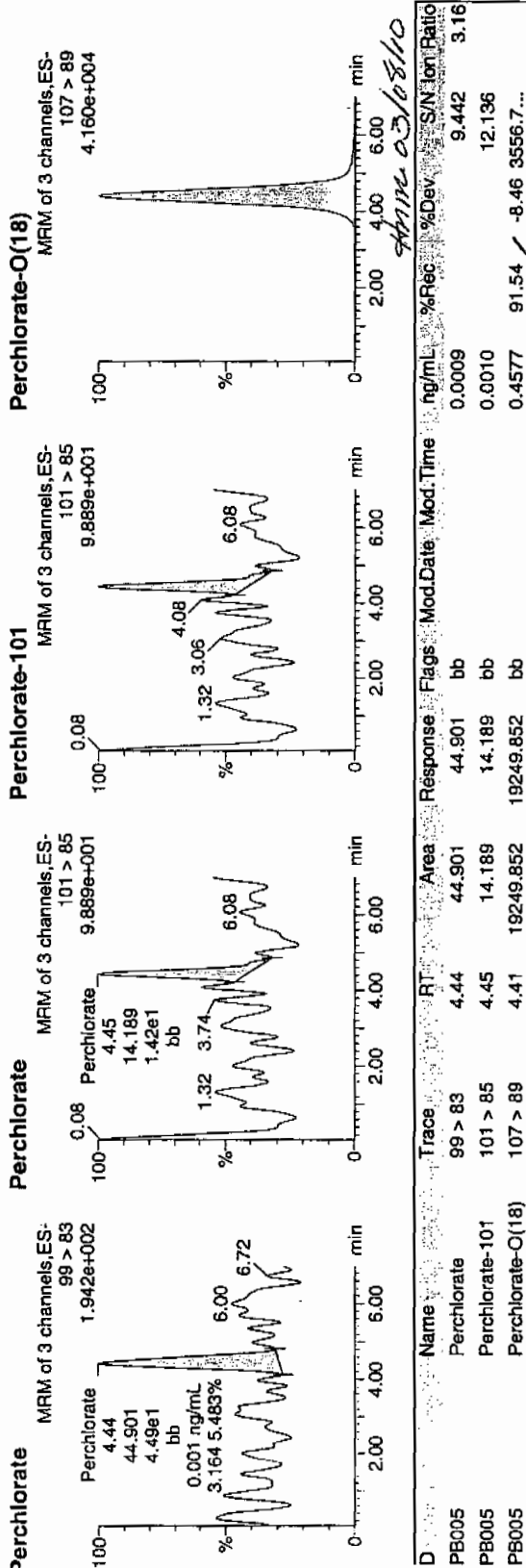
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305036a  
Date: 05-Mar-2010  
Time: 18:32:44  
D: IPB005  
/ial: 1:1,A

03-06-10



| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| PB005 | Perchlorate       | 99 > 83  | 4.44 | 44.901    | 44.901    | bb    |          |          | 0.0009 |       |       | 9.442     | 3.16      |
| PB005 | Perchlorate-101   | 101 > 85 | 4.45 | 14.189    | 14.189    | bb    |          |          | 0.0010 |       |       | 12.136    |           |
| PB005 | Perchlorate-O(18) | 107 > 89 | 4.41 | 19249.852 | 19249.852 | bb    |          |          | 0.4577 | 91.54 | -8.46 | 3556.7... |           |

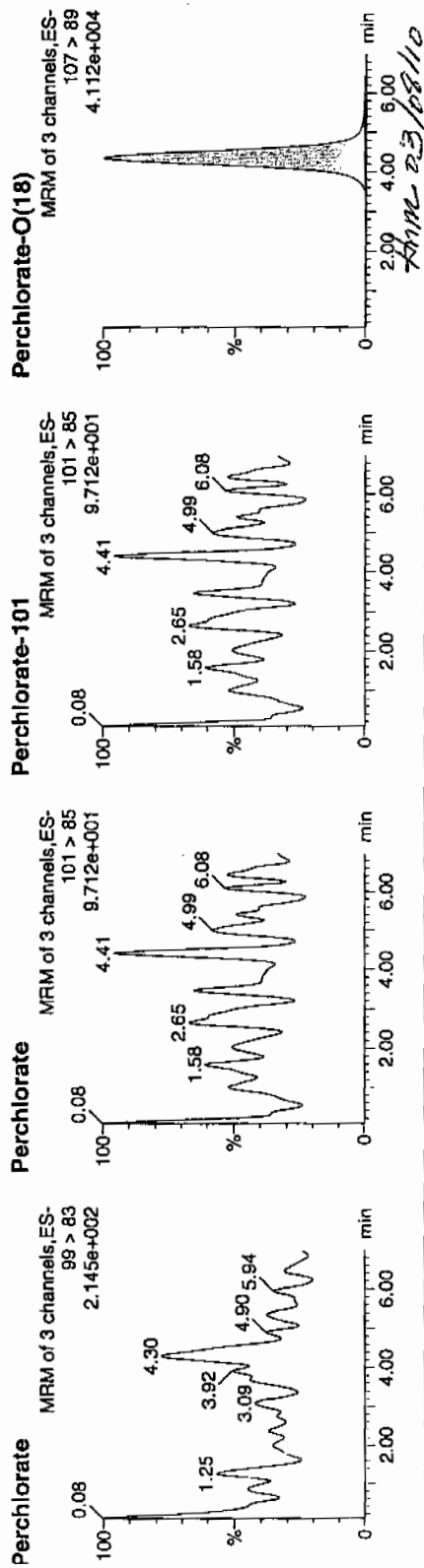
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305062a  
Date: 05-Mar-2010  
Time: 22:55:56  
ID: IPB008  
Vial: 1:1,A

03-06-10



| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| PB008 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |        |           | 0.00      |
| PB008 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |        |           |           |
| PB008 | Perchlorate-O(18) | 107 > 89 | 4.34 | 18762.594 | 18762.594 | bb    |          |          | 0.4461 | 89.22 | -10.78 | 2075.7... |           |

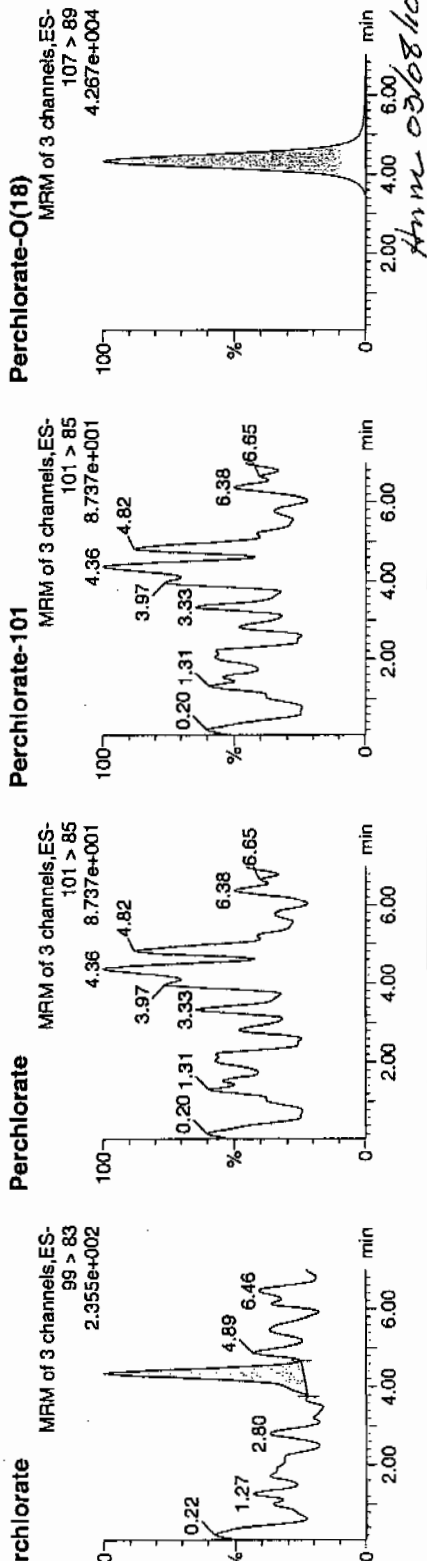
antify Sample Report MassLynx 4.0 SP4  
 a GEL Group, LLC Analyst: Charliers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

me: per0305075a  
 te: 06-Mar-2010  
 ne: 01:07:14  
 : IPB009  
 al: 1:1,A

03 06 10



| Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| Perchlorate       | 99 > 83  | 4.35 | 56.745    | 56.745    | bb    |          |          | 0.0012 |       |       | 28.981    | 0.00      |
| Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |           |           |
| Perchlorate-O(18) | 107 > 89 | 4.34 | 19612.217 | 19612.217 | bb    |          |          | 0.4663 | 93.26 | -6.74 | 1489.6... |           |



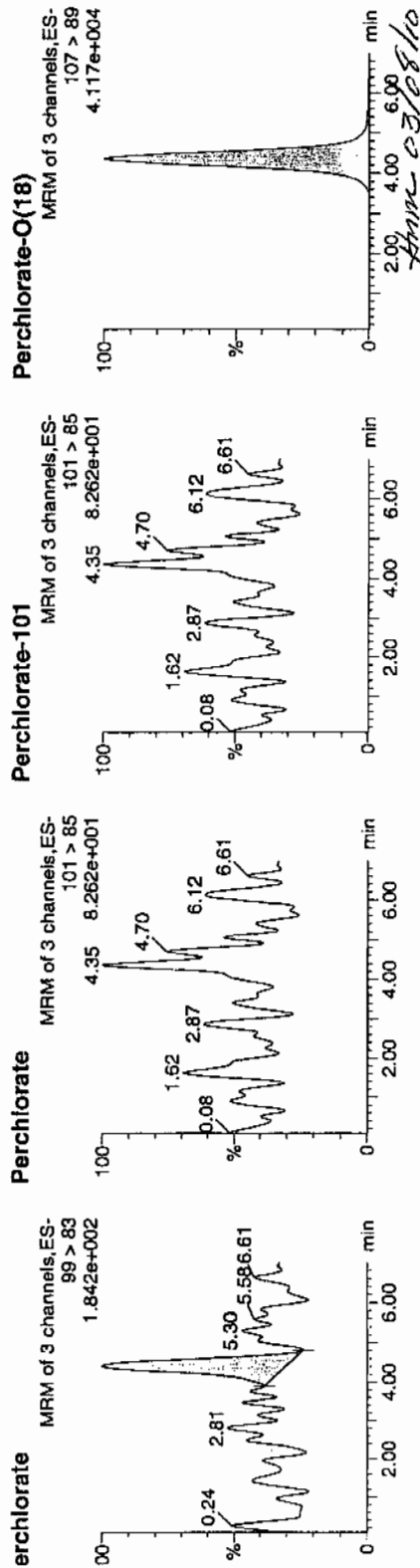
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Sample Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Sample Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305079a  
Sample Date: 06-Mar-2010  
Sample Time: 01:47:51  
Sample ID: IPB010  
Sample Label: 1:1,A

03-06-10



| Name | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN     | Ion Ratio |
|------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|--------|-----------|
| B010 | Perchlorate       | 99 > 83  | 4.41 | 52.090    | bb    |          |          | 0.0011 |       |        | 12.083 | 0.00      |
| B010 | Perchlorate-101   | 101 > 85 |      |           |       |          |          |        |       |        |        |           |
| B010 | Perchlorate-O(18) | 107 > 89 | 4.35 | 18875.709 | bb    |          |          | 0.4488 | 89.76 | -10.24 | 3786.1 | ...       |

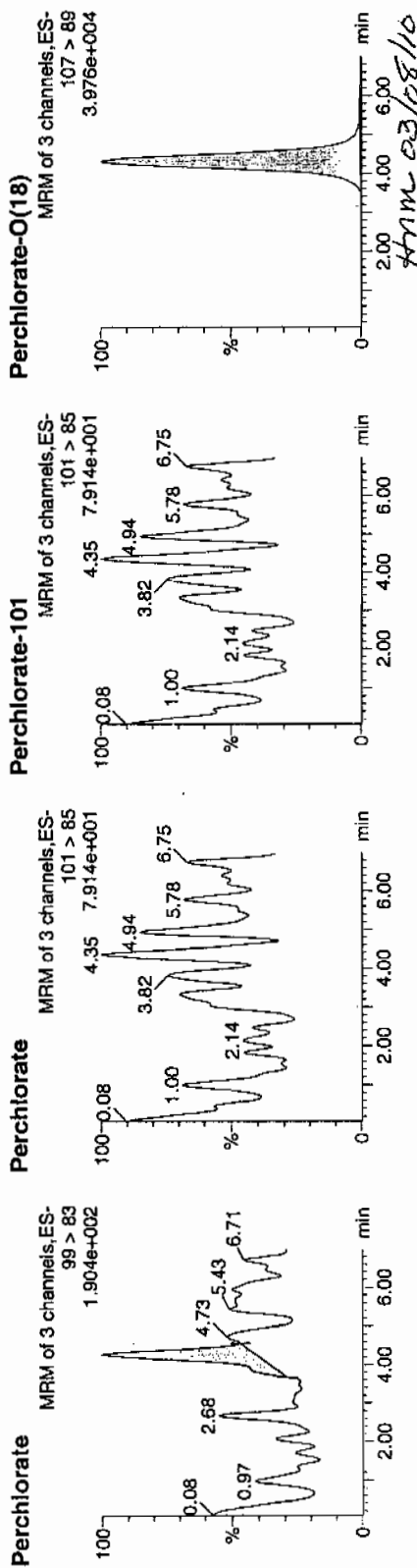
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305088a  
Date: 06-Mar-2010  
Time: 03:19:03  
ID: IPB011  
Vial: 1:1,A

03-06-10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| IPB011 | Perchlorate       | 99 > 83  | 4.27 | 38.645    | 38.645    | bb    |          |          | 0.0008 |       |        | 9.935     | 0.00      |
| IPB011 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |        |           |           |
| IPB011 | Perchlorate-O(18) | 107 > 89 | 4.32 | 18268.896 | 18268.896 | bb    |          |          | 0.4344 | 86.87 | -13.13 | 3328.6... |           |

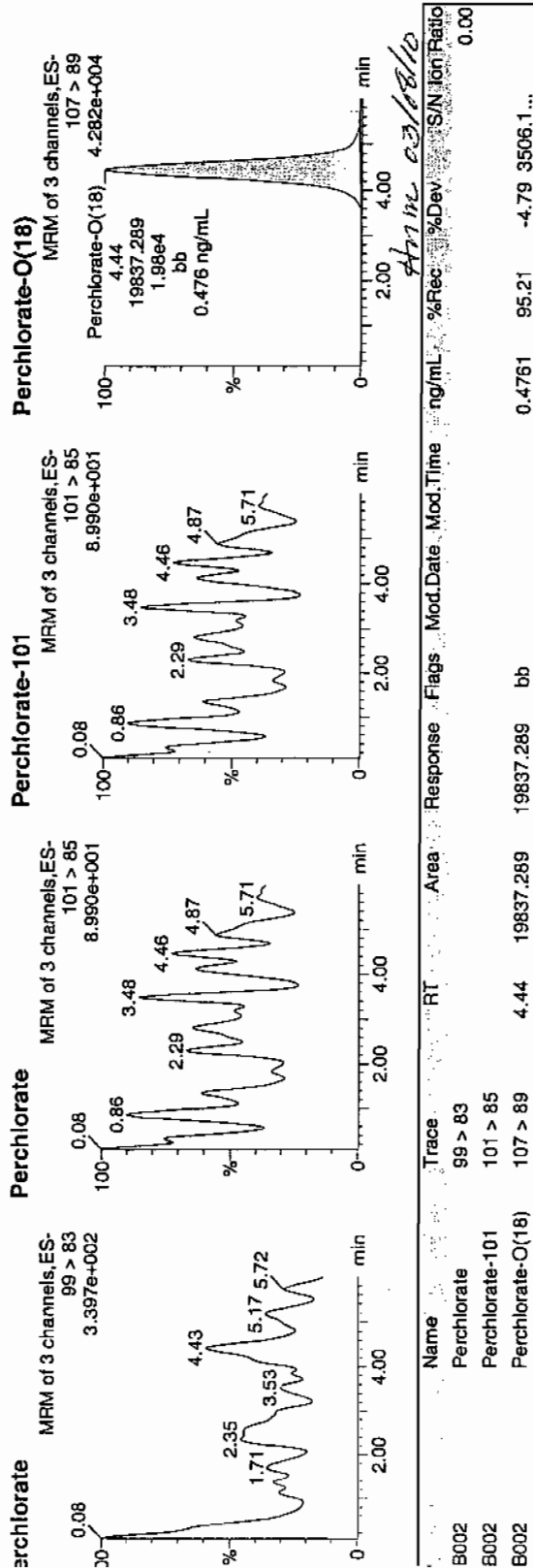
Quantity Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Page 8 of 63

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306008a  
Date: 06-Mar-2010  
Time: 15:38:29  
File: IPB002  
Label: 1:1,A



EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

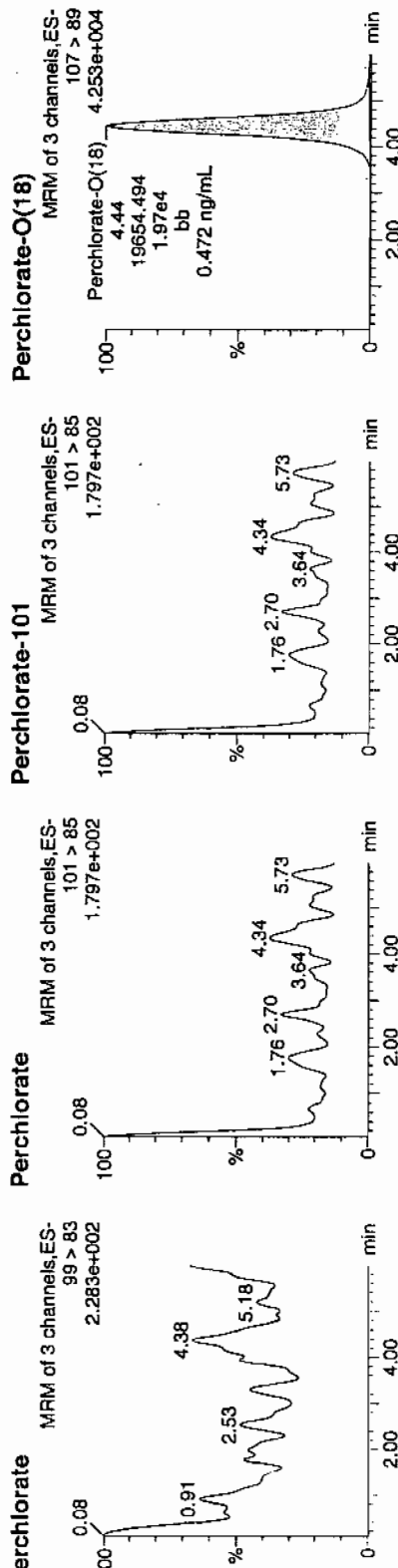
Quantify Sample Report MassLynx 4.0 SP4  
 the GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306010a  
 ate: 06-Mar-2010  
 ime: 15:56:49  
 ): IPB003  
 ial: 1:1,A

03-07-10



| Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N     | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |         | 0.00      |
| Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |         |           |
| Perchlorate-O(18) | 107 > 89 | 4.44 | 19654.494 | 19654.494 | bb    |          |          | 0.4717 | 94.33 | -5.67 | 617.145 |           |

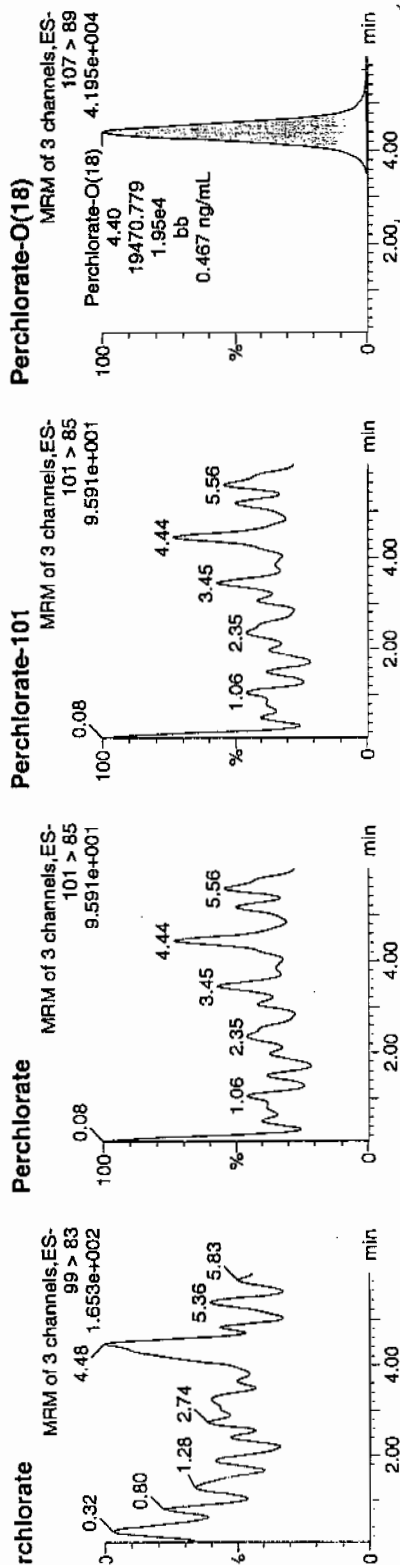
Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

st Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
nted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

me: per0306015a  
te: 06-Mar-2010  
ne: 16:42:19  
IPB004  
il: 1:1,A

0307-10



| Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev | S/N   | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|------|-------|-----------|
| Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |      |       | 0.00      |
| Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |      |       |           |
| Perchlorate-O(18) | 107 > 89 | 4.40 | 19470.779 | 19470.779 | bb    |          |          | 0.4673 | 93.45 | -    | -6.55 | 1614.6... |

# Identify Sample Report MassLynx 4.0 SP4

ie GEL Group, LLC Analyst: Charles W. Wilson

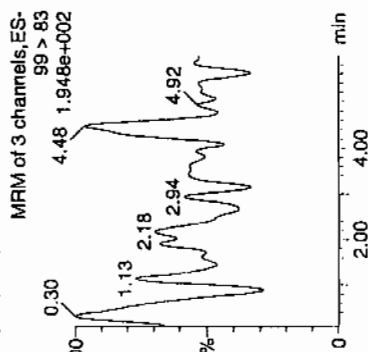
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ist Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
inted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

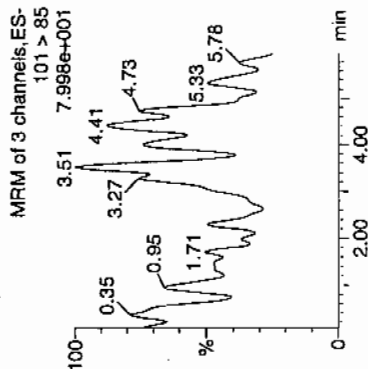
ime: per0306023a  
ite: 06-Mar-2010  
me: 17:54:53  
: IPB005  
al: 1:1,A

03-07-10

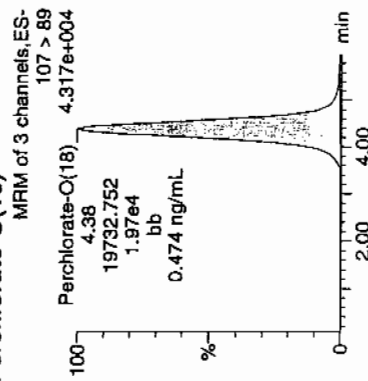
Perchlorate MRM of 3 channels, ES- 99 > 83 1.948e+002



Perchlorate-101 MRM of 3 channels, ES- 101 > 85 7.998e+001



Perchlorate-O(18) MRM of 3 channels, ES- 107 > 89 4.317e+004



| Name | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|------|-------------------|----------|------|-----------|-----------|----------|----------|--------|-------|-------|-----------|-----------|
| B005 | Perchlorate       | 99 > 83  |      |           |           |          |          |        |       |       |           | 0.00      |
| B005 | Perchlorate-101   | 101 > 85 |      |           |           |          |          |        |       |       |           |           |
| B005 | Perchlorate-O(18) | 107 > 89 | 4.38 | 19732.752 | 19732.752 | bb       |          | 0.4735 | 94.71 | -5.29 | 1130.4... |           |

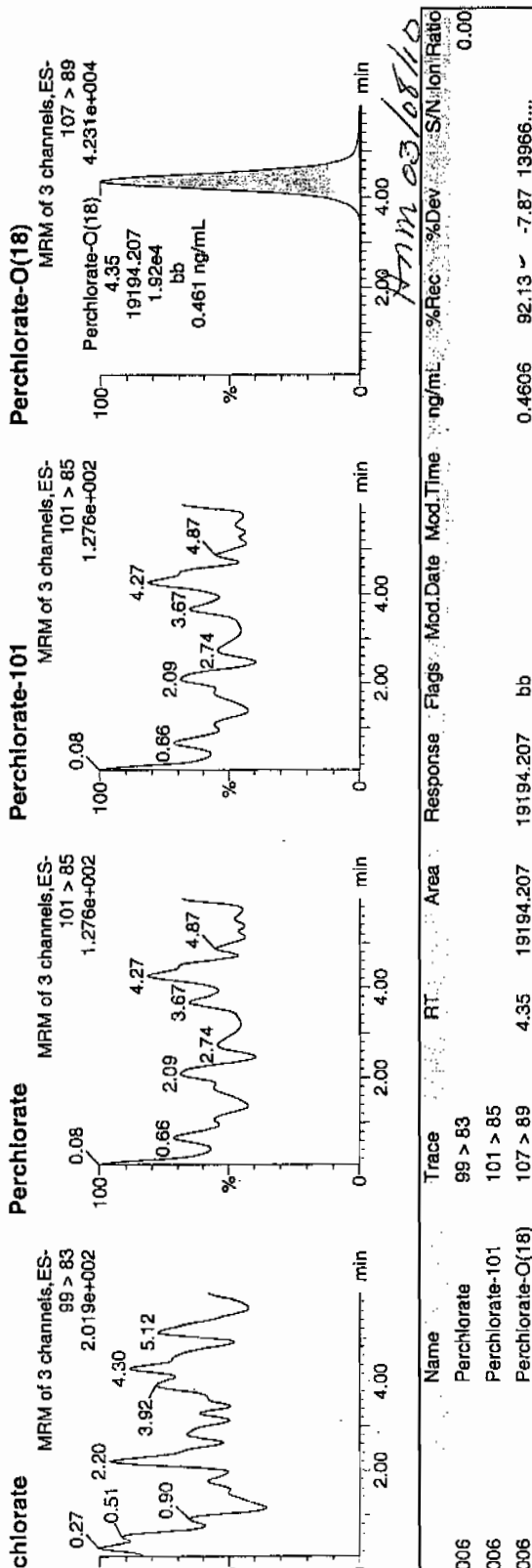
Identify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

Asset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Acquired: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Processed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

File: per0306036a  
Date: 06-Mar-2010  
Time: 19:52:45  
IPB006  
I: 1:1,A

03-07-10



Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/RbI (2.0/0.05ug/ul) in 50/20 2-propanol/H<sub>2</sub>O.  
 ;Most useful general purpose calibrant for all low  
 ;MW applications, including MS/MS work.  
 ;At high resolution, readily covers from m/z 50-2000.  
 ;At reduced resolution, can be used to over m/z 3000.  
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.  
 Updated 20 April '95

|             |     |
|-------------|-----|
| 22.9898     | 100 |
| 84.9118     | 100 |
| 172.8840    | 100 |
| 322.7782    | 100 |
| 472.6725    | 100 |
| 622.5667    | 100 |
| 772.4610    | 100 |
| 922.3552    | 100 |
| 1072.2494   | 100 |
| ; 1222.1437 | 100 |
| ; 1372.0379 | 100 |
| ; 1521.9321 | 100 |
| ; 1671.8264 | 100 |
| ; 1821.7206 | 100 |
| ; 1971.6149 | 100 |
| ; 2121.5091 | 100 |
| ; 2271.4033 | 100 |
| ; 2421.2976 | 100 |
| ; 2571.1918 | 100 |
| ; 2721.0861 | 100 |
| ; 2870.9803 | 100 |
| ; 3020.8745 | 100 |
| ; 3170.7688 | 100 |
| ; 3320.6630 | 100 |
| ; 3470.5572 | 100 |
| ; 3620.4515 | 100 |
| ; 3770.3457 | 100 |
| ; 3920.2400 | 100 |



QUARTO ULTIMA: nairb 01.08.08.cal

Calibration Report - MS1 Static

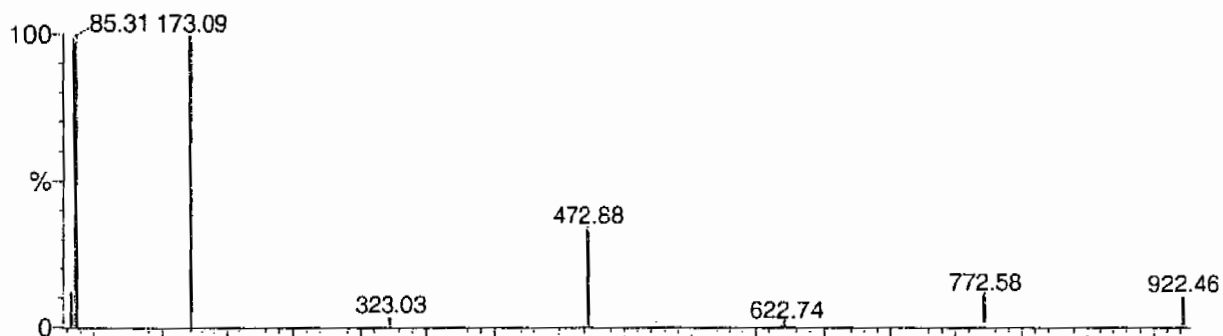
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

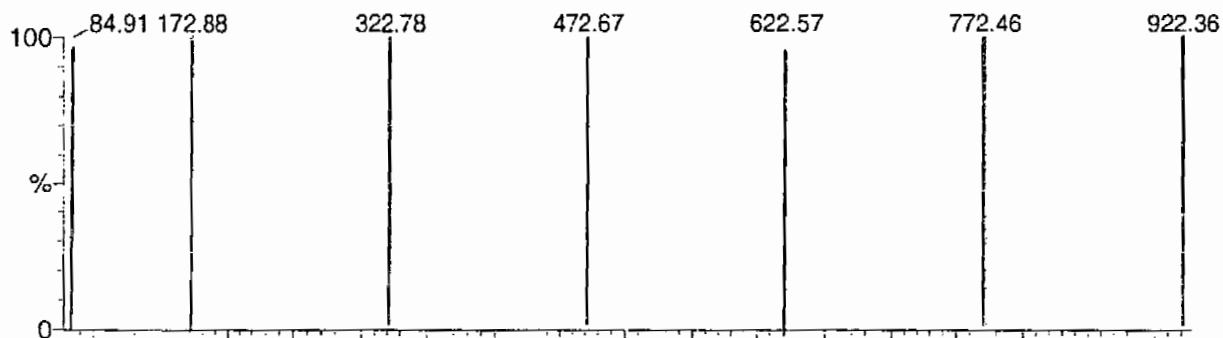
POINTS HIGHLIGHTED BY CURVED 01.07.03

Data file: STATMS1 - Uncalibrated

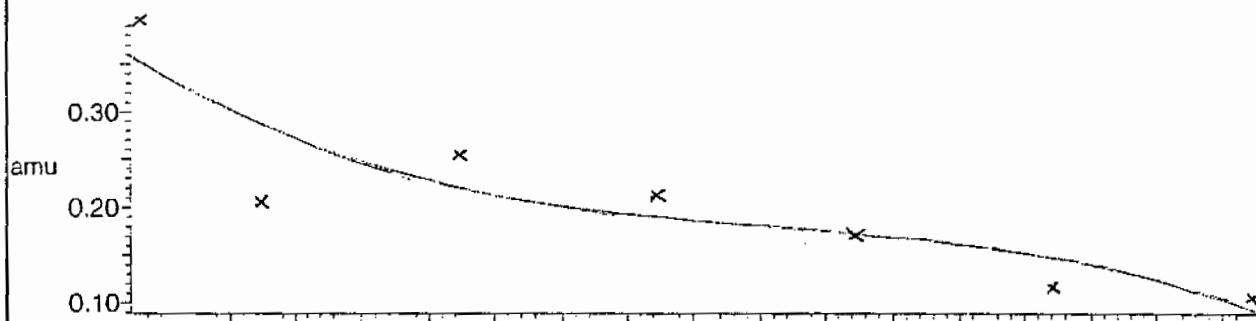
7 matches of 7 tested references



Reference file: Nairb

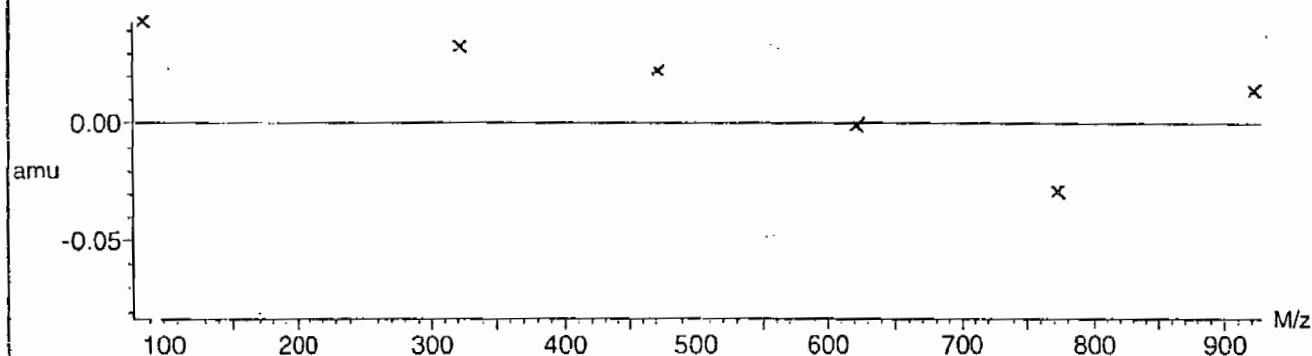


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



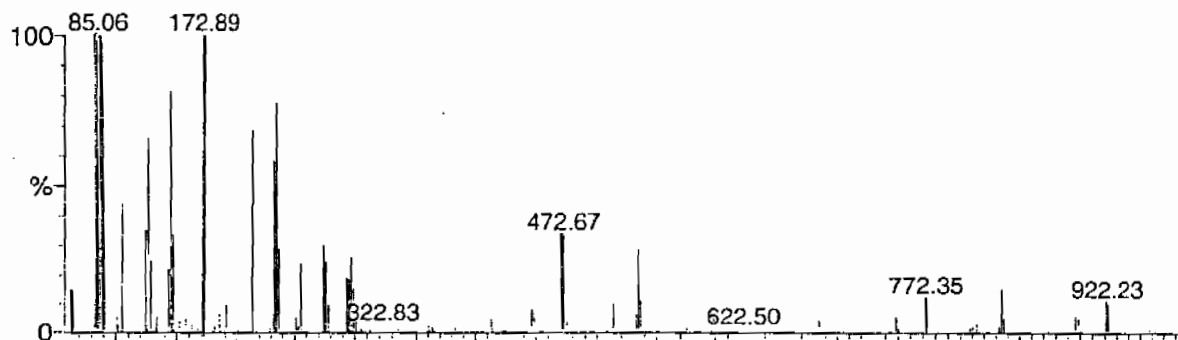
Calibration Report - MS1 Scanning

Page 1 of 1

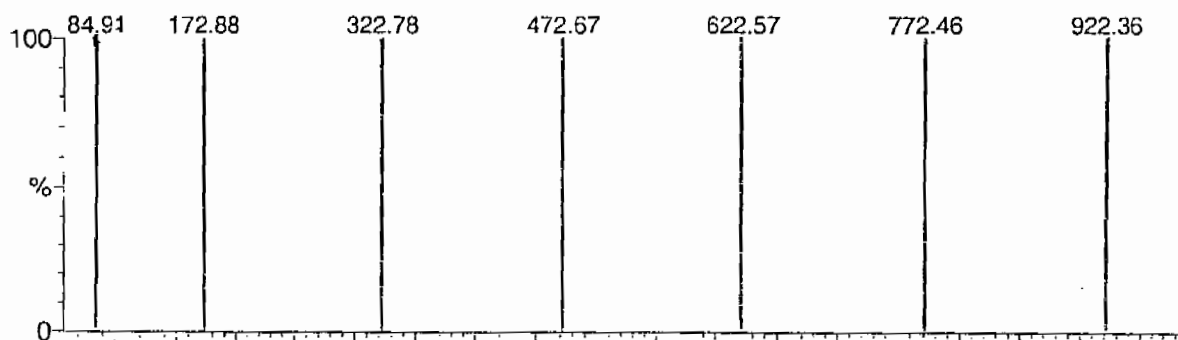
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

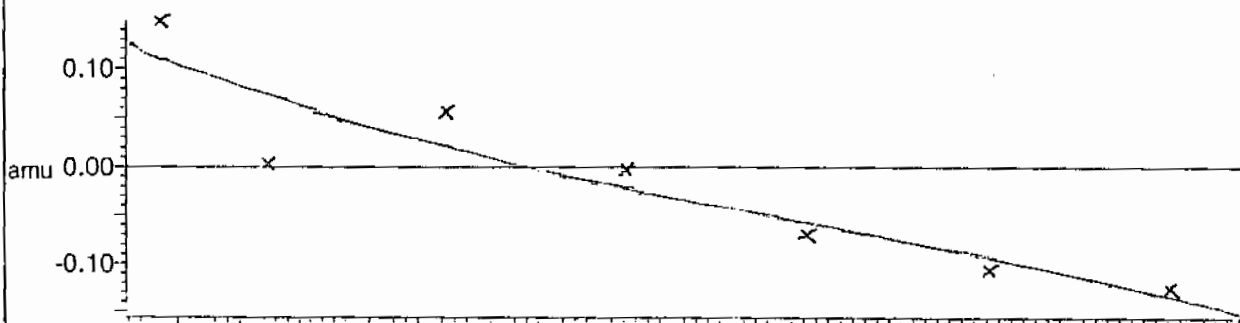
7 matches of 7 tested references



Reference file: Nairb

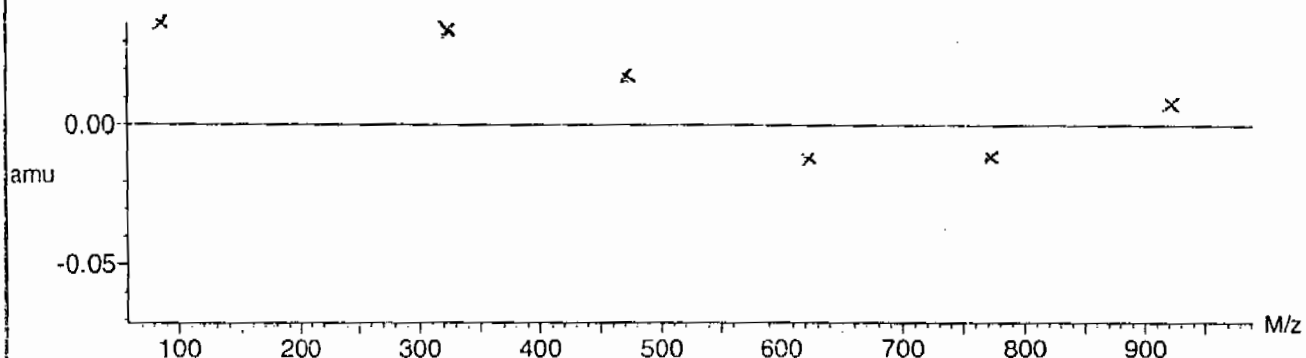


Mass difference (Raw - Ref mass)



Residuals

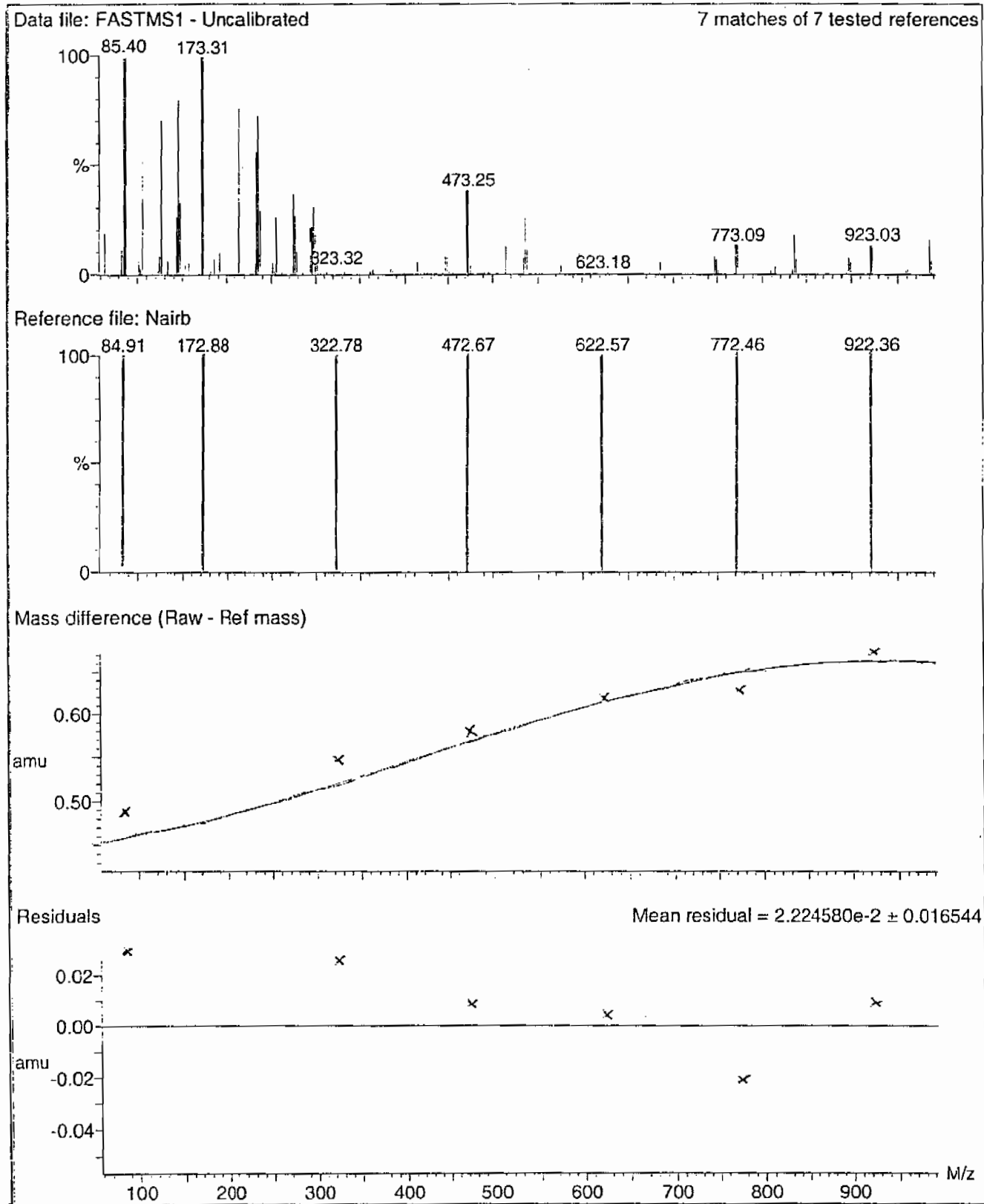
Mean residual =  $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

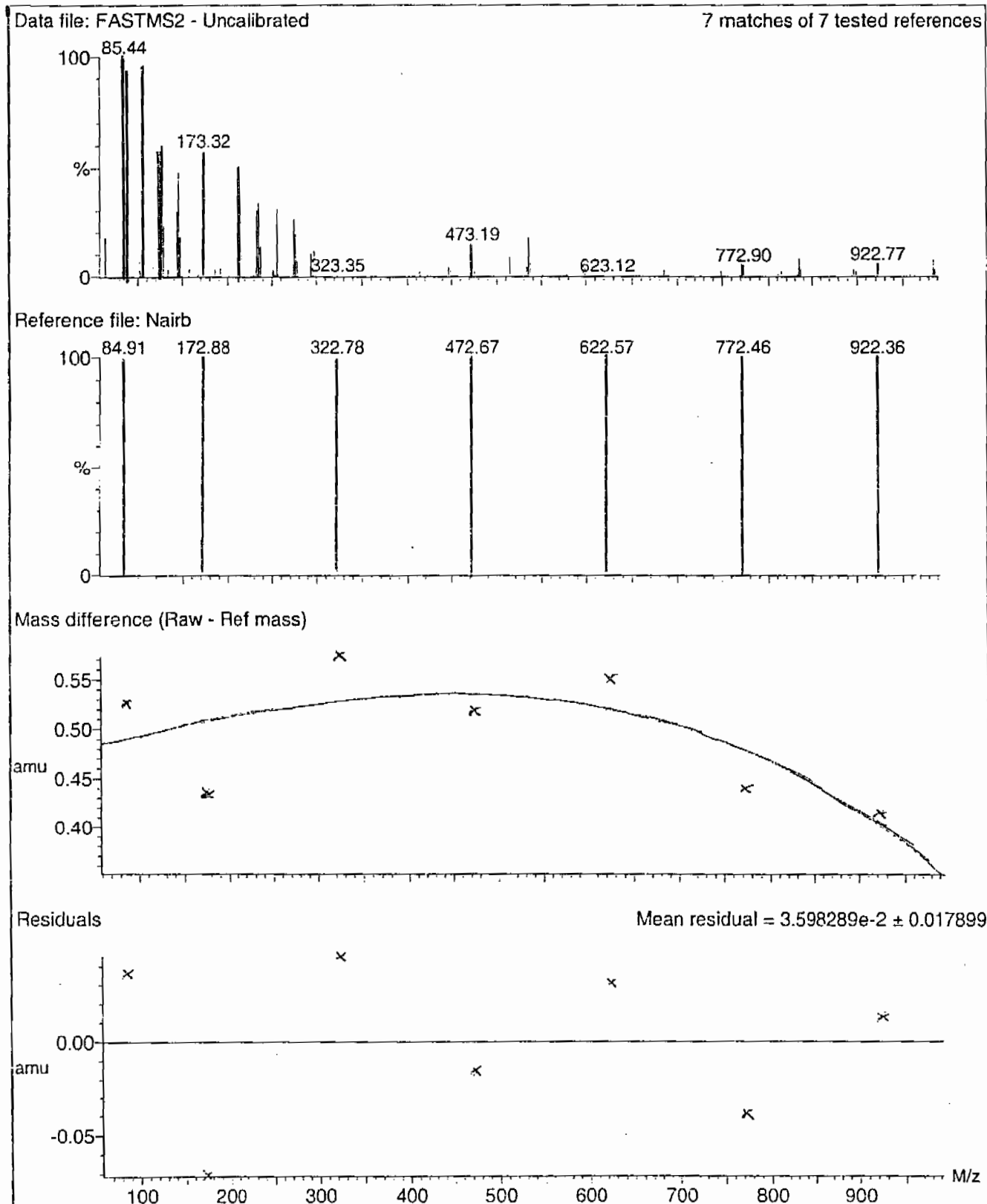
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

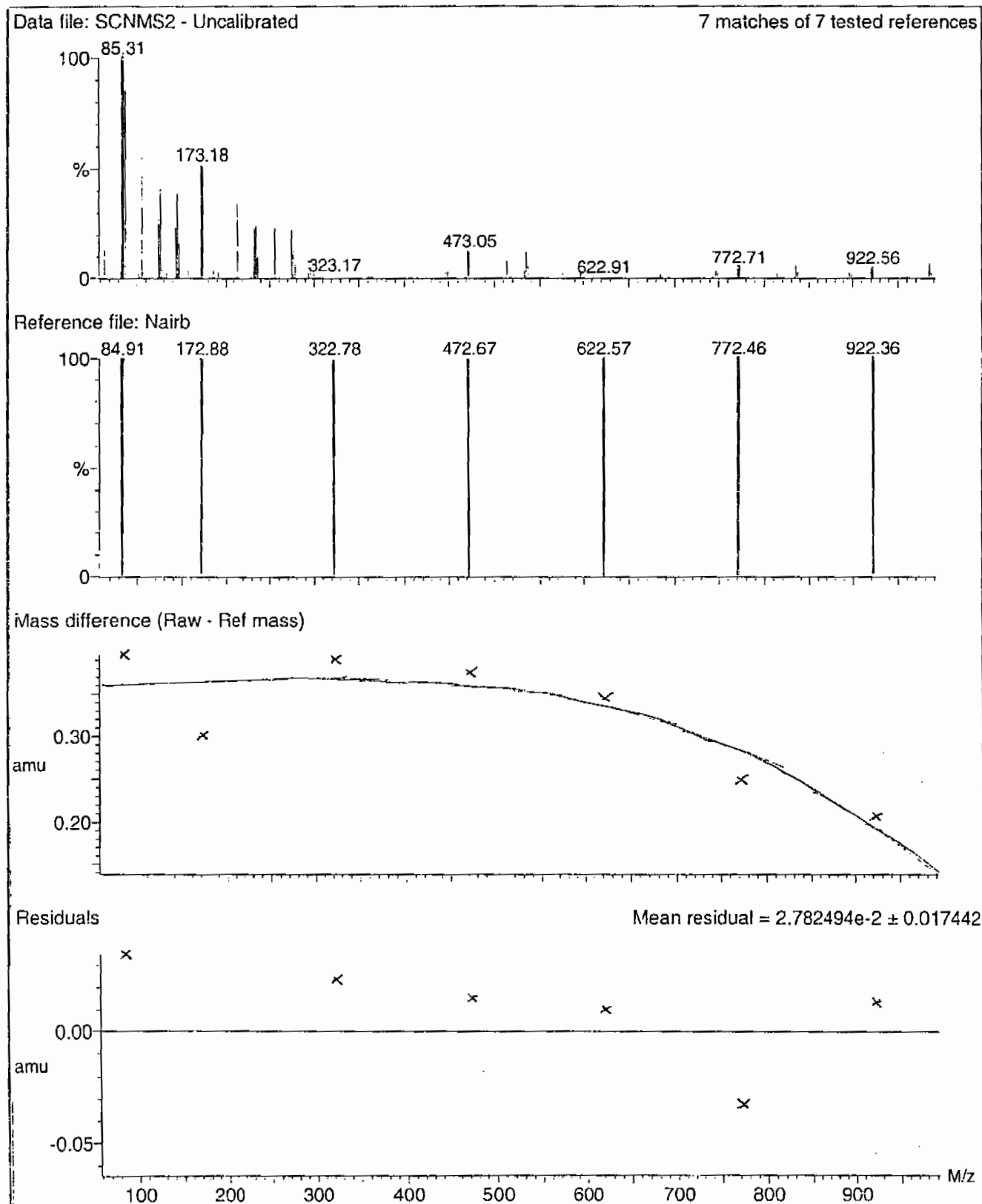
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



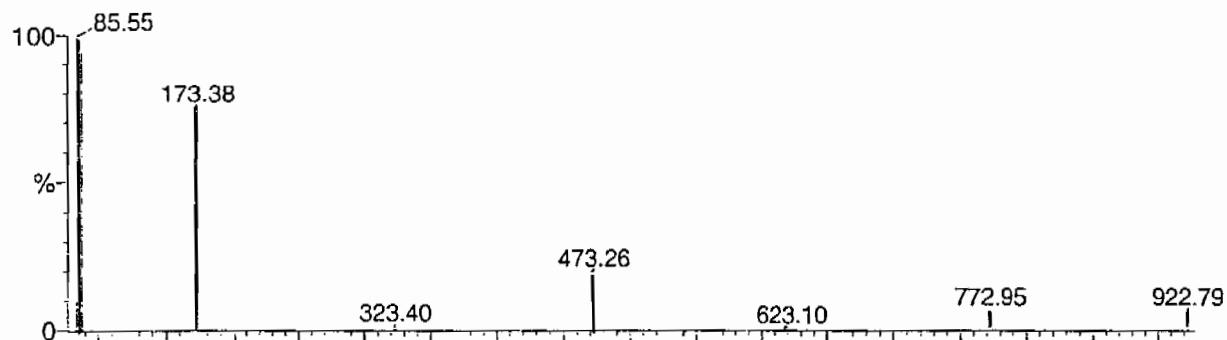
Calibration Report - MS2 Static

Page 1 of 1

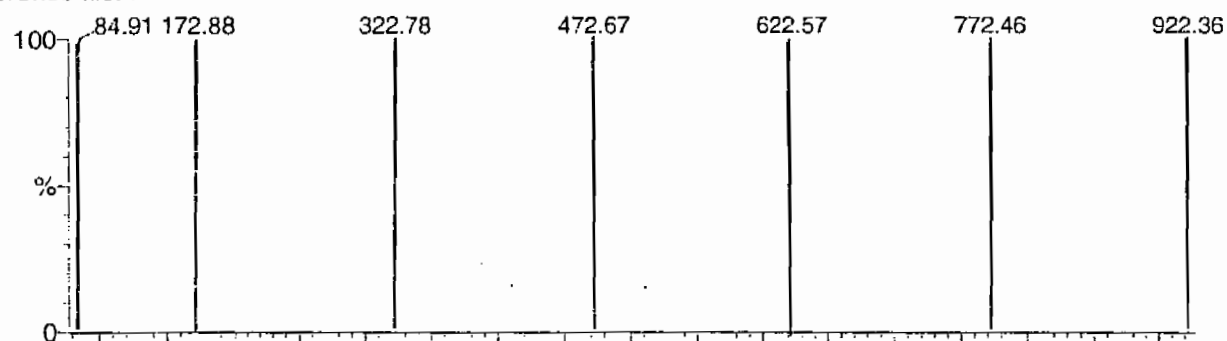
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

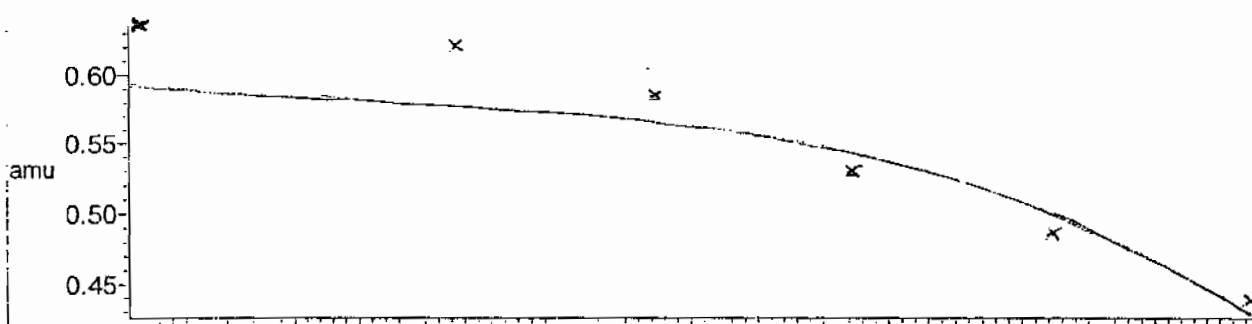
7 matches of 7 tested references



Reference file: Nairb

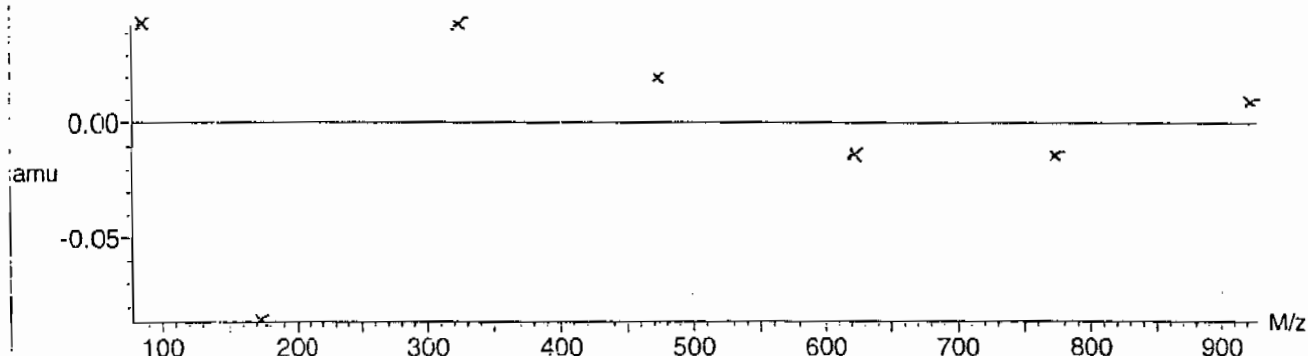


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.295980 \times 10^{-2} \pm 0.025603$



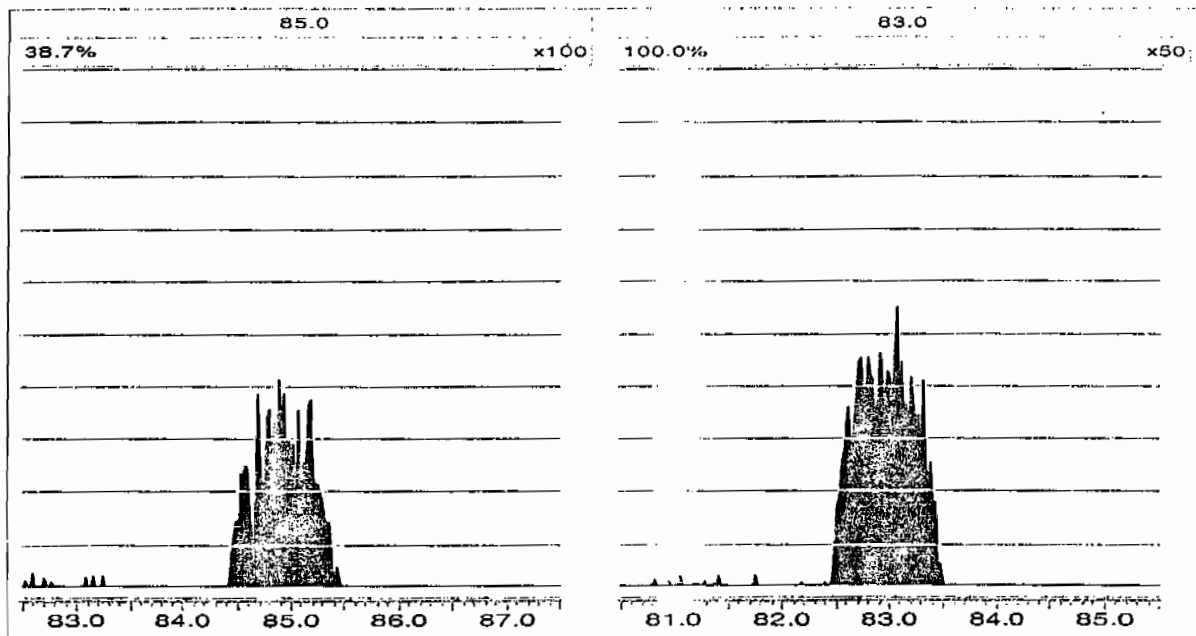
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, March 05, 2010 10:31:47 Eastern Standard Time



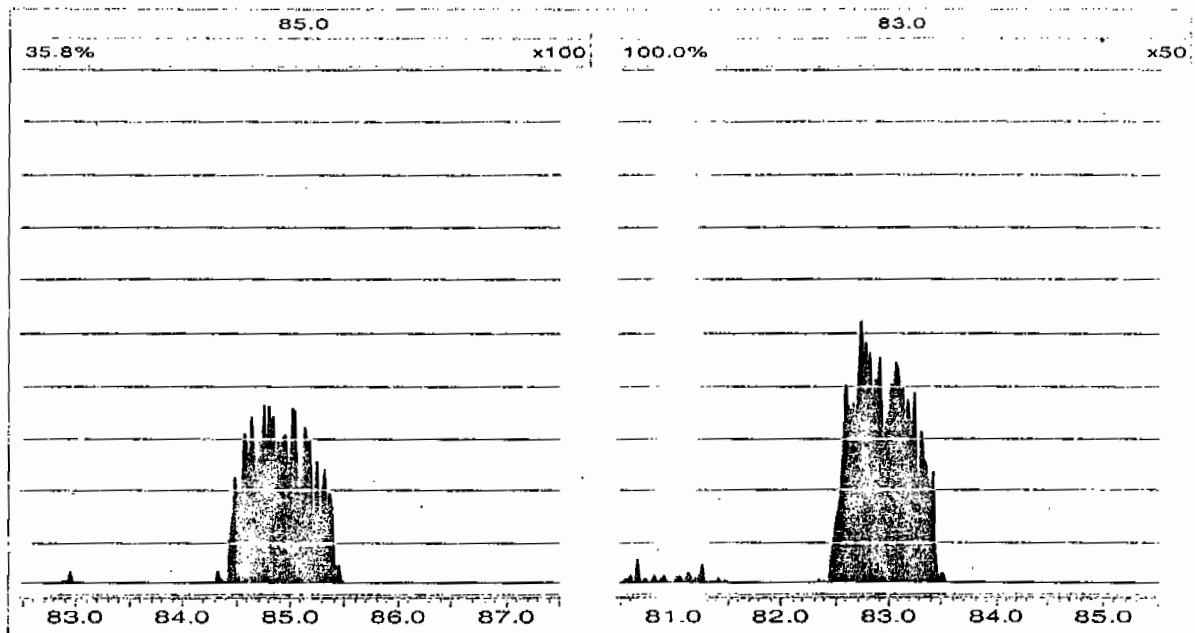
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PROVACQ\Perchlorate.IPR

Printed: Saturday, March 06, 2010 11:02:44 Eastern Standard Time





Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories  
GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Sample ID              | Datafile    | Run Date        | Area     | RT   | RT<br>CLO4 | RRT   | Q<br>0.98-1.02 |
|------------------------|-------------|-----------------|----------|------|------------|-------|----------------|
| MidLevel Standard Area | per0305006a | 05-MAR-10       | 21416.7  |      |            |       |                |
| Lower Area Limit       |             |                 | 10708.35 |      |            |       |                |
| Upper Area Limit       |             |                 | 42833.4  |      |            |       |                |
| 247188003              | per0305064a | 05-MAR-10 23:16 | 18751.5  | 4.34 | 4.36487    | 1.006 |                |
| 247188004              | per0305065a | 05-MAR-10 23:26 | 18686.5  | 4.35 | 4.36483    | 1.003 |                |
| 247188005              | per0305066a | 05-MAR-10 23:36 | 19285    | 4.34 | 4.36482    | 1.006 |                |
| 247188006              | per0305067a | 05-MAR-10 23:46 | 18620.1  | 4.34 | 4.32755    | .997  |                |
| 247188007              | per0305068a | 05-MAR-10 23:56 | 18768.8  | 4.34 | 4.29032    | .989  |                |
| 247188008              | per0305069a | 06-MAR-10 00:06 | 19091.7  | 4.34 | 4.36485    | 1.006 |                |
| 247188009              | per0305070a | 06-MAR-10 00:16 | 19037.2  | 4.34 | 4.3648     | 1.006 |                |
| 247188010              | per0305071a | 06-MAR-10 00:26 | 19362.9  | 4.34 | 4.3648     | 1.006 |                |

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Sample ID              | Datafile    | Run Date        | Area     | RT   | RT<br>CLO4 | RRT   | Q<br>0.98-1.02 |
|------------------------|-------------|-----------------|----------|------|------------|-------|----------------|
| MidLevel Standard Area | per0305006a | 05-MAR-10       | 21416.7  |      |            |       |                |
| Lower Area Limit       |             |                 | 10708.35 |      |            |       |                |
| Upper Area Limit       |             |                 | 42833.4  |      |            |       |                |
| 247188011              | per0305072a | 06-MAR-10 00:36 | 19450.9  | 4.34 | 4.35235    | 1.003 |                |
| 247188012              | per0305073a | 06-MAR-10 00:46 | 19204.5  | 4.34 | 4.37717    | 1.009 |                |
| 247188013              | per0305077a | 06-MAR-10 01:27 | 19331.8  | 4.34 | 4.36482    | 1.006 |                |
| 247188014              | per0305078a | 06-MAR-10 01:37 | 19192.9  | 4.34 | 4.37715    | 1.009 |                |

## Perchlorate RT And Area Summary

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Sample ID              | Datafile    | Run Date        | Area    | RT   | RT<br>CLO4 | RRT   | Q<br>0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|------------|-------|----------------|
| MidLevel Standard Area | per0306006a | 06-MAR-10       | 20712.4 |      |            |       |                |
| Lower Area Limit       |             |                 | 10356.2 |      |            |       |                |
| Upper Area Limit       |             |                 | 41424.8 |      |            |       |                |
| 1202049039             | per0306025a | 06-MAR-10 18:13 | 20445.6 | 4.35 | 4.35235    | 1.001 |                |
| 1202049040             | per0306026a | 06-MAR-10 18:22 | 20535.3 | 4.35 | 4.36482    | 1.003 |                |
| 1202049043             | per0306027a | 06-MAR-10 18:31 | 21916.9 | 4.65 | 4.6753     | 1.005 |                |
| 247188001              | per0306031a | 06-MAR-10 19:07 | 19796.3 | 4.35 | 4.4021     | 1.012 |                |
| 1202049041             | per0306032a | 06-MAR-10 19:16 | 19866   | 4.36 | 4.38962    | 1.007 |                |
| 1202049042             | per0306033a | 06-MAR-10 19:25 | 20506   | 4.35 | 4.37715    | 1.006 |                |
| 247188002              | per0306034a | 06-MAR-10 19:34 | 20171.6 | 4.34 | 4.33987    | 1     |                |

# SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8196

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 24718001

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>a</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:07 | per0306031a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:07 | per0306031a |
|            | Perchlorate-O(18)         |      |      | 4.81  | ug/kg |   | 1               | 06-MAR-10 19:07 | per0306031a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X  $\frac{1}{\% \text{Solids}}$   
Aliquot

ntify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
ted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ne: per0306031a

e: 06-Mar-2010

e: 19:07:29

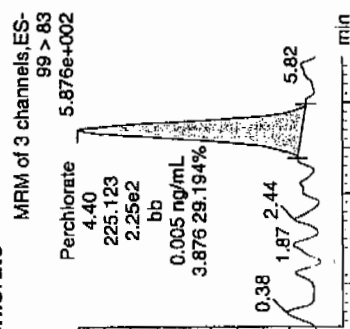
247188001

: 1:6,A

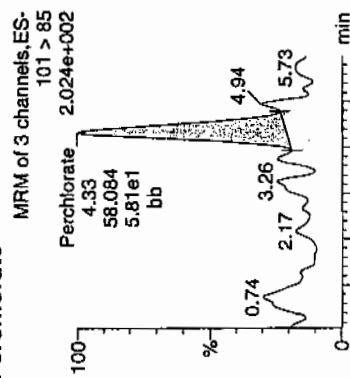
03-07-10

17226 | 955709 | 3020 | 11 | NA

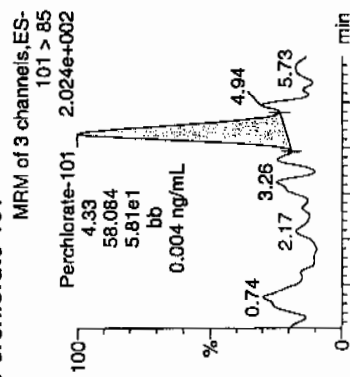
chlorate



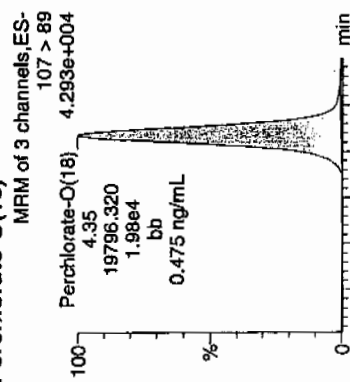
Perchlorate



Perchlorate-101



Perchlorate-O(18)



| Name   | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | SN        | Ion Ratio |
|--------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| 188001 | Perchlorate       | 99 > 83  | 4.40 | 225.123   | bb    |          |          | 0.0045 | -     |       | 23.976    | 3.88      |
| 188001 | Perchlorate-101   | 101 > 85 | 4.33 | 58.084    | bb    |          |          | 0.0037 |       |       | 25.601    |           |
| 188001 | Perchlorate-O(18) | 107 > 89 | 4.35 | 19796.320 | bb    |          |          | 0.4751 | 95.02 | -4.98 | 1153.5... |           |

4.35 19796.320 1.98e4 bb 0.475 ng/mL  
4.35 19796.320 1.98e4 bb 0.475 ng/mL  
4.35 19796.320 1.98e4 bb 0.475 ng/mL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8186

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188002

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 19:34 | per0306034a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 19:34 | per0306034a |
|            | Perchlorate-O(18)         |      |      | 4.90  | ug/kg |   | 1               | 06-MAR-10 19:34 | per0306034a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306034a

Date: 06-Mar-2010

Time: 19:34:40

ID: 247188002

Vial: 1:6,D

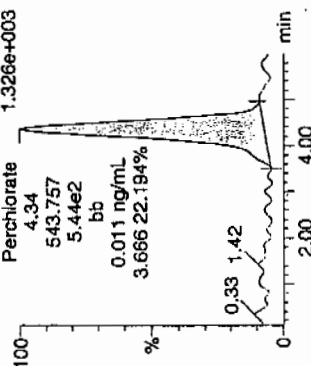
03-07-10

1222 | 955709 | 5020 | 11

**Perchlorate**

MRM of 3 channels, ES-

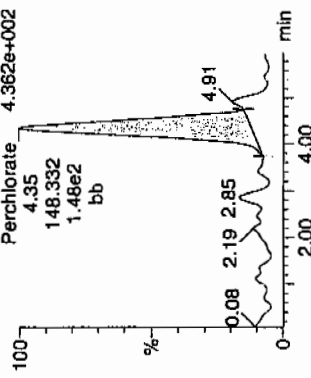
99 > 83



**Perchlorate**

MRM of 3 channels, ES-

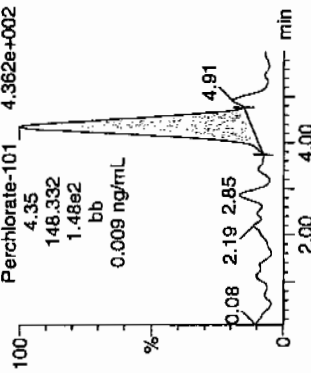
101 > 85



**Perchlorate-101**

MRM of 3 channels, ES-

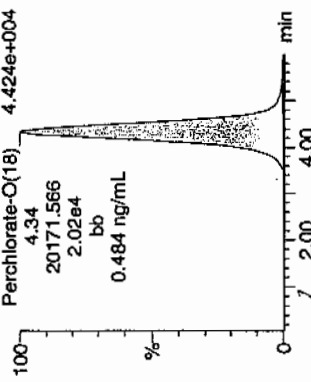
101 > 85



**Perchlorate-O(18)**

MRM of 3 channels, ES-

107 > 89



| ID        | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 247188002 | Perchlorate       | 99 > 83  | 4.34 | 543.757   | 543.757   | bb    |          |          | 0.0109 | 96.82 | 64.998 | 3.67      |           |
| 247188002 | Perchlorate-101   | 101 > 85 | 4.35 | 148.332   | 148.332   | bb    |          |          | 0.0095 |       |        | 8.532     |           |
| 247188002 | Perchlorate-O(18) | 107 > 89 | 4.34 | 20171.566 | 20171.566 | bb    |          |          | 0.4841 |       |        | 2110.5... |           |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8194

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188003

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:16 | per0305064a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 05-MAR-10 23:16 | per0305064a |
|            | Perchlorate-O(18)         |      |      | 4.50  | ug/kg |   | 1               | 05-MAR-10 23:16 | per0305064a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305064a

Date: 05-Mar-2010

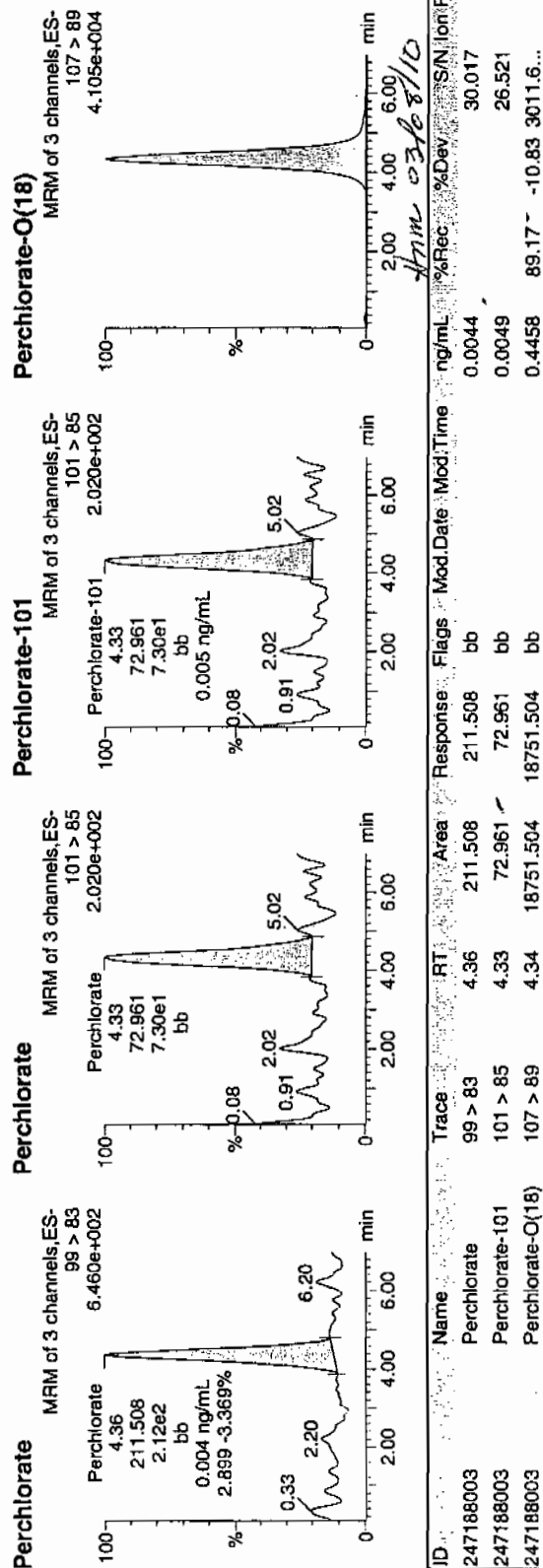
Time: 23:16:17

ID: 247188003

Vial: 2:2,E

03-06-10

1955701 | 5020 | 1 |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8189

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188004

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 99

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.533 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate Isotope Ratio |      |      | 3.09  |       |   | 1               | 05-MAR-10 23:26 | per0305065a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.562 | ug/kg | J | 1               | 05-MAR-10 23:26 | per0305065a |
|            | Perchlorate-O(18)         |      |      | 4.49  | ug/kg |   | 1               | 05-MAR-10 23:26 | per0305065a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

First Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 First: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305065a

Sample Date: 05-Mar-2010

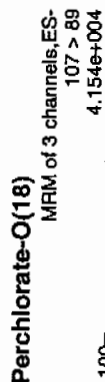
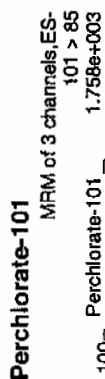
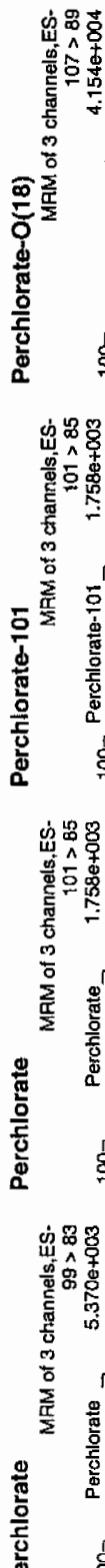
Sample Time: 23:26:29

Sample ID: 247188004

Sample Aliq: 2:2,F

034010

16700 | 955709 | 5070 | 11



| Name     | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN        | Ion Ratio |
|----------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 47188004 | Perchlorate       | 99 > 83  | 4.36 | 2556.741  | bb    |          |          | 0.0527 |       |        | 298.012   | 3.09      |
| 47188004 | Perchlorate-101   | 101 > 85 | 4.35 | 827.713   | bb    |          |          | 0.0556 |       |        | 385.480   |           |
| 47188004 | Perchlorate-O(18) | 107 > 89 | 4.35 | 18686.479 | bb    |          |          | 0.4443 | 88.88 | -11.14 | 2288.1... |           |

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8188

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188005

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.4

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate Isotope Ratio |      |      | 3.26  |       |   | 1               | 05-MAR-10 23:36 | per0305066a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 2.13  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |
|            | Perchlorate-O(18)         |      |      | 4.66  | ug/kg |   | 1               | 05-MAR-10 23:36 | per0305066a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot

ntify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

iset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ne: per0305066a

e: 05-Mar-2010

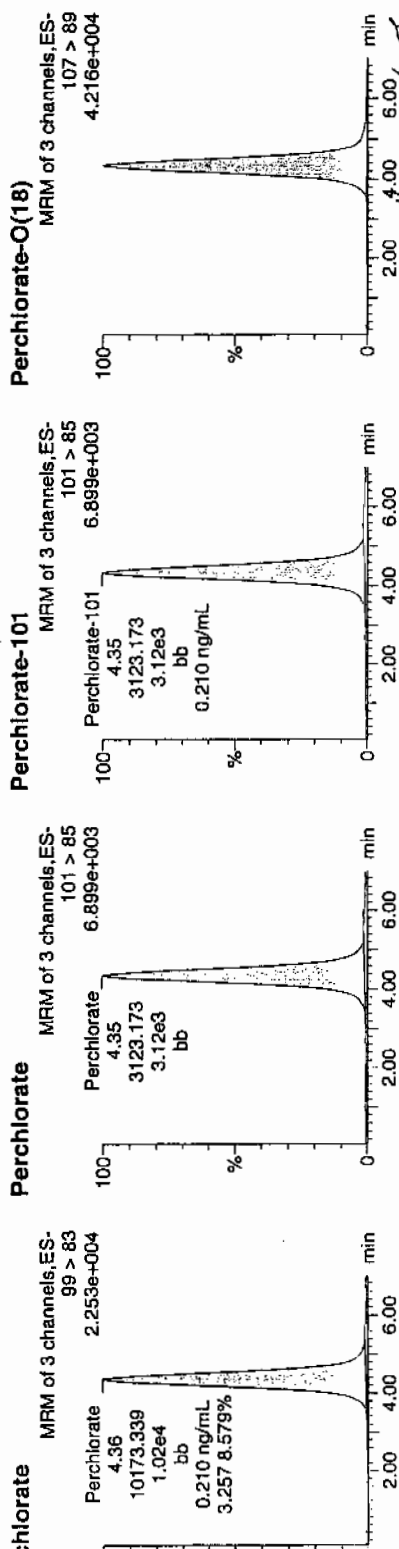
e: 23:36:30

247188005

: 2:3,A

WJ  
03-06-10

107100 | 955709 | 5000 | 11



| Name   | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | SN        | Ion Ratio |
|--------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| 188005 | Perchlorate       | 99 > 83  | 4.36 | 10173.339 | bb    |          |          | 0.2098 |       |       | 1683.3... | 3.26      |
| 188005 | Perchlorate-101   | 101 > 85 | 4.35 | 3123.173  | bb    |          |          | 0.2099 |       |       | 323.157   |           |
| 188005 | Perchlorate-O(18) | 107 > 89 | 4.34 | 19284.957 | bb    |          |          | 0.4585 | 91.70 | -8.30 | 1983.1... |           |

$$\frac{10173.339}{48489.7} \times 100 = 2.13$$

## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8187  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188006  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 97.5

| CAS No.    | Analyte <sup>a</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:46 | per0305067a |
| 14797-73-0 | Perchlorate-101           | .513 | 2.05 | 0.513 | ug/kg | U | 1               | 05-MAR-10 23:46 | per0305067a |
|            | Perchlorate-O(18)         |      |      | 4.54  | ug/kg |   | 1               | 05-MAR-10 23:46 | per0305067a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Identify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

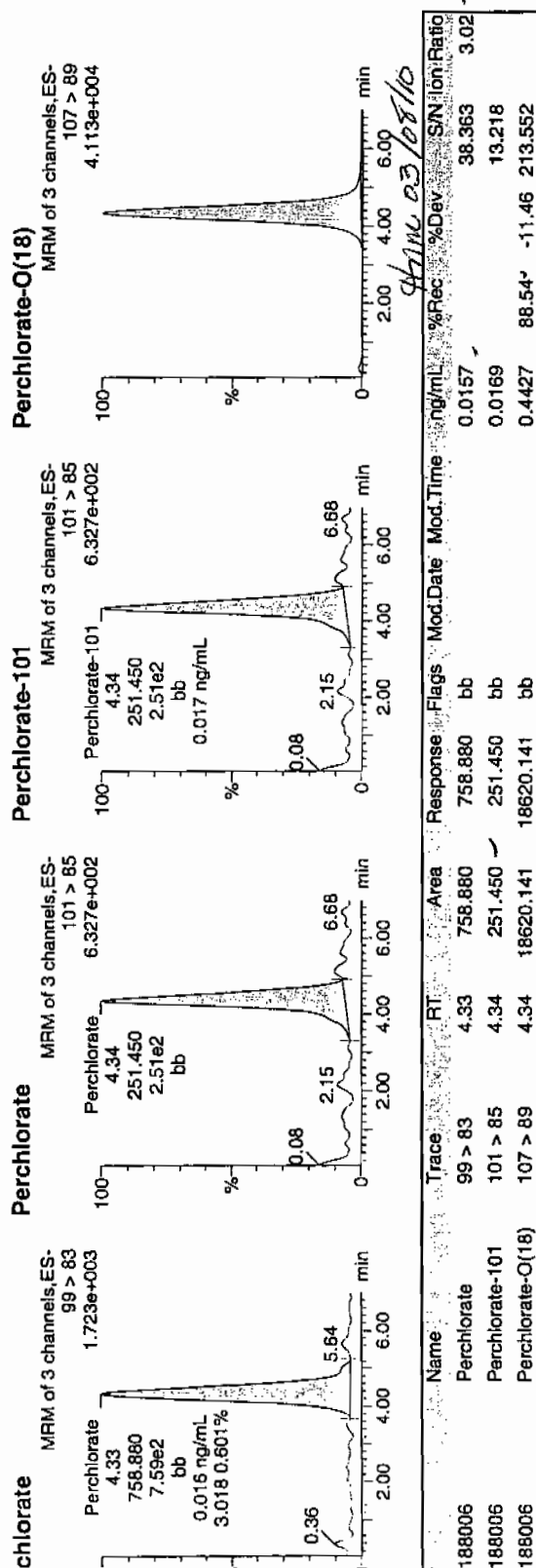
aset: C:\MassLynx\Perchlorate.PRO\per030510a.qid

t Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ited: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ne: per0305067a  
e: 05-Mar-2010  
ie: 23:46:33  
247188006  
l: 2:3,B

03-06-10

15220 | 955707 | 5020 | 11





## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8197  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188007  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 05-MAR-10 23:56 | per0305068a |
| 14797-73-0 | Perchlorate-101           | .507 | 2.03 | 0.507 | ug/kg | U | 1               | 05-MAR-10 23:56 | per0305068a |
|            | Perchlorate-O(18)         |      |      | 4.53  | ug/kg |   | 1               | 05-MAR-10 23:56 | per0305068a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
 Aliquot %Solids

Intify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

aset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

t Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ifed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ne: per0305068a

e: 05-Mar-2010

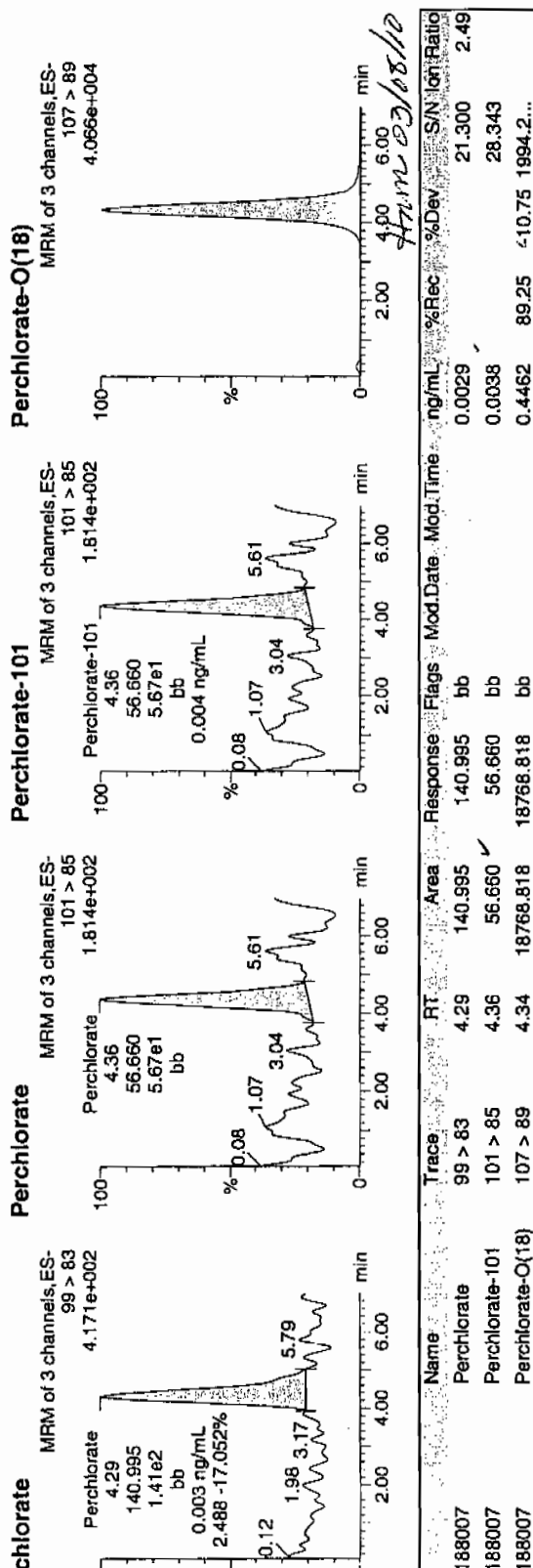
ie: 23:56:36

247188007

l: 2:3,C

030610

LANU | 955701 | 5020 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8190  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188008  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 %Solids: 99.07

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:06 | per0305069a |
| 14797-73-0 | Perchlorate-101           | .505 | 2.02 | 0.505 | ug/kg | U | 1               | 06-MAR-10 00:06 | per0305069a |
|            | Perchlorate-O(18)         |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:06 | per0305069a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\% \text{Solids}}$$

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

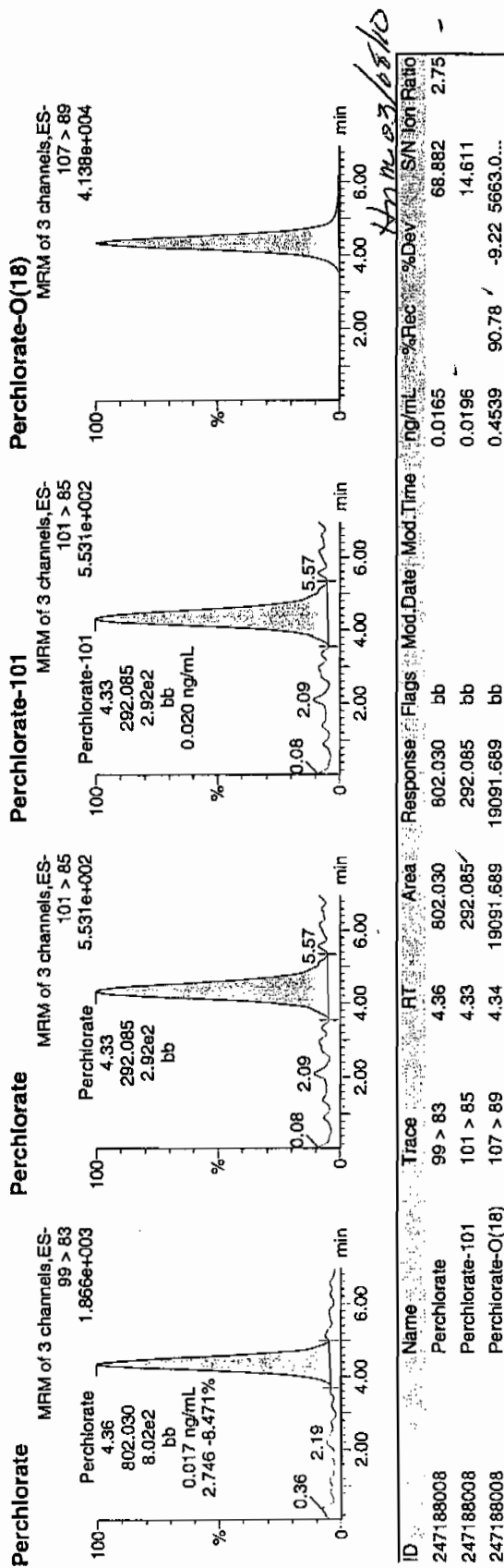
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qid

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305069a  
Date: 06-Mar-2010  
Time: 00:06:39  
ID: 247188008  
Vial: 2:3,D

03-06-10

162201955709/2010/11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8193

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188009

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.7

| CAS No.    | Analyte <sup>a</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:16 | per0305070a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.03 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:16 | per0305070a |
|            | Perchlorate-O(18)         |      |      | 4.58  | ug/kg |   | 1               | 06-MAR-10 00:16 | per0305070a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Identify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charles W. Wilson

iset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ne: per0305070a

ie: 06-Mar-2010

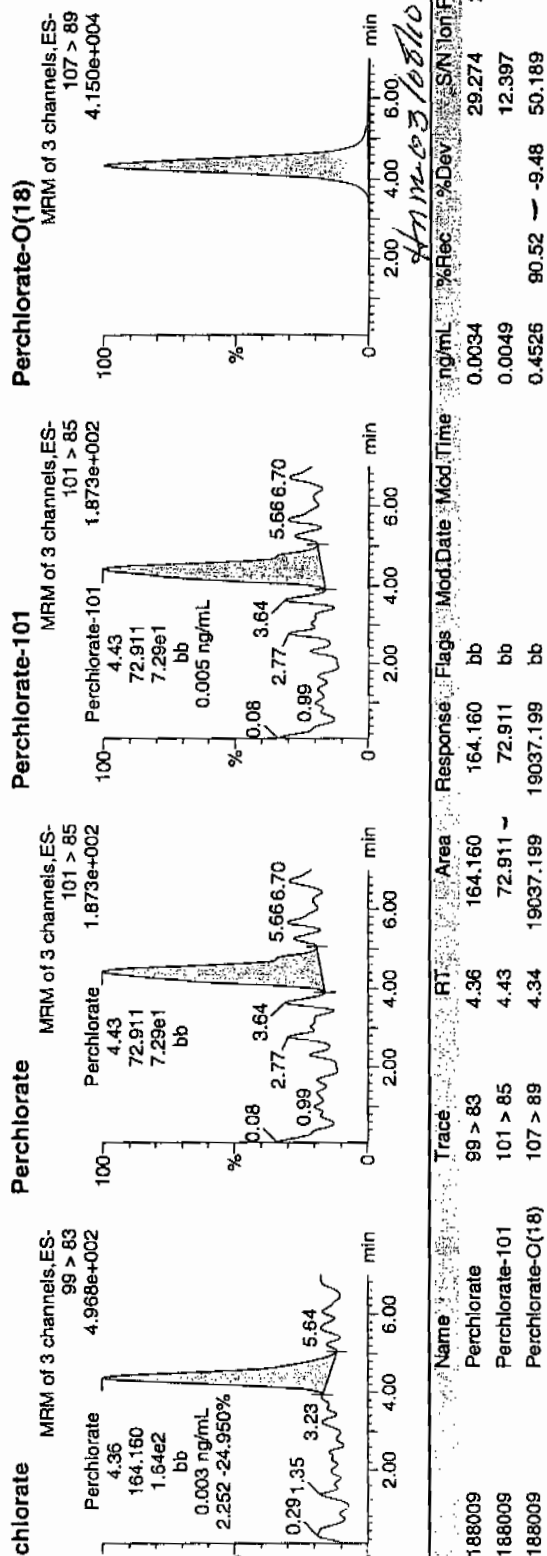
ie: 00:16:40

247188009

l: 2:3,E

03-06-10

1777-1955701/2020/11



## Perchlorate Analysis Data Sheet

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 255708Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8191Date Received: 16-FEB-10GEL Job No (SDG): 10-1863GEL Sample ID: 247188010Date Filtered: 03-MAR-10Injection Volume (uL): 20%Solids: 99.33

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:26 | per0305071a |
| 14797-73-0 | Perchlorate-101           | .503 | 2.01 | 0.503 | ug/kg | U | 1               | 06-MAR-10 00:26 | per0305071a |
|            | Perchlorate-O(18)         |      |      | 4.63  | ug/kg |   | 1               | 06-MAR-10 00:26 | per0305071a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Identify Sample Report MassLynx 4.0 SP4  
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305071a

Sample Date: 06-Mar-2010

Sample Time: 00:26:42

Sample ID: 247188010

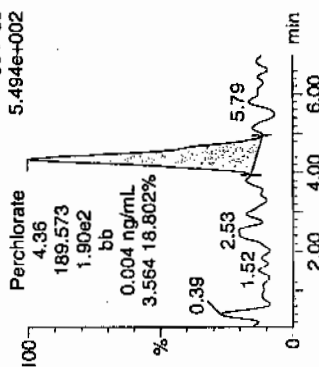
Sample Label: 2:3,F

03-06-10

12400 | 955709 | 30000 | 11

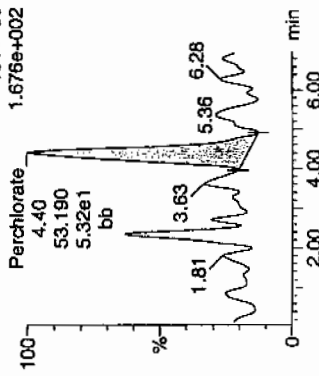
Perchlorate

MRM of 3 channels, ES-  
 99 > 83  
 5.494e+002



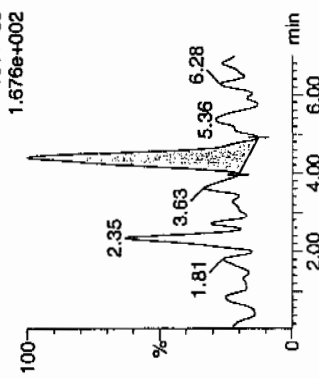
Perchlorate

MRM of 3 channels, ES-  
 101 > 85  
 1.676e+002



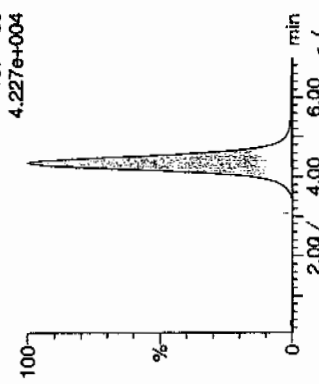
Perchlorate-101

MRM of 3 channels, ES-  
 101 > 85  
 1.676e+002



Perchlorate-O(18)

MRM of 3 channels, ES-  
 107 > 89  
 4.227e+004



| D         | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| 147188010 | Perchlorate       | 99 > 83  | 4.36 | 189.573   | 189.573   | bb    |          |          | 0.0039 |       |       | 27.705    | 3.56      |
| 147188010 | Perchlorate-101   | 101 > 85 | 4.40 | 53.190    | 53.190    | bb    |          |          | 0.0036 |       |       | 16.973    |           |
| 147188010 | Perchlorate-O(18) | 107 > 89 | 4.34 | 19362.883 | 19362.883 | bb    |          |          | 0.4604 | 92.07 | -7.93 | 2577.5... |           |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8192  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 247188011  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:36 | per0305072a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 00:36 | per0305072a |
|            | Perchlorate-O(18)         |      |      | 4.68  | ug/kg |   | 1               | 06-MAR-10 00:36 | per0305072a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X Concentrated Extract Volume X 1  
 Aliquot %Solids

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305072a

Date: 06-Mar-2010

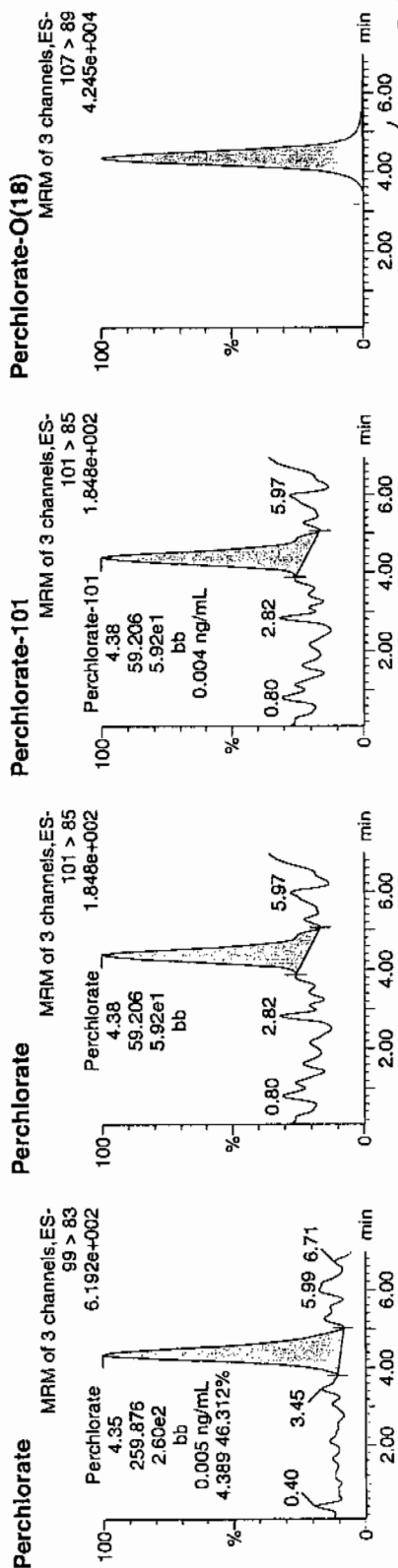
Time: 00:36:44

ID: 247188011

Vial: 2:4,A

0306-10

1955709 | 5000 | 11



| ID        | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N    | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|--------|-----------|
| 247188011 | Perchlorate       | 99 > 83  | 4.35 | 259.876   | 259.876   | bb    |          |          | 0.0054 | -     |       | 20.132 | 4.39      |
| 247188011 | Perchlorate-101   | 101 > 85 | 4.38 | 59.206    | 59.206    | bb    |          |          | 0.0040 |       |       | 21.714 |           |
| 247188011 | Perchlorate-O(18) | 107 > 89 | 4.34 | 19450.896 | 19450.896 | bb    |          |          | 0.4625 | 92.49 | -7.51 | 6877.2 |           |

4.39 20.132 4.39  
21.714  
6877.2

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8195

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188012

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.5

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 00:46 | per0305073a |
| 14797-73-0 | Perchlorate-101           | .508 | 2.03 | 0.508 | ug/kg | U | 1               | 06-MAR-10 00:46 | per0305073a |
|            | Perchlorate-O(18)         |      |      | 4.64  | ug/kg |   | 1               | 06-MAR-10 00:46 | per0305073a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Antify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

Asset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Alt: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ited: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

me: per0305073a

le: 06-Mar-2010

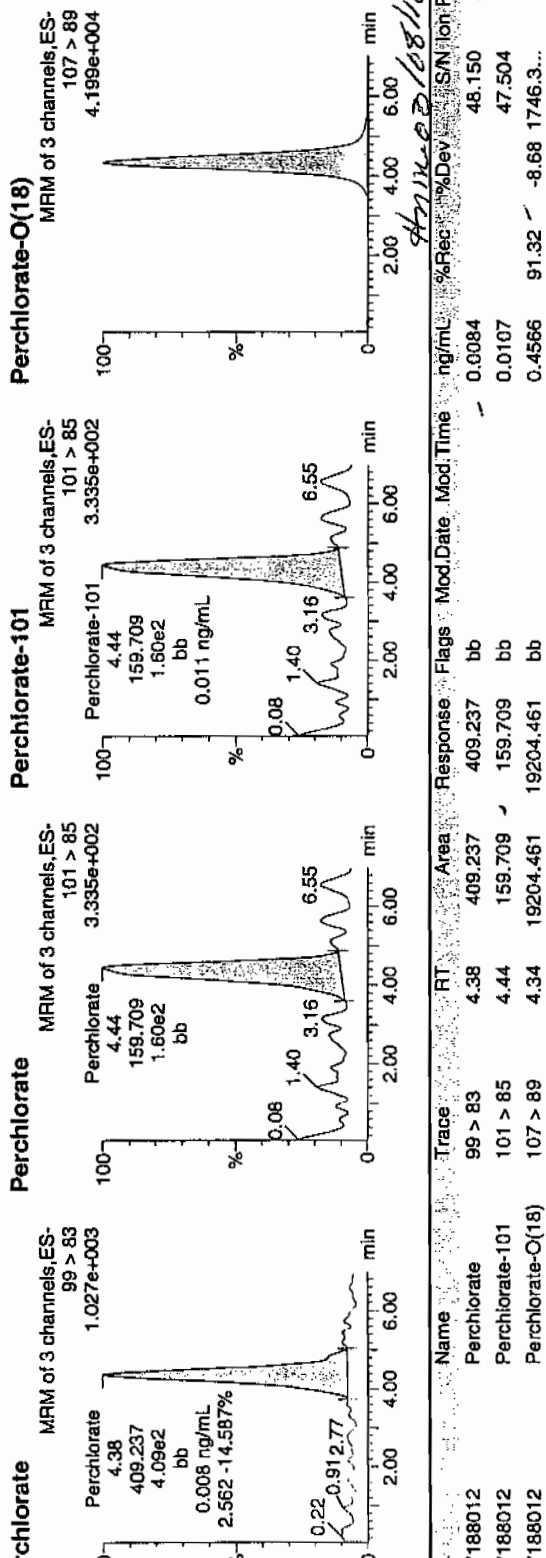
re: 00:46:47

247188012

IL: 2:4,B

603  
03-06-10

1422 | 955709 | 5000 | 11



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8226

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188013

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 97.6

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:27 | per0305077a |
| 14797-73-0 | Perchlorate-101           | .512 | 2.05 | 0.512 | ug/kg | U | 1               | 06-MAR-10 01:27 | per0305077a |
|            | Perchlorate-O(18)         |      |      | 4.71  | ug/kg |   | 1               | 06-MAR-10 01:27 | per0305077a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305077a

Date: 06-Mar-2010

Time: 01:27:36

ID: 247188013

Vial: 2:4,C

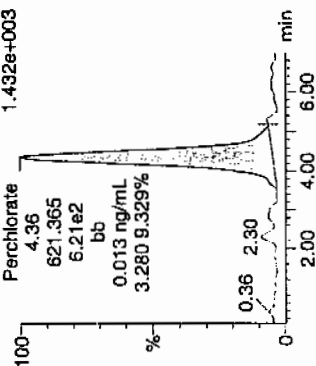
0306-10

16226 | 955709 | 50220 | 11

**Perchlorate**

MRM of 3 channels, ES-

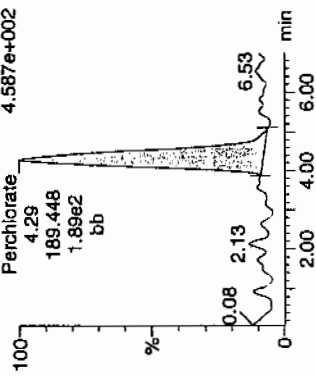
99 > 83



**Perchlorate**

MRM of 3 channels, ES-

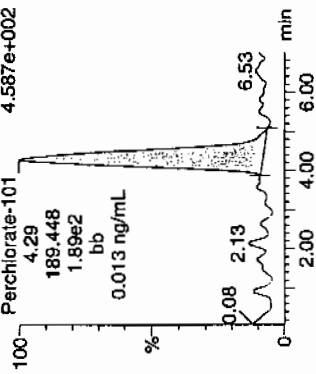
101 > 85



**Perchlorate-101**

MRM of 3 channels, ES-

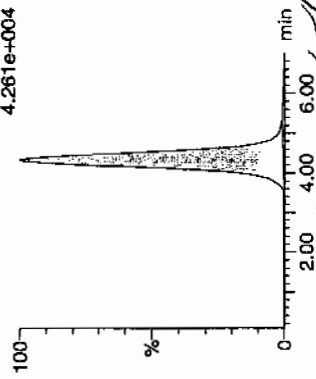
101 > 85



**Perchlorate-O(18)**

MRM of 3 channels, ES-

107 > 89



| ID        | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| 247188013 | Perchlorate       | 99 > 83  | 4.36 | 621.365   | 621.365   | bb    |          |          | 0.0128 |       |       | 86.884    | 3.28      |
| 247188013 | Perchlorate-101   | 101 > 85 | 4.29 | 189.448   | 189.448   | bb    |          |          | 0.0127 |       |       | 125.681   |           |
| 247188013 | Perchlorate-O(18) | 107 > 89 | 4.34 | 19331.770 | 19331.770 | bb    |          |          | 0.4596 | 91.93 | -8.07 | 1506.3... |           |

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 255708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8211

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 247188014

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate Isotope Ratio |      |      |       |       |   | 1               | 06-MAR-10 01:37 | per0305078a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 0.506 | ug/kg | U | 1               | 06-MAR-10 01:37 | per0305078a |
|            | Perchlorate-O(18)         |      |      | 4.62  | ug/kg |   | 1               | 06-MAR-10 01:37 | per0305078a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X %Solids

ntify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

set: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ne: per0305078a

e: 06-Mar-2010

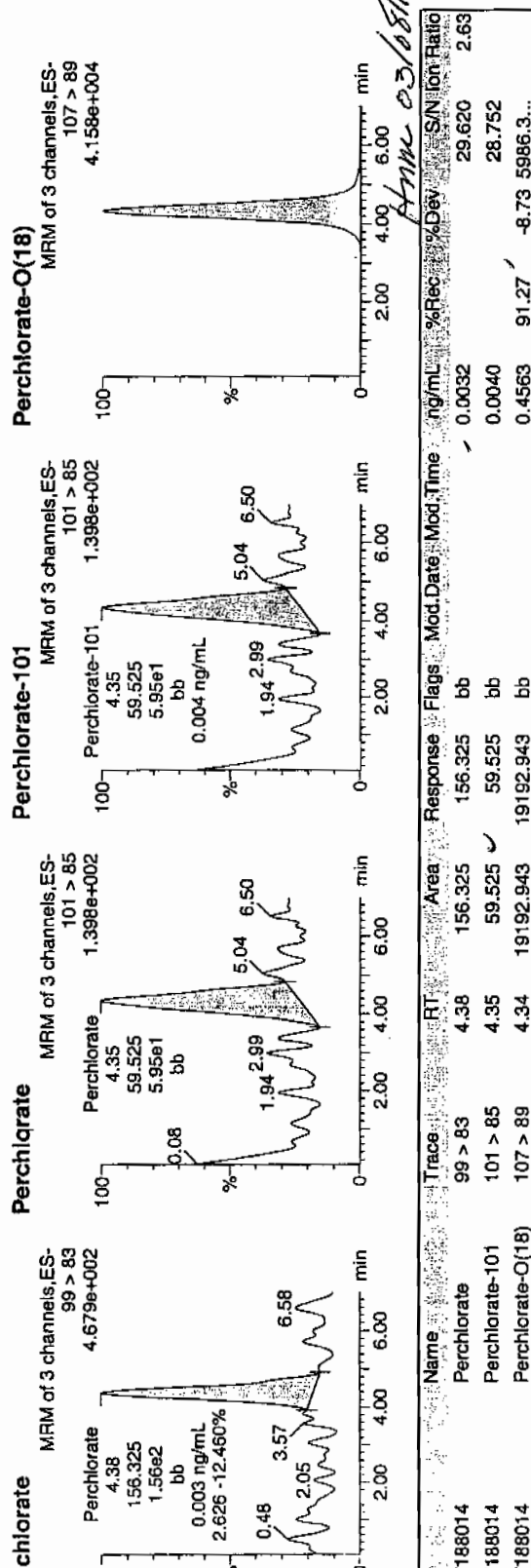
ie: 01:37:49

247188014

i: 2:4,D

03-06-10

12221955701 | 50120 | 11





# STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 48489.74

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14881.82

Response Type: External Standard

Curve Type: RF

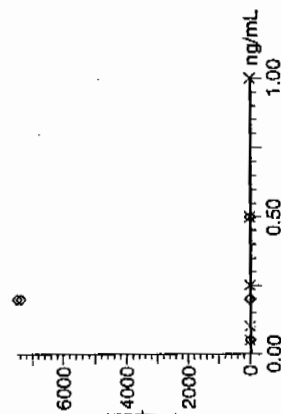
Identify Calibration Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charliers W. Wilson

aset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

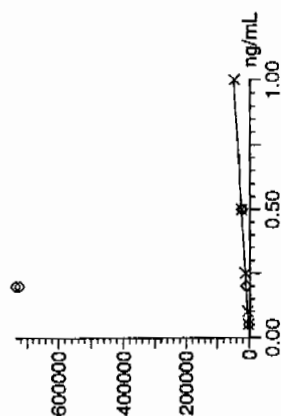
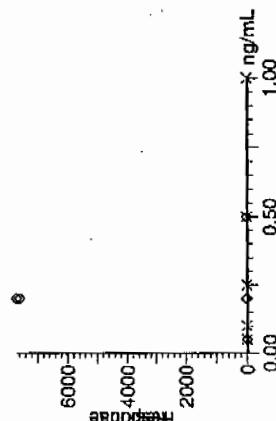
Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
ited: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

thod: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19  
ibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

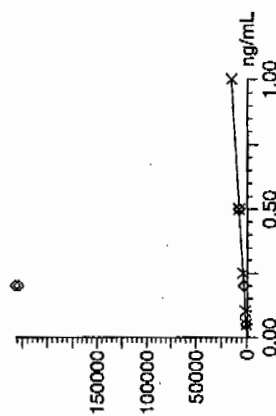
mpound name: Perchlorate  
sponse Factor: 48489.7  
F SD: 1243.24, % Relative SD: 2.56392 ✓  
sponse type: External Std, Area  
ve type: RF ✓



mpound name: Perchlorate-101  
sponse Factor: 14881.8  
F SD: 415.715, % Relative SD: 2.79344 ✓  
sponse type: External Std, Area  
ve type: RF ✓



03-06-10



03-06-10

Identify Calibration Report MassLynx 4.0 SP4

e GEL Group, LLC Analyst: Charlers W. Wilson

Fileset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Start Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Ended: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

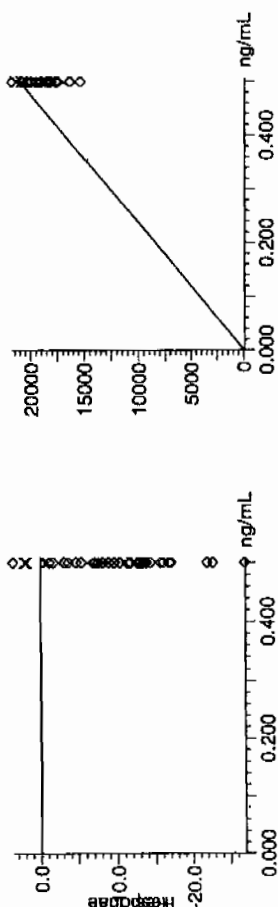
Compound name: Perchlorate-O(18)

Response Factor: 42059.8

RF SD: 811.21, % Relative SD: 1.9287

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 06-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate  
 Coefficient of Determination:  
 Calibration Curve: 49865.1  
 Response Type: External Standard  
 Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 06-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 15687.1  
 Response Type: External Standard  
 Curve Type: RF

Antify Calibration Report MassLynx 4.0 SP4  
 GEL Group, LLC Analyst: Charles W. Wilson

File: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Acquired: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Date: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030610a.mdb 07 Mar 2010 10:54:54  
 File: C:\MassLynx\Perchlorate.PRO\CurveDB\per030610a.cdb 07 Mar 2010 11:00:09

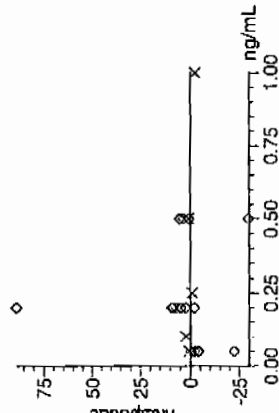
Compound name: Perchlorate

Response Factor: 49865.1

RF SD: 927.627, % Relative SD: 1.86027

Response type: External Std, Area

Curve type: RF



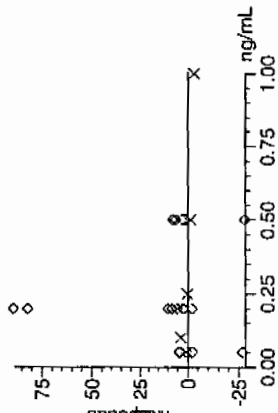
Compound name: Perchlorate-101

Response Factor: 15687.1

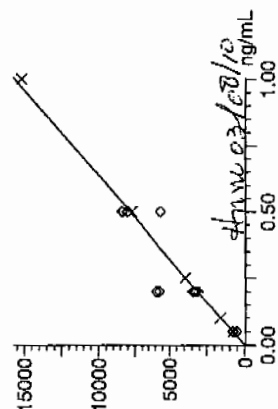
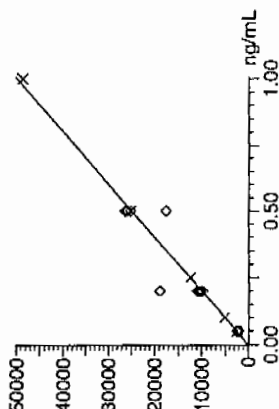
RF SD: 395.517, % Relative SD: 2.52129

Response type: External Std, Area

Curve type: RF



0303-10





Identify Calibration Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

st Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
nted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

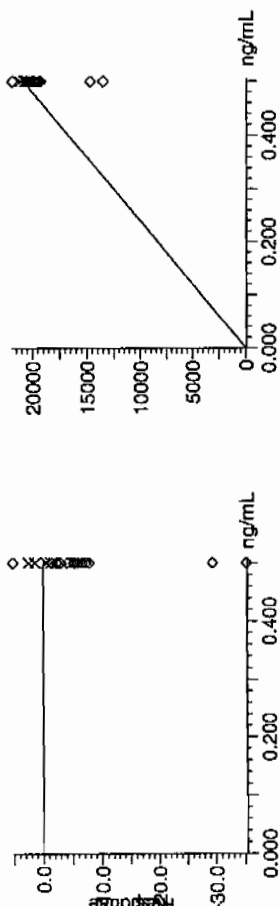
mpound name: Perchlorate-O<sup>-</sup>(18)

isponse Factor: 41669.8

if SD: 770.369, % Relative SD: 1.84875 ✓

isponse type: External Std, Area

ive type: RF ✓



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .5   | .51   | 101.59 | 05-MAR-10 14:00 | per0305009a |
| Perchlorate Isotope Ratio |      | 3.02  |        | 05-MAR-10 14:00 | per0305009a |
| Perchlorate-101           | .5   | .55   | 109.45 | 05-MAR-10 14:00 | per0305009a |
| Perchlorate               | .5   | .53   | 105.64 | 06-MAR-10 15:47 | per0306009a |
| Perchlorate Isotope Ratio |      | 3.17  |        | 06-MAR-10 15:47 | per0306009a |
| Perchlorate-101           | .5   | .53   | 105.93 | 06-MAR-10 15:47 | per0306009a |

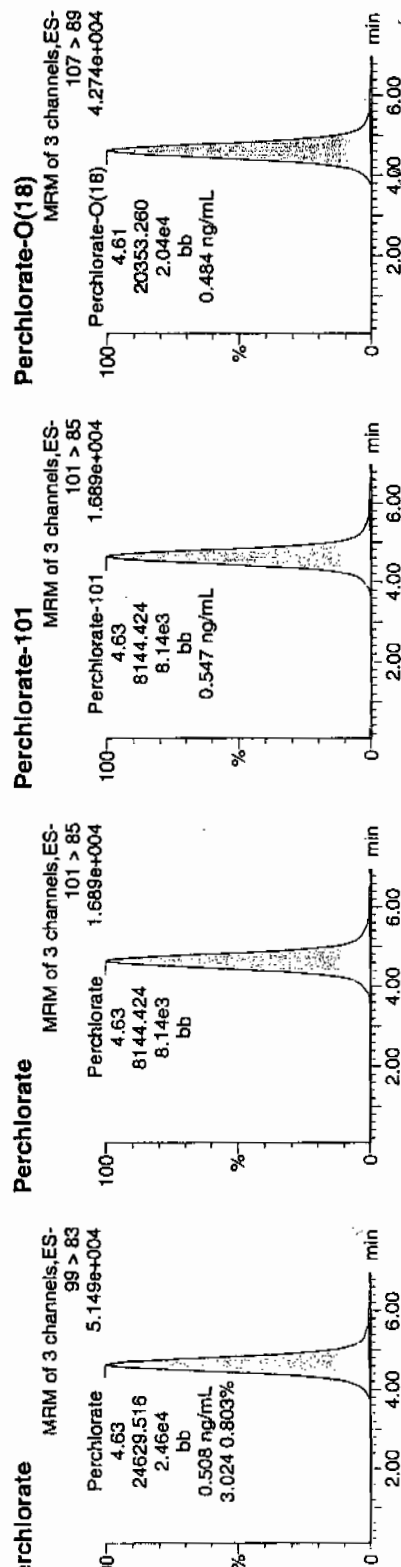
Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Sample Name: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Sample Date: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305009a  
Sample Date: 05-Mar-2010  
Sample Time: 14:00:49  
Sample File: WCL100227-06ICV  
Sample Label: 1:2,A

Per  
03-06-10



| Name           | Trace             | RT   | Area      | Response  | Flags | Mod Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|----------------|-------------------|------|-----------|-----------|-------|----------|--------|--------|-------|-----------|-----------|
| CL100227-06ICV | Perchlorate       | 4.63 | 24629.516 | 24629.516 | bb    |          | 0.5079 | 101.59 | 1.59  | 3539.4... | 3.02      |
| CL100227-06ICV | Perchlorate-101   | 4.63 | 8144.424  | 8144.424  | bb    |          | 0.5473 | 109.45 | 9.45  | 2045.0... |           |
| CL100227-06ICV | Perchlorate-O(18) | 4.61 | 20353.260 | 20353.260 | bb    |          | 0.4839 | 96.78  | -3.22 | 3845.3... |           |

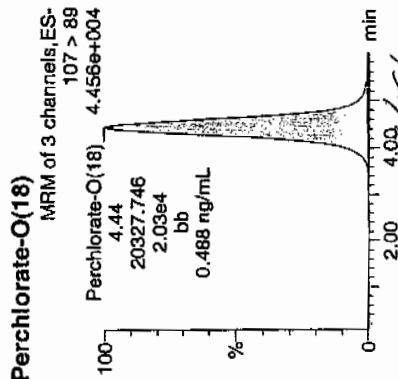
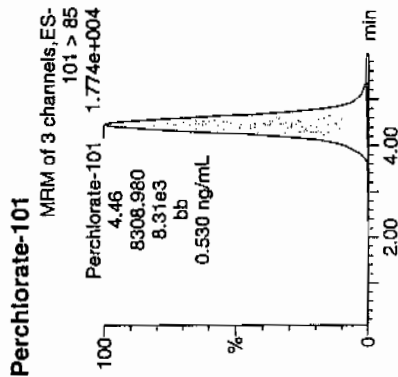
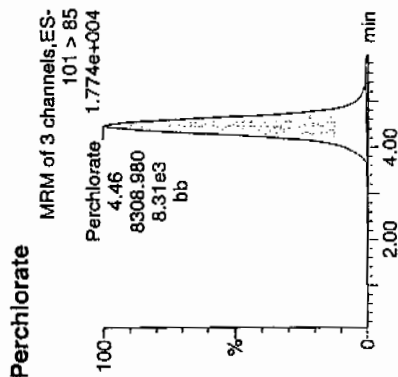
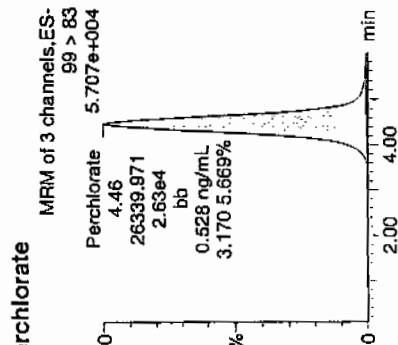
Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

Sample: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Sample Name: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Sample Date: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306009a  
Sample Date: 06-Mar-2010  
Sample Time: 15:47:39  
Sample File: WCL100227-06ICV  
Sample Aliot: 1:2,A

Per  
030710



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 'CL100227-06ICV | Perchlorate       | 99 > 83  | 4.46 | 26339.971 | bb    |          |          | 0.5282 | 105.64 | 5.64  | 1460.8... | 3.17      |
| 'CL100227-06ICV | Perchlorate-101   | 101 > 85 | 4.46 | 8308.980  | bb    |          |          | 0.5297 | 105.93 | 5.93  | 310.031   |           |
| 'CL100227-06ICV | Perchlorate-O(18) | 107 > 89 | 4.44 | 20327.746 | bb    |          |          | 0.4878 | 97.57  | -2.43 | 842.834   |           |

Form 3

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units:  $\mu\text{g/kg}$

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .5   | .5    | 100.84 | 05-MAR-10 16:11 | per0305022a |
| Perchlorate Isotope Ratio |      | 3.08  |        | 05-MAR-10 16:11 | per0305022a |
| Perchlorate-101           | .5   | .53   | 106.73 | 05-MAR-10 16:11 | per0305022a |
| Perchlorate               | .5   | .5    | 100.86 | 05-MAR-10 18:22 | per0305035a |
| Perchlorate Isotope Ratio |      | 3.15  |        | 05-MAR-10 18:22 | per0305035a |
| Perchlorate-101           | .5   | .52   | 104.17 | 05-MAR-10 18:22 | per0305035a |
| Perchlorate               | .5   | .49   | 97.76  | 05-MAR-10 22:45 | per0305061a |
| Perchlorate Isotope Ratio |      | 3.15  |        | 05-MAR-10 22:45 | per0305061a |
| Perchlorate-101           | .5   | .51   | 101.05 | 05-MAR-10 22:45 | per0305061a |
| Perchlorate               | .5   | .49   | 98.25  | 06-MAR-10 00:56 | per0305074a |
| Perchlorate Isotope Ratio |      | 3.17  |        | 06-MAR-10 00:56 | per0305074a |
| Perchlorate-101           | .5   | .51   | 101.04 | 06-MAR-10 00:56 | per0305074a |
| Perchlorate               | .5   | .47   | 93.47  | 06-MAR-10 03:08 | per0305087a |

## Perchlorate Continuing Calibration Verification

**Lab Name: General Engineering Laboratories**

**GEL Job No.(SDG):** 10-1863

**Lab Code:** GEL

**Reporting Units:** µg/kg

|                           |    |      |        |                 |             |
|---------------------------|----|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio |    | 3.06 |        | 06-MAR-10 03:08 | per0305087a |
| Perchlorate-101           | .5 | .5   | 99.39  | 06-MAR-10 03:08 | per0305087a |
| Perchlorate               | .5 | .52  | 103.44 | 06-MAR-10 17:45 | per0306022a |
| Perchlorate Isotope Ratio |    | 3.23 |        | 06-MAR-10 17:45 | per0306022a |
| Perchlorate-101           | .5 | .51  | 101.86 | 06-MAR-10 17:45 | per0306022a |
| Perchlorate               | .5 | .53  | 105.31 | 06-MAR-10 19:43 | per0306035a |
| Perchlorate Isotope Ratio |    | 3.11 |        | 06-MAR-10 19:43 | per0306035a |
| Perchlorate-101           | .5 | .54  | 107.48 | 06-MAR-10 19:43 | per0306035a |

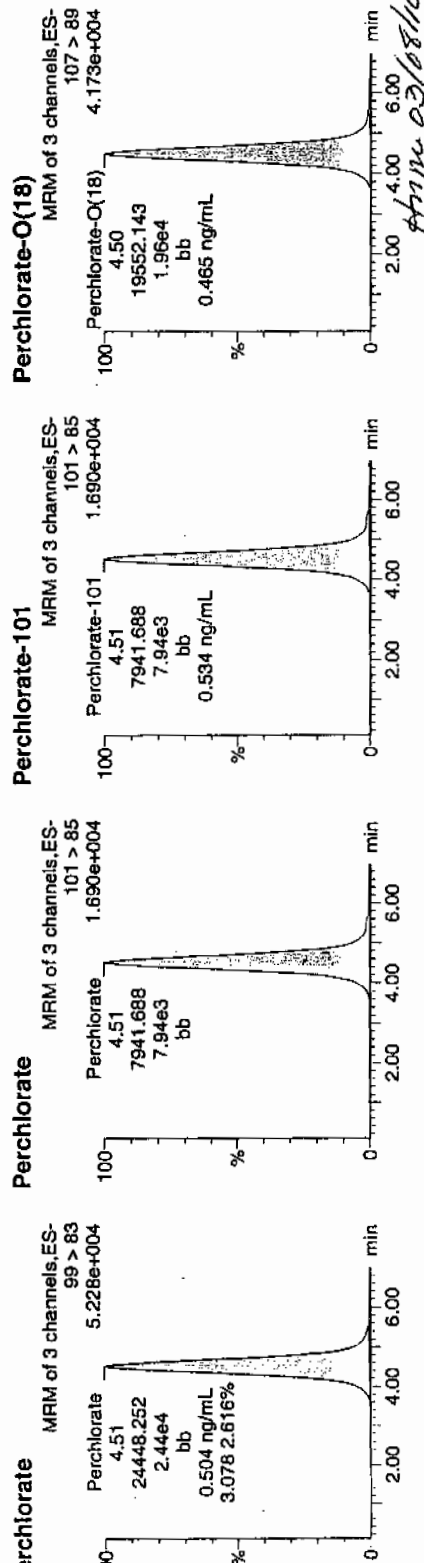
Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ime: per0305022a  
ite: 05-Mar-2010  
me: 16:11:38  
: WCL100227-06CCV  
al: 1:2,A

*Per  
an  
03-06-10*



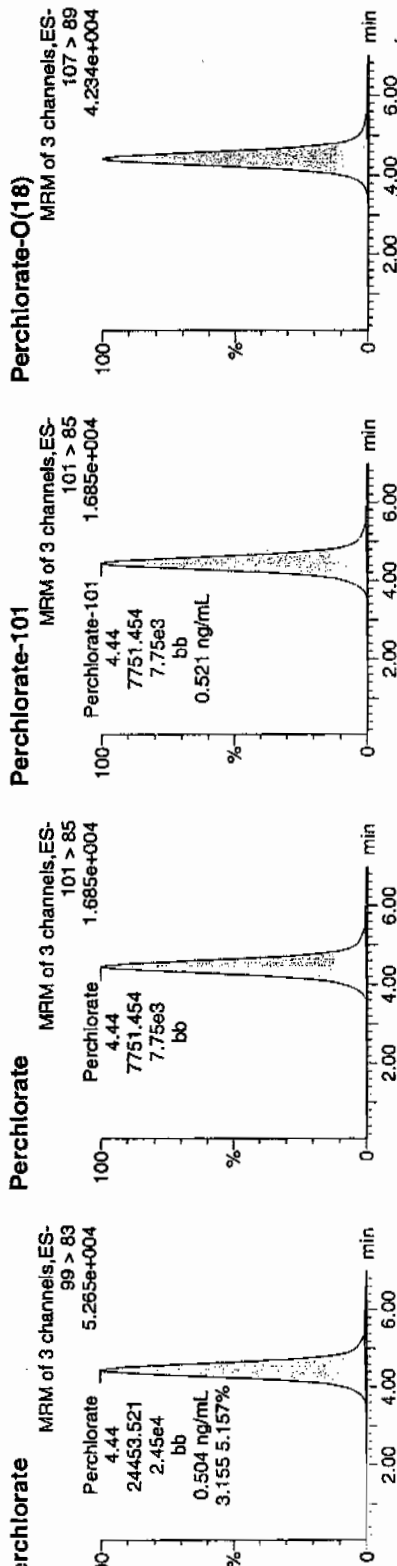
| Name              | Trace    | RT   | Area      | Response  | Flags | Mod Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|--------|--------|-------|-----------|-----------|
| Perchlorate       | 99 > 83  | 4.51 | 24448.252 | 24448.252 | bb    |          | 0.5042 | 100.84 | 0.84  | 2170.1... | 3.08      |
| Perchlorate-101   | 101 > 85 | 4.51 | 7941.688  | 7941.688  | bb    |          | 0.5337 | 106.73 | 6.73  | 534.771   |           |
| Perchlorate-O(18) | 107 > 89 | 4.50 | 19552.143 | 19552.143 | bb    |          | 0.4649 | 92.97  | -7.03 | 2384.2... |           |

Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Sample Name: per0305035a  
Date: 05-Mar-2010  
Time: 18:22:27  
File: WCL100227-06CCV  
Label: 1:2,A

Per  
03-06-10



| Name           | Trace             | RT       | Area | Response  | Flags | Mod. Time | Mod. Date | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|----------------|-------------------|----------|------|-----------|-------|-----------|-----------|--------|--------|-------|-----------|-----------|
| CL100227-06CCV | Perchlorate       | 99 > 83  | 4.44 | 24453.521 | bb    |           |           | 0.5043 | 100.86 | 0.86  | 2843.3... | 3.15      |
| CL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.44 | 7751.454  | bb    |           |           | 0.5209 | 104.17 | 4.17  | 512.645   |           |
| CL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.41 | 19898.803 | bb    |           |           | 0.4731 | 94.62  | -5.38 | 2133.5... |           |



Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ist Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305061a

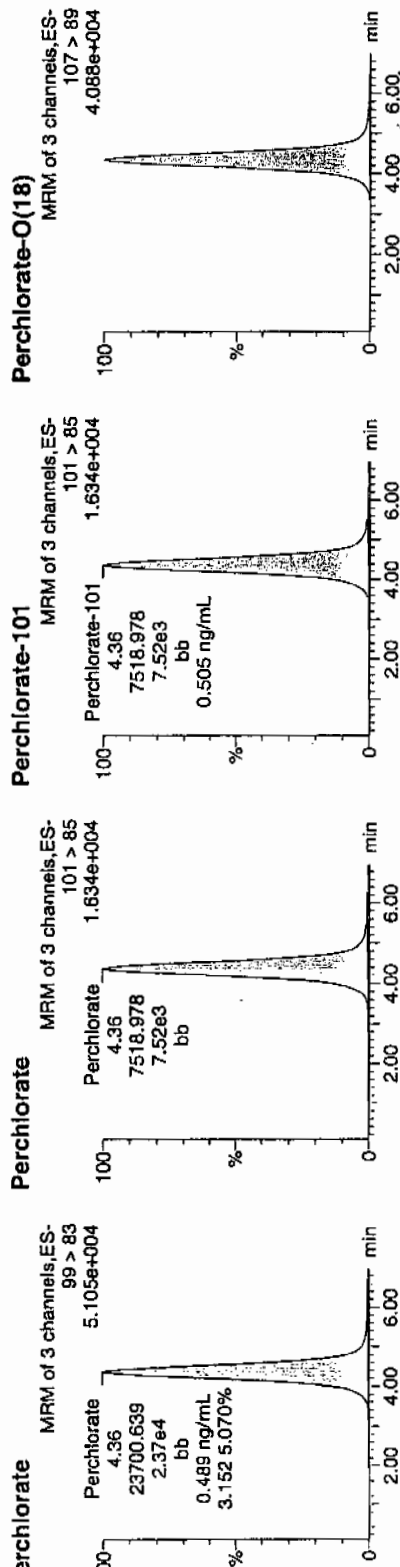
ate: 05-Mar-2010

me: 22:45:32

WCL100227-06CCV

al: 1:2,A

*Per  
 03-06-10*



| Name            | Trace             | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| ICL100227-06CCV | Perchlorate       | 4.36 | 23700.639 | 23700.639 | bb    |          |          | 0.488  | 97.76  | -2.24 | 1855.8... | 3.15      |
| ICL100227-06CCV | Perchlorate-101   | 4.36 | 7518.978  | 7518.978  | bb    |          |          | 0.5052 | 101.05 | 1.05  | 619.599   |           |
| ICL100227-06CCV | Perchlorate-O(18) | 4.34 | 18982.309 | 18982.309 | bb    |          |          | 0.4513 | 90.26  | -9.74 | 1438.8... |           |

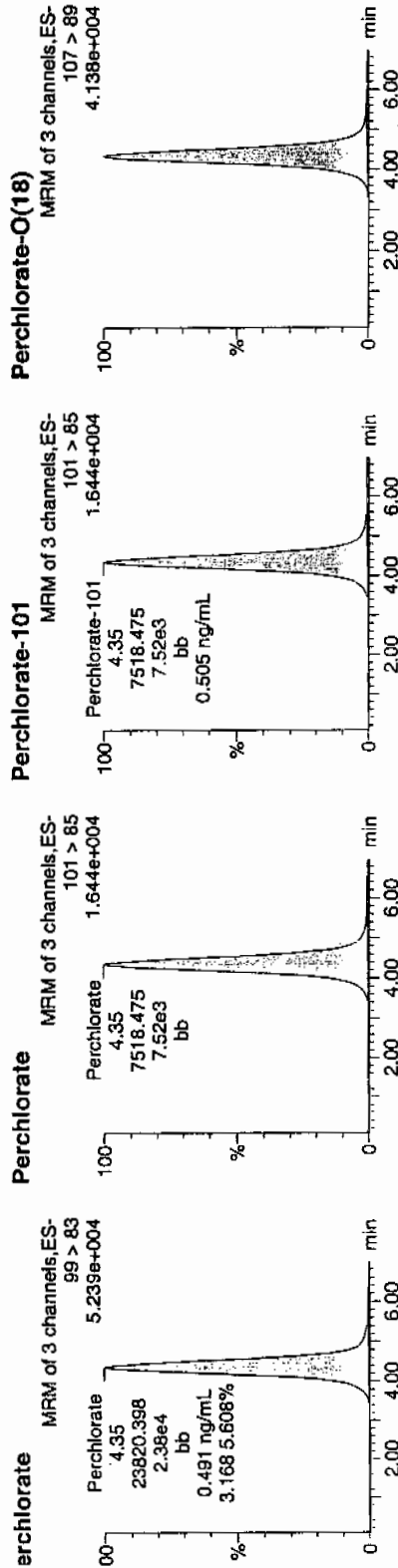
Quantity Sample Report MassLynx 4.0 SP4  
 GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

First Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Infited: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305074a  
 Date: 06-Mar-2010  
 Time: 00:56:49  
 File: WCL100227-06CCV  
 Label: 1:2,A

Per 0306-10



| Name            | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev   | S/N       | Ion Ratio |
|-----------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|-----------|-----------|
| /CL100227-06CCV | 99 > 83  | 4.35 | 23820.398 | 23820.398 | bb    |          |          | 0.4912 | 98.25  | -1.75  | 1882.8... | 3.17      |
| /CL100227-06CCV | 101 > 85 | 4.35 | 7518.475  | 7518.475  | bb    |          |          | 0.5052 | 101.04 | 1.04   | 1244.3... |           |
| /CL100227-06CCV | 107 > 89 | 4.34 | 18849.641 | 18849.641 | bb    |          |          | 0.4482 | 89.63  | -10.37 | 3023.5... |           |

Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charlers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ime: per0305087a

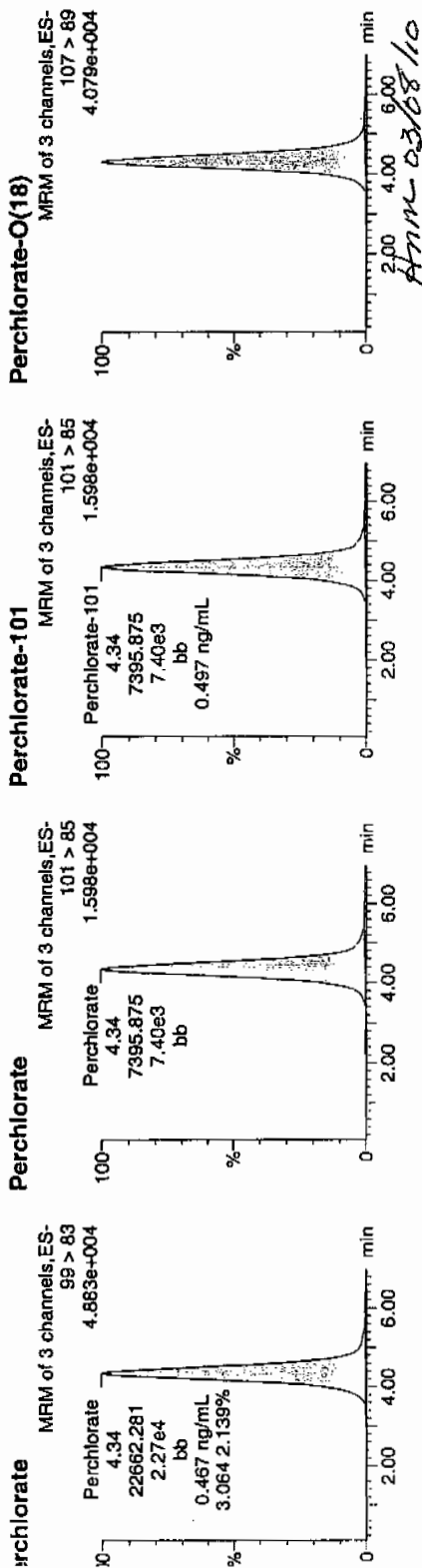
ite: 06-Mar-2010

me: 03:08:46

: WCL100227-06CCV

al: 1:2,A

Per  
 03/06/10



| Name           | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| CL100227-06CCV | Perchlorate       | 99 > 83  | 4.34 | 22662.281 | bb    |          |          | 0.4674 | 93.47 | -6.53  | 1088.5... | 3.06      |
| CL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.34 | 7395.875  | bb    |          |          | 0.4970 | 99.99 | -0.61  | 829.416   |           |
| CL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.32 | 18312.898 | bb    |          |          | 0.4354 | 87.08 | -12.92 | 1929.6... |           |

Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

First Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Intend: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306022a

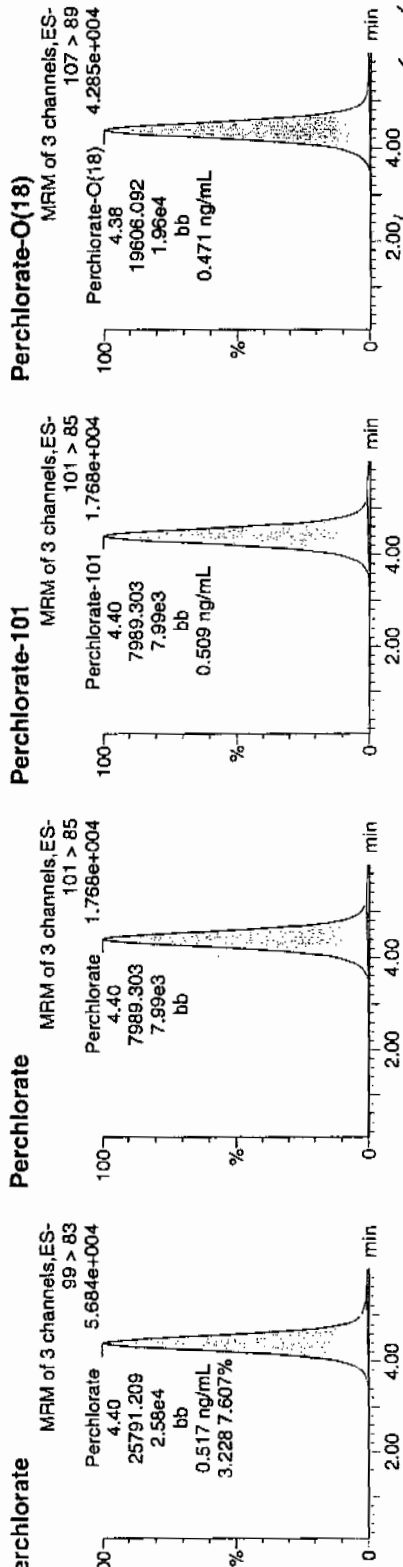
Sample Date: 06-Mar-2010

Sample Time: 17:45:51

Sample ID: WCL100227-06CCV

Sample Aliq: 1:2,A

*Perchlorate*  
*03-07-10*



| Name             | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|------------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| /JCL100227-06CCV | Perchlorate       | 99 > 83  | 4.40 | 25791.209 | bb    |          |          | 0.5172 | 103.44 | 3.44  | 2256.3... | 3.23      |
| /JCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.40 | 7989.303  | bb    |          |          | 0.5093 | 101.86 | 1.86  | 1287.2... |           |
| /JCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.38 | 19606.092 | bb    |          |          | 0.4705 | 94.10  | -5.90 | 6406.1... |           |

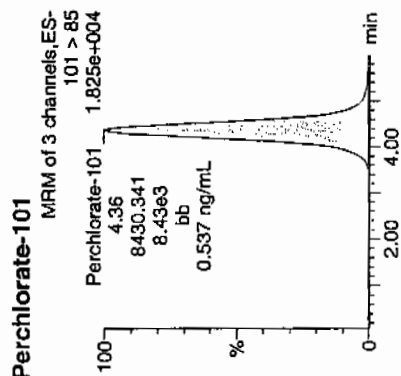
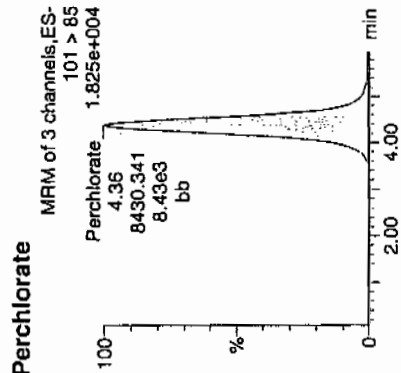
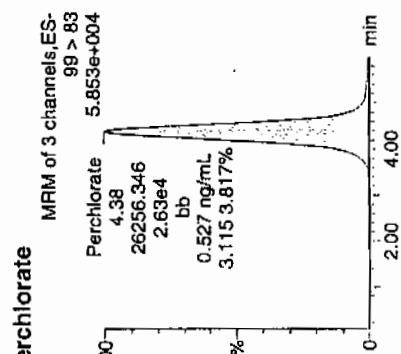
Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

First Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Intended: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306035a  
 Date: 06-Mar-2010  
 Time: 19:43:43  
 File: WCL100227-06CCV  
 Aliot: 1:2,A

*Perchlorate*  
*03-07-10*



| Name           | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| CL100227-06CCV | Perchlorate       | 99 > 83  | 4.38 | 26256.346 | bb    |          |          | 0.5265 | 105.31 | 5.31  | 4475.8... | 3.11      |
| CL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.36 | 8430.341  | bb    |          |          | 0.5374 | 107.48 | 7.48  | 247.813   |           |
| CL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.35 | 20545.770 | bb    |          |          | 0.4931 | 98.61  | -1.39 | 2866.5... |           |

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1863

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units:  $\mu\text{g/kg}$

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .05  | .05   | 97.42  | 05-MAR-10 14:21 | per0305011a |
| Perchlorate Isotope Ratio |      | 3.39  |        | 05-MAR-10 14:21 | per0305011a |
| Perchlorate-101           | .05  | .05   | 93.73  | 05-MAR-10 14:21 | per0305011a |
| Perchlorate               | .05  | .05   | 94.34  | 05-MAR-10 16:31 | per0305024a |
| Perchlorate Isotope Ratio |      | 2.94  |        | 05-MAR-10 16:31 | per0305024a |
| Perchlorate-101           | .05  | .05   | 104.64 | 05-MAR-10 16:31 | per0305024a |
| Perchlorate               | .05  | .04   | 88.33  | 05-MAR-10 18:42 | per0305037a |
| Perchlorate Isotope Ratio |      | 2.97  |        | 05-MAR-10 18:42 | per0305037a |
| Perchlorate-101           | .05  | .05   | 96.82  | 05-MAR-10 18:42 | per0305037a |
| Perchlorate               | .05  | .04   | 85.02  | 05-MAR-10 23:06 | per0305063a |
| Perchlorate Isotope Ratio |      | 3.14  |        | 05-MAR-10 23:06 | per0305063a |

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863

Lab Code: GEL

Reporting Units: ug/kg

|                           |     |      |        |                 |             |
|---------------------------|-----|------|--------|-----------------|-------------|
| Perchlorate-101           | .05 | .04  | 88.26  | 05-MAR-10 23:06 | per0305063a |
| Perchlorate               | .05 | .04  | 89.21  | 06-MAR-10 01:17 | per0305076a |
| Perchlorate Isotope Ratio |     | 3.29 |        | 06-MAR-10 01:17 | per0305076a |
| Perchlorate-101           | .05 | .04  | 88.45  | 06-MAR-10 01:17 | per0305076a |
| Perchlorate               | .05 | .04  | 85.29  | 06-MAR-10 03:29 | per0305089a |
| Perchlorate Isotope Ratio |     | 3.36 |        | 06-MAR-10 03:29 | per0305089a |
| Perchlorate-101           | .05 | .04  | 82.59  | 06-MAR-10 03:29 | per0305089a |
| Perchlorate               | .05 | .05  | 96.41  | 06-MAR-10 16:05 | per0306011a |
| Perchlorate Isotope Ratio |     | 2.95 |        | 06-MAR-10 16:05 | per0306011a |
| Perchlorate-101           | .05 | .05  | 103.98 | 06-MAR-10 16:05 | per0306011a |
| Perchlorate               | .05 | .05  | 97.89  | 06-MAR-10 18:04 | per0306024a |

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863

Lab Code: GEL

Reporting Units: µg/kg

|                           |     |      |        |                 |             |
|---------------------------|-----|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio |     | 2.98 |        | 06-MAR-10 18:04 | per0306024a |
| Perchlorate-101           | .05 | .05  | 104.42 | 06-MAR-10 18:04 | per0306024a |
| Perchlorate               | .05 | .05  | 99.71  | 06-MAR-10 20:01 | per0306037a |
| Perchlorate Isotope Ratio |     | 3.24 |        | 06-MAR-10 20:01 | per0306037a |
| Perchlorate-101           | .05 | .05  | 97.72  | 06-MAR-10 20:01 | per0306037a |



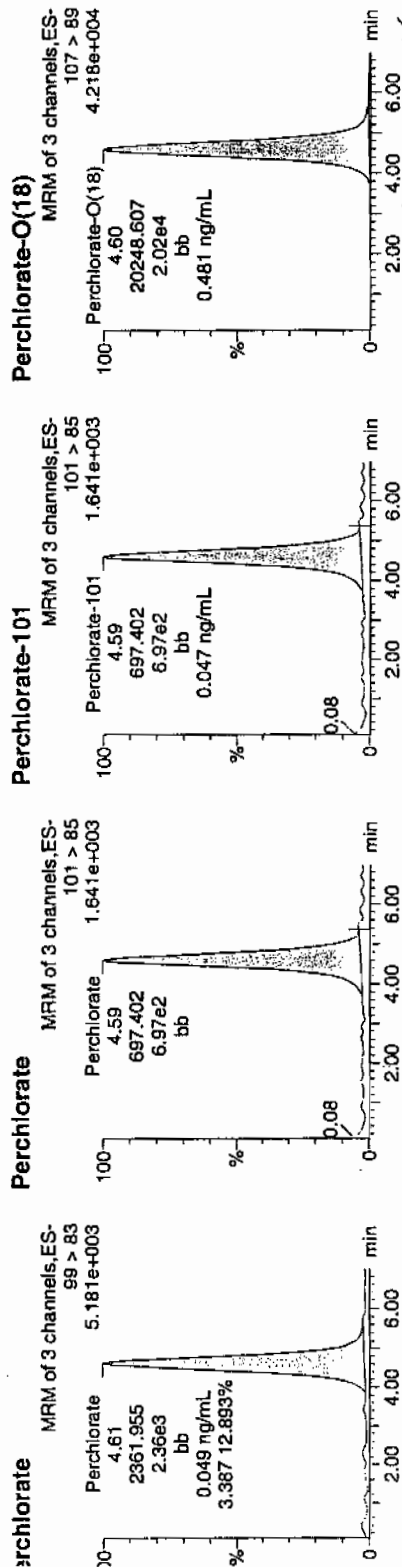
Identify Sample Report MassLynx 4.0 SP4  
ie GEL Group, LLC Analyst: Charles W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ime: per0305011a  
ite: 05-Mar-2010  
me: 14:21:02  
: WCL100227-07CRI  
al: 1:2,B

Per  
03-06-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N     | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| 'CL100227-07CRI | Perchlorate       | 99 > 83  | 4.61 | 2361.955  | bb    |          |          | 0.0487 | 97.42 | -2.58 | 227.404 | 3.39      |
| 'CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.59 | 697.402   | bb    |          |          | 0.0469 | 93.73 | -6.27 | 49.831  |           |
| 'CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.60 | 20248.607 | bb    |          |          | 0.4814 | 96.28 | -3.72 | 305.789 |           |

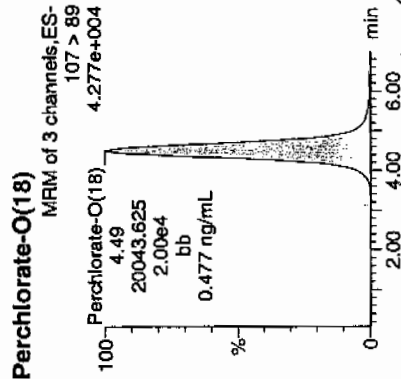
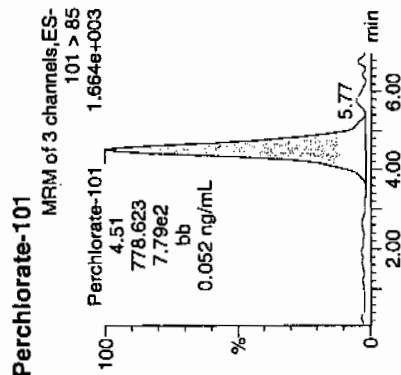
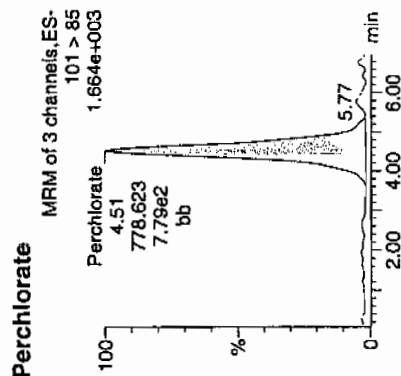
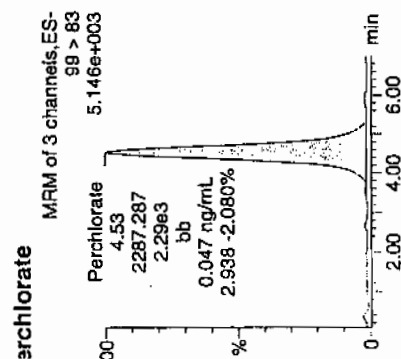
uantify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ist Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305024a  
ate: 05-Mar-2010  
me: 16:31:58  
i: WCL100227-07CRI  
ial: 1:2,B

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and  
030610*



| Name            | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
| ICL100227-07CRI | Perchlorate       | 99 > 83  | 4.53 | 2287.287  | 2287.287  | bb       |          | 0.0472 | 94.34  | -5.66 | 193.383   | 2.94      |
| ICL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.51 | 778.623   | 778.623   | bb       |          | 0.0523 | 104.64 | 4.64  | 32.800    |           |
| ICL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.49 | 20043.625 | 20043.625 | bb       |          | 0.4766 | 95.31  | -4.69 | 1708.4... |           |

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305037a

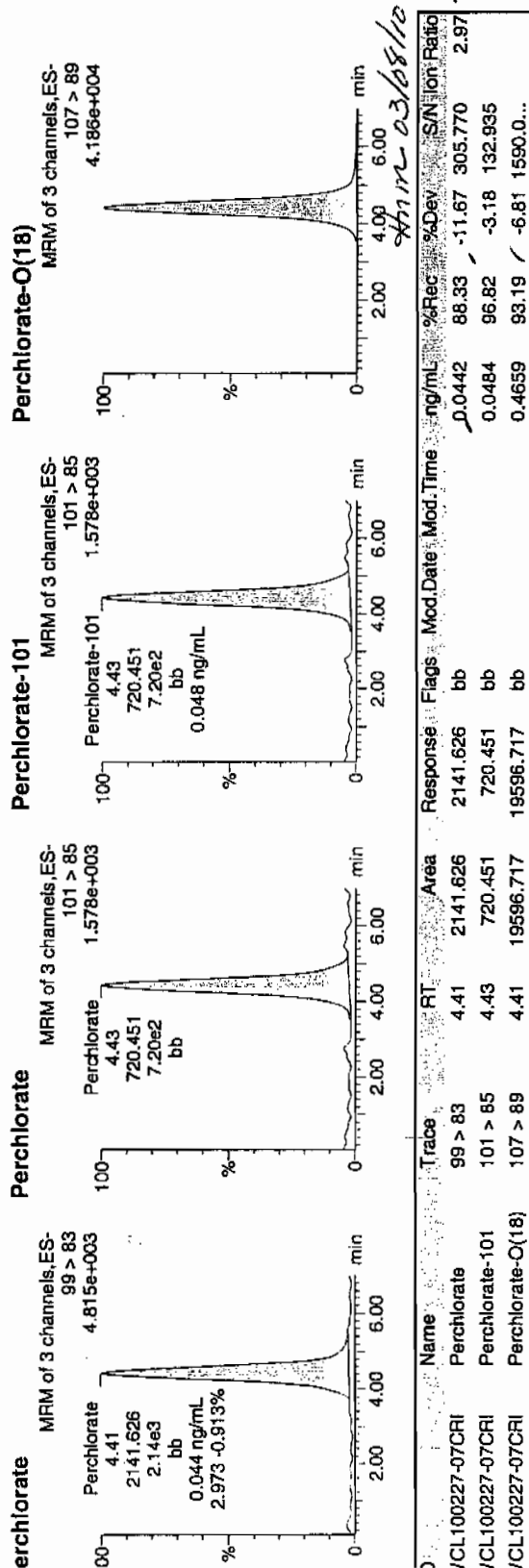
Date: 05-Mar-2010

Time: 18:42:54

File: WCL100227-07CRI

Label: 1:2,B

Per  
and  
0306-10



Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305063a

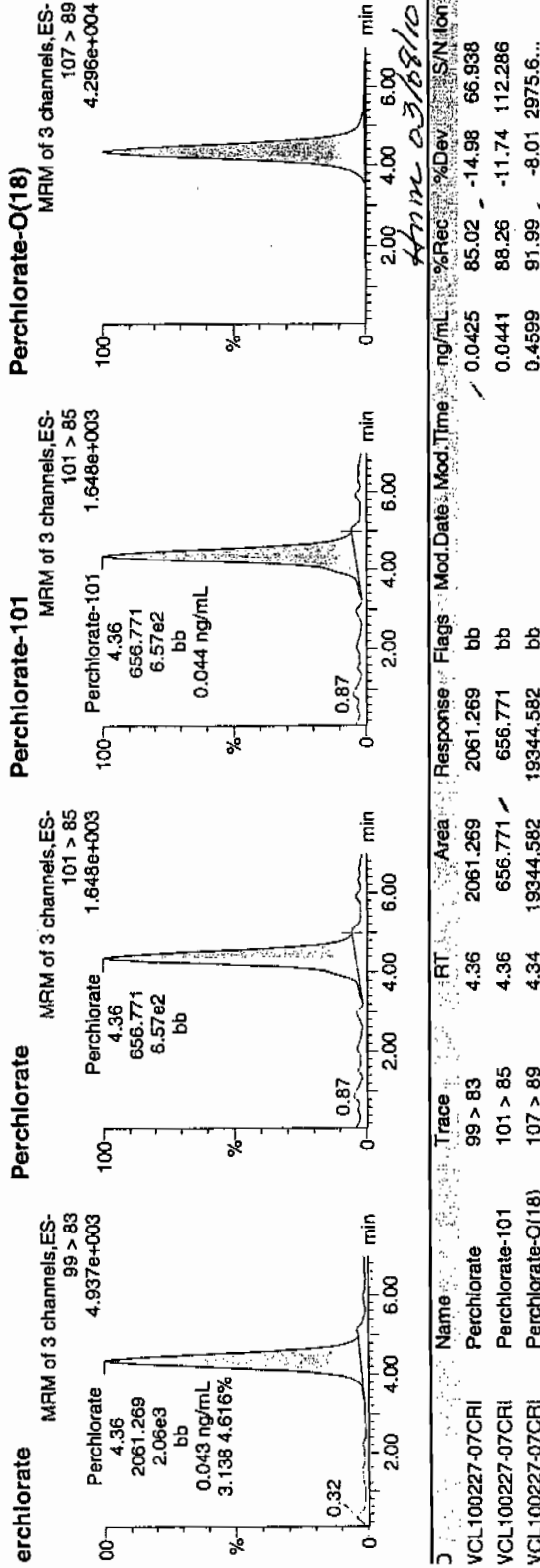
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Time: 23:06:06

File: WCL100227-07CRI

Label: 1:2,B

Per  
03-06-10



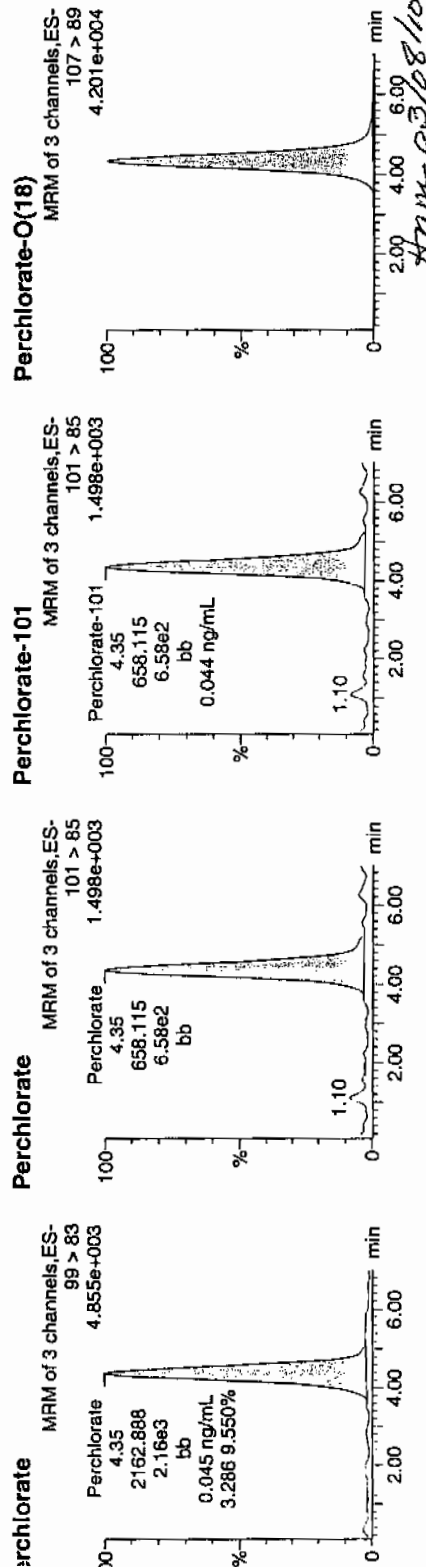
Identify Sample Report MassLynx 4.0 SP4  
e GEL Group, LLC Analyst: Charliers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ime: per0305076a  
ite: 06-Mar-2010  
me: 01:17:24  
: WCL100227-07CRI  
al: 1:2,B

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on do-10*



| Name            | Trace             | RT       | Area | Response  | Flags     | Mod | Date | Mod | Time | ng/mL  | %Rec  | %Dev   | SN        | Ion  | Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-----|------|-----|------|--------|-------|--------|-----------|------|-------|
| 'CL100227-07CRI | Perchlorate       | 99 > 83  | 4.35 | 2162.888  | 2162.888  | bb  |      |     |      | 0.0446 | 89.21 | -10.79 | 223.515   | 3.29 |       |
| 'CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.35 | 658.115   | 658.115   | bb  |      |     |      | 0.0442 | 88.45 | -11.55 | 76.826    |      |       |
| 'CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.34 | 19454.201 | 19454.201 | bb  |      |     |      | 0.4625 | 92.51 | -7.49  | 1998.1... |      |       |

Quantify Sample Report MassLynx 4.0 SP4  
 re GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qid

1st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 1st Edited: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305089a

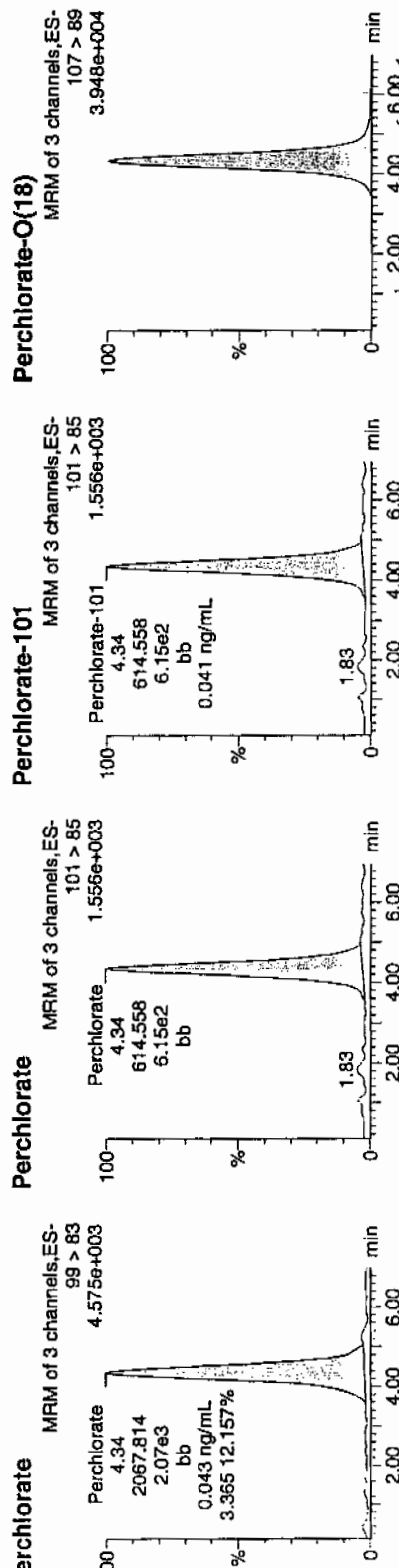
Sample Date: 06-Mar-2010

Sample Time: 03:29:13

Sample ID: WCL100227-07CRI

Sample Label: 1:2,B

33-06-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| /CL100227-07CRI | Perchlorate       | 99 > 83  | 4.34 | 2067.814  | bb    |          |          | 0.0426 | 85.29 | -14.71 | 261.095   | 3.36      |
| /CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.34 | 614.558   | bb    |          |          | 0.0413 | 82.59 | -17.41 | 104.546   |           |
| /CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.33 | 18267.762 | bb    |          |          | 0.4343 | 86.87 | -13.13 | 1288.7... |           |

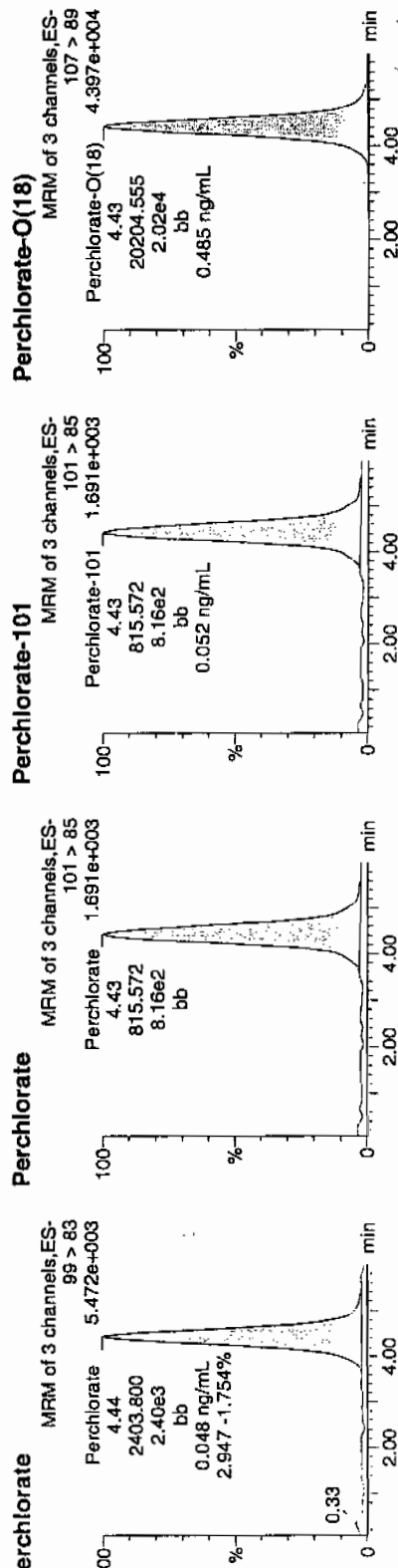
uantify Sample Report MassLynx 4.0 SP4  
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306011a  
ate: 06-Mar-2010  
ime: 16:05:59  
): WCL100227-07CRI  
ial: 1:2,B

*Perchlorate*  
*0.03-0.10*



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| /CL100227-07CRI | Perchlorate       | 99 > 83  | 4.44 | 2403.800  |       |          |          | 0.0482 | 96.41  | -3.59 | 30.940    | 2.95      |
| /CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.43 | 815.572   | bb    |          |          | 0.0520 | 103.98 | 3.98  | 105.676   |           |
| /CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.43 | 20204.555 | bb    |          |          | 0.4849 | 96.97  | -3.03 | 3173.0... |           |

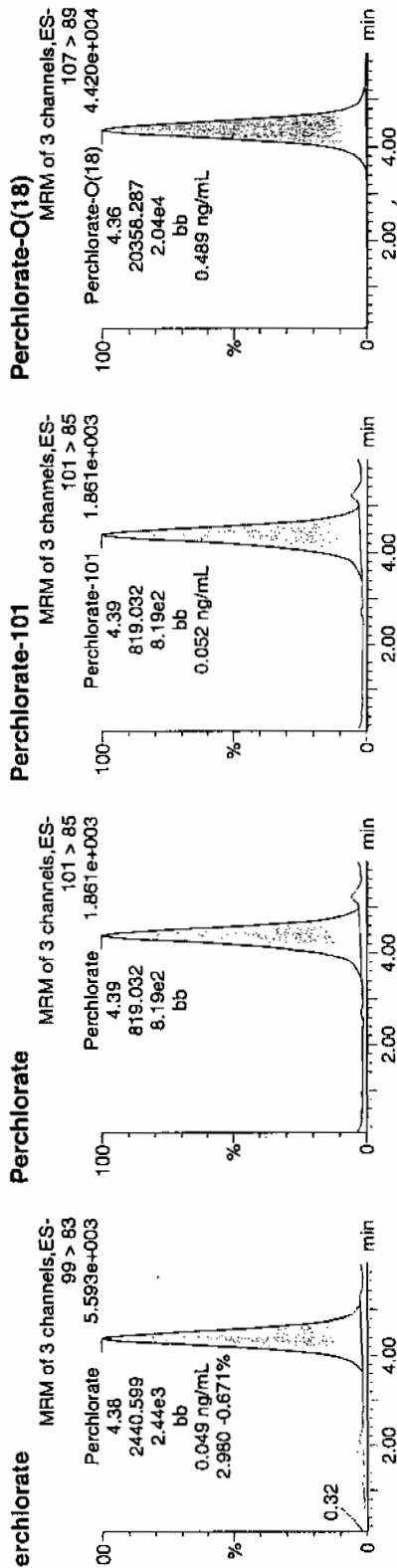
Quantify Sample Report MassLynx 4.0 SP4  
 he GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306024a  
 ate: 06-Mar-2010  
 ime: 18:04:03  
 ): WCL100227-07CRI  
 ial: 1:2,B

03-07-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| /CL100227-07CRI | Perchlorate       | 99 > 83  | 4.38 | 2440.599  | bb    |          |          | 0.0489 | 97.89  | -2.11 | 254.348   | 2.98      |
| /CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.39 | 819.032   | bb    |          |          | 0.0522 | 104.42 | 4.42  | 96.508    |           |
| /CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.36 | 20358.287 | bb    |          |          | 0.4886 | 97.71  | -2.29 | 1453.1... |           |



uantify Sample Report MassLynx 4.0 SP4

ne GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306037a

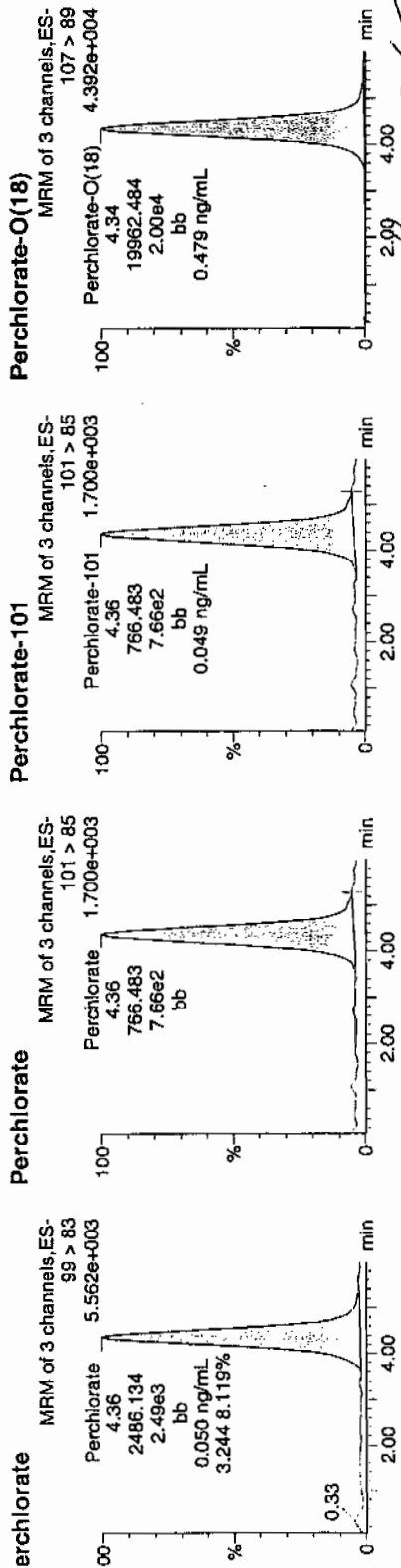
ate: 06-Mar-2010

ime: 20:01:55

Y: WCL100227-07CRI

ial: 1:2,B

Pass  
632  
3-07-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | SN        | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| /CL100227-07CRI | Perchlorate       | 99 > 83  | 4.36 | 2486.134  | bb    |          |          | 0.0499 | 99.71 | -0.29 | 46.862    | 3.24      |
| /CL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.36 | 766.483   | bb    |          |          | 0.0489 | 97.72 | -2.28 | 9.797     |           |
| /CL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.34 | 19962.484 | bb    |          |          | 0.4791 | 95.81 | -4.19 | 1837.9... |           |

# QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Client Sample No. MB  
 Date Received: 03-MAR-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 1202049039  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .5  | 2  | 0.500 | ug/kg | U | 1               | 06-MAR-10 18:13 | per0306025a |
|            | Perchlorate Isotope Ratio |     |    |       |       |   | 1               | 06-MAR-10 18:13 | per0306025a |
| 14797-73-0 | Perchlorate-101           | .5  | 2  | 0.500 | ug/kg | U | 1               | 06-MAR-10 18:13 | per0306025a |
|            | Perchlorate-O(18)         |     |    | 4.91  | ug/kg |   | 1               | 06-MAR-10 18:13 | per0306025a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

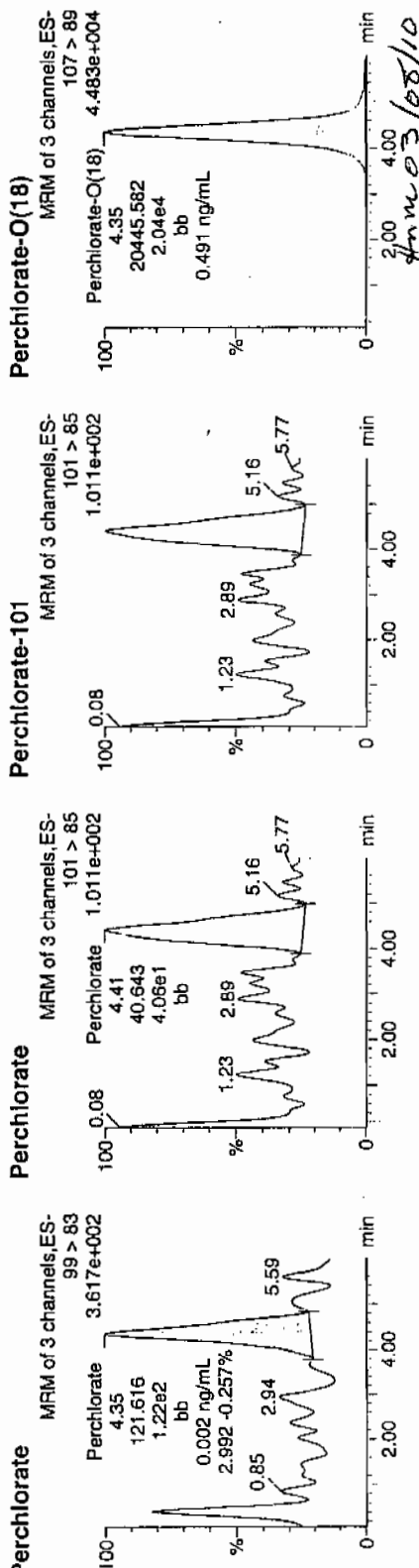
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306025a  
Date: 06-Mar-2010  
Time: 18:13:13  
ID: 1202049039  
Val: 1:5,A

03-07-10

1770-1955709 | 5000 | 1100



| ID        | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N     | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| 202049039 | Perchlorate       | 99 > 83  | 4.35 | 121.616   | 121.616   | bb    |          |          | 0.0024 |       |       | 12.587  | 2.99      |
| 202049039 | Perchlorate-101   | 101 > 85 | 4.41 | 40.643    | 40.643    | bb    |          |          | 0.0026 |       |       | 14.575  |           |
| 202049039 | Perchlorate-O(18) | 107 > 89 | 4.35 | 20445.582 | 20445.582 | bb    |          |          | 0.4907 | 98.13 | -1.87 | 774.055 |           |

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 955708  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. LCS  
 Date Received: 03-MAR-10  
 GEL Job No (SDG): 10-1863  
 GEL Sample ID: 1202049040  
 Date Filtered: 03-MAR-10  
 Injection Volume (uL): 20  
 %Solids: 100

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .5  | 2  | 2.09  | ug/kg |   | 1               | 06-MAR-10 18:22 | per0306026a |
|            | Perchlorate Isotope Ratio |     |    | 3.26  |       |   | 1               | 06-MAR-10 18:22 | per0306026a |
| 14797-73-0 | Perchlorate-101           | .5  | 2  | 2.04  | ug/kg |   | 1               | 06-MAR-10 18:22 | per0306026a |
|            | Perchlorate-O(18)         |     |    | 4.93  | ug/kg |   | 1               | 06-MAR-10 18:22 | per0306026a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306026a

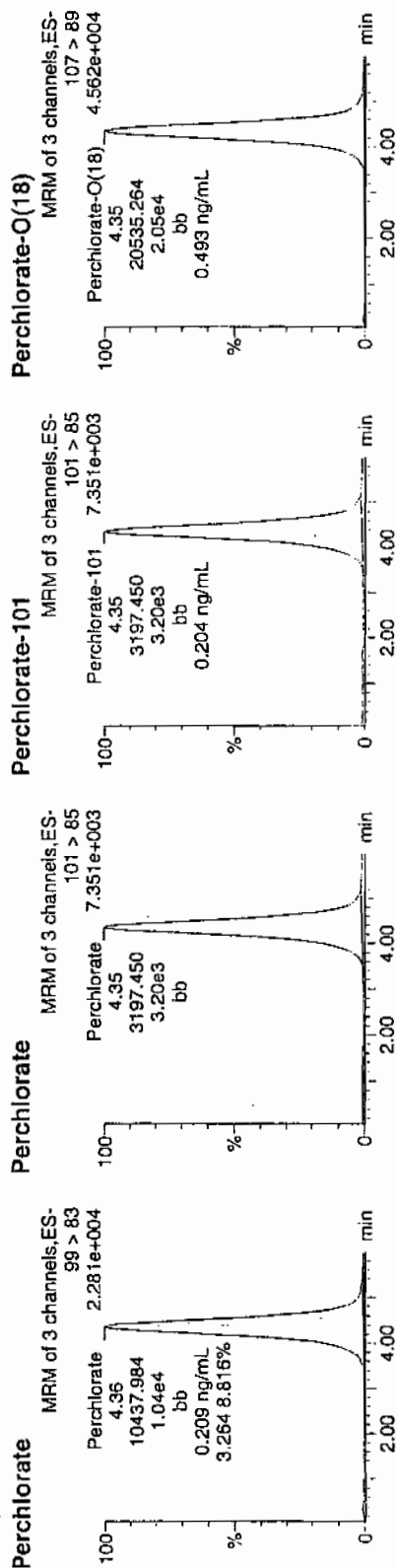
Date: 06-Mar-2010

Time: 18:22:16

ID: 1202049040

Vial: 1:5,B

LC5 HPLC 03/08/10  
LAW-1955709 | 3020 | 110A  
03/07/10



| D         | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 202049040 | Perchlorate       | 99 > 83  | 4.36 | 10437.984 | 10437.984 | bb    |          |          | 0.2093 | 104.66 | 4.65  | 639.798   | 3.26      |
| 202049040 | Perchlorate-101   | 101 > 85 | 4.35 | 3197.450  | 3197.450  | bb    |          |          | 0.2038 | 101.91 | 1.91  | 396.065   |           |
| 202049040 | Perchlorate-O(18) | 107 > 89 | 4.35 | 20535.264 | 20535.264 | bb    |          |          | 0.4928 | 98.56  | -1.44 | 3578.1... |           |

10437.984  
49865.1  
= 0.2093  
HPLC 03/08/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8196MS

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 1202049041

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 2.20  | ug/kg |   | 1               | 06-MAR-10 19:16 | per0306032a |
|            | Perchlorate Isotope Ratio |      |      | 3.19  |       |   | 1               | 06-MAR-10 19:16 | per0306032a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 2.19  | ug/kg |   | 1               | 06-MAR-10 19:16 | per0306032a |
|            | Perchlorate-O(18)         |      |      | 4.82  | ug/kg |   | 1               | 06-MAR-10 19:16 | per0306032a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1  
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4

File: GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

First Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306032a

Acquisition Date: 06-Mar-2010

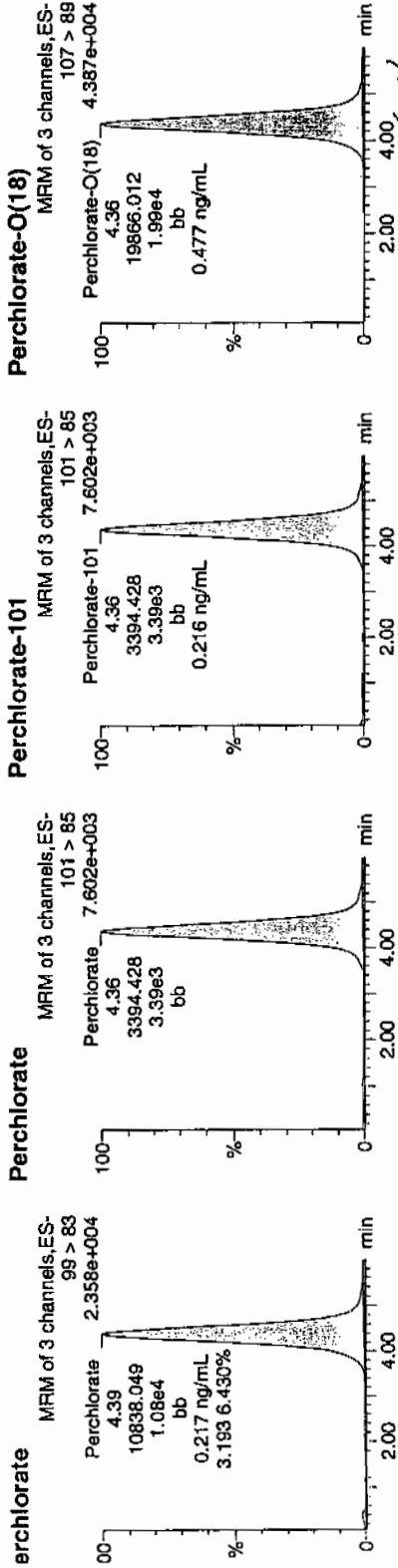
Time: 19:16:33

File: 1202049041

Label: 1:6,B

03-07-10

1202049041 | 1202049041 | 1202049041



| Name      | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
| 202049041 | Perchlorate       | 99 > 83  | 4.39 | 10838.049 | 10838.049 | bb       |          | 0.2173 | 108.67 | 8.67  | 1014.3... | 3.19      |
| 202049041 | Perchlorate-101   | 101 > 85 | 4.36 | 3394.428  | 3394.428  | bb       |          | 0.2164 | 108.19 | 8.19  | 1648.7... |           |
| 202049041 | Perchlorate-O(18) | 107 > 89 | 4.36 | 19866.012 | 19866.012 | bb       |          | 0.4767 | 95.35  | -4.65 | 540.866   |           |



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 255708

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8196MSD

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863

GEL Sample ID: 1202049042

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

| CAS No.    | Analyte <sup>^</sup>      | MDL  | RL   | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .506 | 2.02 | 2.07  | ug/kg |   | 1               | 06-MAR-10 19:25 | per0306033a |
|            | Perchlorate Isotope Ratio |      |      | 3.18  |       |   | 1               | 06-MAR-10 19:25 | per0306033a |
| 14797-73-0 | Perchlorate-101           | .506 | 2.02 | 2.07  | ug/kg |   | 1               | 06-MAR-10 19:25 | per0306033a |
|            | Perchlorate-O(18)         |      |      | 4.98  | ug/kg |   | 1               | 06-MAR-10 19:25 | per0306033a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Sample Name: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Date Acquired: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

File Name: per0306033a

File Date: 06-Mar-2010

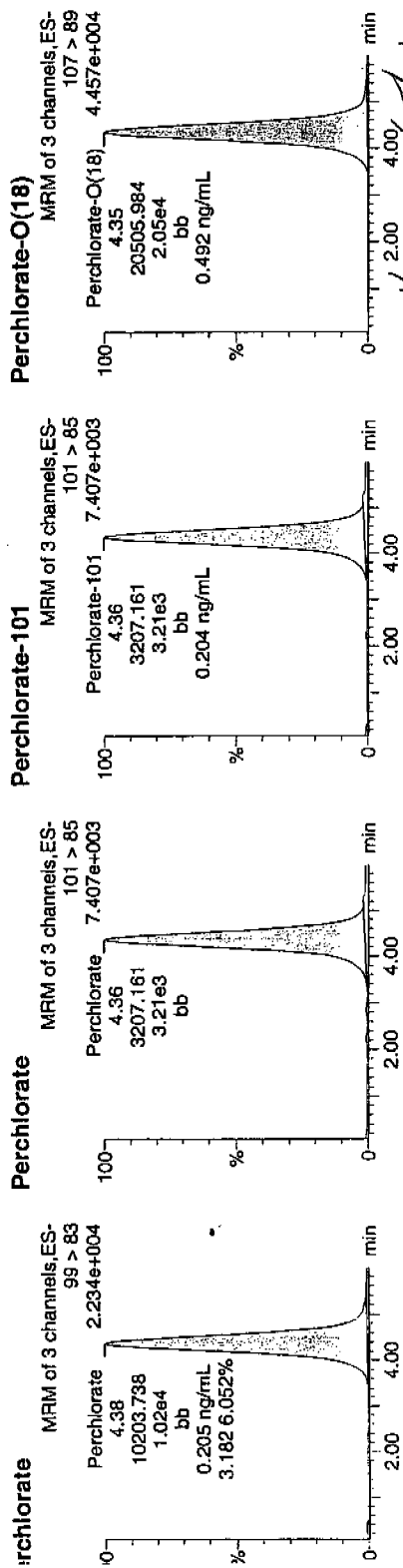
Time: 19:25:37

Sample ID: 1202049042

Label: 1:6,C

03-07-10

1202049042 | 3020 | 1:6,C



| Name     | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|----------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 12049042 | Perchlorate       | 99 > 83  | 4.38 | 10203.738 | bb    |          |          | 0.2046 | 102.31 | 2.31  | 905.880   | 3.18      |
| 12049042 | Perchlorate-101   | 101 > 85 | 4.36 | 3207.161  | bb    |          |          | 0.2044 | 102.22 | 2.22  | 510.673   |           |
| 12049042 | Perchlorate-O(18) | 107 > 89 | 4.35 | 20505.984 | bb    |          |          | 0.4921 | 98.42  | -1.58 | 2707.6... |           |

# MISCELLANEOUS DATA

# Prep Logbook

## Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 955708 Verified by: Lab SOP: GL-OA-E-067 REV# 6  
 Analyst: Kaylie Westmoreland Instrument: MicroMass Quattro Ultima  
 Method: SW846 6850 Modified

| Sample ID                  | Run Date             | Aliquot (g) | Prepped Aliquot (mL) | Prepped Factor (mL/g) |
|----------------------------|----------------------|-------------|----------------------|-----------------------|
| 1202049039 MIB             | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 1202049040 LCS             | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247187001                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247187002                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247187003                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188001                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 1202049041 MS (247188001)  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 1202049042 MSD (247188001) | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188002                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188003                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188004                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188005                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188006                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188007                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188008                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188009                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188010                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188011                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188012                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188013                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 247188014                  | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |
| 1202049043 LCS             | 03-MAR-2010 16:56:00 | 2           | 20                   | 10                    |

| Type | Sample Id  | Description                   | Serial Number  | Spike Amt | Units | Comments:   |
|------|------------|-------------------------------|----------------|-----------|-------|---|
| ICS  | 1202049043 | 10 ug/L ICS/CCV Second Source | UCL100210-02.2 | .4        | mL    | Desulting cartridges used: 100217-1-H & 100204-1-Bu |
| LCS  | 1202049040 | 10 ug/L LCS/CCV Second Source | UCL100210-02.2 | .4        | mL    |   |
| MS   | 1202049041 | 10 ug/L MS/CCV Second Source  | UCL100210-02.2 | .4        | mL    |   |
| MSD  | 1202049042 | 10 ug/L MSD/CCV Second Source | UCL100210-02.2 | .4        | mL    |   |

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS#2

Date: 03/05/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per030510a  
 Initial Calibration Date: 03/05/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100126-01  
 Mobile Phase Lot#: 1278668, 1271949  
 Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hmc*  
 Date: *03/08/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100227-06

| DataFile    | Sample     | Analyst | Injection Date | Batch  | SDG     | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|----------------|--------|---------|----------|--------|----------|---------|
| per0305001a | IPB001     | CWW     | 3/5/2010 12:39 |        |         | 1        |        | USE      | B       |
| per0305002a | IPB001     | CWW     | 3/5/2010 12:50 |        |         | 1        |        | USE      | B       |
| per0305003a | WCLICAL-01 | CWW     | 3/5/2010 13:00 |        |         | 1        |        | USE      | I       |
| per0305004a | WCLICAL-02 | CWW     | 3/5/2010 13:10 |        |         | 1        |        | USE      | I       |
| per0305005a | WCLICAL-03 | CWW     | 3/5/2010 13:20 |        |         | 1        |        | USE      | I       |
| per0305006a | WCLICAL-04 | CWW     | 3/5/2010 13:30 |        |         | 1        |        | USE      | I       |
| per0305007a | WCLICAL-05 | CWW     | 3/5/2010 13:40 |        |         | 1        |        | USE      | I       |
| per0305008a | IPB002     | CWW     | 3/5/2010 13:50 |        |         | 1        |        | USE      | B       |
| per0305009a | WCLICV     | CWW     | 3/5/2010 14:00 |        |         | 1        |        | USE      | C       |
| per0305010a | IPB003     | CWW     | 3/5/2010 14:11 |        |         | 1        |        | USE      | B       |
| per0305011a | WCLCRI     | CWW     | 3/5/2010 14:21 |        |         | 1        |        | USE      | C       |
| per0305012a | 1202049034 | CWW     | 3/5/2010 14:31 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305013a | 1202049035 | CWW     | 3/5/2010 14:41 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305014a | 1202049038 | CWW     | 3/5/2010 14:51 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305015a | 247141001  | CWW     | 3/5/2010 15:01 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305016a | 247141002  | CWW     | 3/5/2010 15:11 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305017a | 247141003  | CWW     | 3/5/2010 15:21 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305018a | 247172001  | CWW     | 3/5/2010 15:31 | 955706 | 10-1866 | 1        | LANL   | USE      | S       |
| per0305019a | 247172002  | CWW     | 3/5/2010 15:41 | 955706 | 10-1866 | 1        | LANL   | USE      | S       |
| per0305020a | 247178001  | CWW     | 3/5/2010 15:51 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305021a | 247178002  | CWW     | 3/5/2010 16:01 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305022a | WCLCCV     | CWW     | 3/5/2010 16:11 |        |         | 1        |        | USE      | C       |
| per0305023a | IPB004     | CWW     | 3/5/2010 16:21 |        |         | 1        |        | USE      | B       |
| per0305024a | WCLCRI     | CWW     | 3/5/2010 16:31 |        |         | 1        |        | USE      | C       |
| per0305025a | 1202049036 | CWW     | 3/5/2010 16:42 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305026a | 1202049037 | CWW     | 3/5/2010 16:52 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305027a | 247178003  | CWW     | 3/5/2010 17:02 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305028a | 247178004  | CWW     | 3/5/2010 17:12 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305029a | 247178005  | CWW     | 3/5/2010 17:22 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |

|             |            |     |                |        |           |   |      |         |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|---------|---|
| per0305030a | 247178006  | CWW | 3/5/2010 17:32 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305031a | 247178007  | CWW | 3/5/2010 17:42 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305032a | 247178008  | CWW | 3/5/2010 17:52 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305033a | 247178009  | CWW | 3/5/2010 18:02 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305034a | 247178010  | CWW | 3/5/2010 18:12 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305035a | WCLCCV     | CWW | 3/5/2010 18:22 |        |           | 1 |      | USE     | C |
| per0305036a | IPB005     | CWW | 3/5/2010 18:32 |        |           | 1 |      | USE     | B |
| per0305037a | WCLCRI     | CWW | 3/5/2010 18:42 |        |           | 1 |      | USE     | C |
| per0305038a | 247178011  | CWW | 3/5/2010 18:53 | 955706 | 10-1861   | 1 | LANL | DUSE-RA | S |
| per0305039a | 247197001  | CWW | 3/5/2010 19:03 | 955706 | 10-1865-1 | 1 | LANL | DUSE-RA | S |
| per0305040a | 247197002  | CWW | 3/5/2010 19:13 | 955706 | 10-1865-1 | 1 | LANL | DUSE-RA | S |
| per0305041a | IPB006     | CWW | 3/5/2010 19:23 |        |           | 1 |      | DUSE-RA | B |
| per0305042a | 1202062446 | CWW | 3/5/2010 19:33 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305043a | 1202062447 | CWW | 3/5/2010 19:43 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305044a | 1202062450 | CWW | 3/5/2010 19:53 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305045a | 248683001  | CWW | 3/5/2010 20:03 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305046a | 1202062448 | CWW | 3/5/2010 20:13 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305047a | 1202062449 | CWW | 3/5/2010 20:23 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305048a | WCLCCV     | CWW | 3/5/2010 20:34 |        |           | 1 |      | DUSE    | C |
| per0305049a | IPB007     | CWW | 3/5/2010 20:44 |        |           | 1 |      | DUSE    | B |
| per0305050a | WCLCRI     | CWW | 3/5/2010 20:54 |        |           | 1 |      | DUSE    | C |
| per0305051a | 1202049039 | CWW | 3/5/2010 21:04 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305052a | 1202049040 | CWW | 3/5/2010 21:14 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305053a | 1202049043 | CWW | 3/5/2010 21:24 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305054a | 247187001  | CWW | 3/5/2010 21:34 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305055a | 247187002  | CWW | 3/5/2010 21:45 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305056a | 247187003  | CWW | 3/5/2010 21:55 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305057a | 247188001  | CWW | 3/5/2010 22:05 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305058a | 1202049041 | CWW | 3/5/2010 22:15 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305059a | 1202049042 | CWW | 3/5/2010 22:25 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305060a | 247188002  | CWW | 3/5/2010 22:35 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305061a | WCLCCV     | CWW | 3/5/2010 22:45 |        |           | 1 |      | USE     | C |
| per0305062a | IPB008     | CWW | 3/5/2010 22:55 |        |           | 1 |      | USE     | B |
| per0305063a | WCLCRI     | CWW | 3/5/2010 23:06 |        |           | 1 |      | USE     | C |
| per0305064a | 247188003  | CWW | 3/5/2010 23:16 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0305065a | 247188004  | CWW | 3/5/2010 23:26 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0305066a | 247188005  | CWW | 3/5/2010 23:36 | 955709 | 10-1863   | 1 | LANL | USE     | S |

|             |            |     |                |        |           |   |      |     |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|-----|---|
| per0305067a | 247188006  | CWW | 3/5/2010 23:46 | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305068a | 247188007  | CWW | 3/5/2010 23:56 | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305069a | 247188008  | CWW | 3/6/2010 0:06  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305070a | 247188009  | CWW | 3/6/2010 0:16  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305071a | 247188010  | CWW | 3/6/2010 0:26  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305072a | 247188011  | CWW | 3/6/2010 0:36  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305073a | 247188012  | CWW | 3/6/2010 0:46  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305074a | WCLCCV     | CWW | 3/6/2010 0:56  |        |           | 1 |      | USE | C |
| per0305075a | IPB009     | CWW | 3/6/2010 1:07  |        |           | 1 |      | USE | B |
| per0305076a | WCLCRI     | CWW | 3/6/2010 1:17  |        |           | 1 |      | USE | C |
| per0305077a | 247188013  | CWW | 3/6/2010 1:27  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305078a | 247188014  | CWW | 3/6/2010 1:37  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305079a | IPB010     | CWW | 3/6/2010 1:47  |        |           | 1 |      | USE | B |
| per0305080a | 1202049044 | CWW | 3/6/2010 1:58  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305081a | 1202049045 | CWW | 3/6/2010 2:08  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305082a | 1202049048 | CWW | 3/6/2010 2:18  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305083a | 247181001  | CWW | 3/6/2010 2:28  | 955712 | 10-1871-1 | 1 | LANL | USE | S |
| per0305084a | 247181002  | CWW | 3/6/2010 2:38  | 955712 | 10-1871-1 | 1 | LANL | USE | S |
| per0305085a | 247186001  | CWW | 3/6/2010 2:48  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305086a | 247186002  | CWW | 3/6/2010 2:58  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305087a | WCLCCV     | CWW | 3/6/2010 3:08  |        |           | 1 |      | USE | C |
| per0305088a | IPB011     | CWW | 3/6/2010 3:19  |        |           | 1 |      | USE | B |
| per0305089a | WCLCRI     | CWW | 3/6/2010 3:29  |        |           | 1 |      | USE | C |
| per0305090a | 247186003  | CWW | 3/6/2010 3:39  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305091a | 247186004  | CWW | 3/6/2010 3:49  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305092a | 247186005  | CWW | 3/6/2010 3:59  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305093a | 247186006  | CWW | 3/6/2010 4:09  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305094a | 247186007  | CWW | 3/6/2010 4:19  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305095a | 247186008  | CWW | 3/6/2010 4:29  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305096a | 247186009  | CWW | 3/6/2010 4:39  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305097a | 247186010  | CWW | 3/6/2010 4:49  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305098a | WCLCCV     | CWW | 3/6/2010 4:59  |        |           | 1 |      | USE | C |
| per0305099a | IPB012     | CWW | 3/6/2010 5:10  |        |           | 1 |      | USE | B |
| per0305100a | WCLCRI     | CWW | 3/6/2010 5:20  |        |           | 1 |      | USE | C |
| per0305101a | 247201001  | CWW | 3/6/2010 5:30  | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305102a | 1202049046 | CWW | 3/6/2010 5:40  | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305103a | 1202049047 | CWW | 3/6/2010 5:50  | 955712 | 10-1873   | 1 | LANL | USE | S |

|             |            |     |               |        |           |   |      |     |   |
|-------------|------------|-----|---------------|--------|-----------|---|------|-----|---|
| per0305104a | 247201002  | CWW | 3/6/2010 6:00 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305105a | 247201003  | CWW | 3/6/2010 6:10 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305106a | 247201004  | CWW | 3/6/2010 6:20 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305107a | 247201005  | CWW | 3/6/2010 6:31 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305108a | 247201006  | CWW | 3/6/2010 6:41 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305109a | 247201007  | CWW | 3/6/2010 6:51 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305110a | WCLCCV     | CWW | 3/6/2010 7:01 |        |           | 1 |      | USE | C |
| per0305111a | IPB013     | CWW | 3/6/2010 7:11 |        |           | 1 |      | USE | B |
| per0305112a | WCLCRI     | CWW | 3/6/2010 7:21 |        |           | 1 |      | USE | C |
| per0305113a | 1202049069 | CWW | 3/6/2010 7:31 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305114a | 1202049070 | CWW | 3/6/2010 7:42 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305115a | 1202049073 | CWW | 3/6/2010 7:52 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305116a | 247127001  | CWW | 3/6/2010 8:02 | 955727 | 10-1849-1 | 1 | LANL | USE | S |
| per0305117a | 247130001  | CWW | 3/6/2010 8:12 | 955727 | 10-1850-1 | 1 | LANL | USE | S |
| per0305118a | 247139001  | CWW | 3/6/2010 8:22 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305119a | 1202049071 | CWW | 3/6/2010 8:32 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305120a | 1202049072 | CWW | 3/6/2010 8:42 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305121a | 247179001  | CWW | 3/6/2010 8:52 | 955727 | 10-1871   | 1 | LANL | USE | S |
| per0305122a | 247182001  | CWW | 3/6/2010 9:02 | 955727 | 10-1861-1 | 1 | LANL | USE | S |
| per0305123a | WCLCCV     | CWW | 3/6/2010 9:12 |        |           | 1 |      | USE | C |
| per0305124a | IPB014     | CWW | 3/6/2010 9:23 |        |           | 1 |      | USE | B |
| per0305125a | WCLCRI     | CWW | 3/6/2010 9:33 |        |           | 1 |      | USE | C |



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/06/10  
Extr. Injection Volume: 20ul  
Sequence Number: per030610a  
Initial Calibration Date: 03/06/10

Method: EPA 6850-Modified  
Int. Std.: UCL100126-01  
Mobile Phase Lot#: 1278668, 1271949  
Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hmc*  
Date: *03/08/10*  
SOP: GL-OA-E-067 Rev.6  
Alt Check Std. ID: WCL100227-06

| DataFile    | Sample     | Analyst | Injection Date | Batch  | SDG       | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|----------------|--------|-----------|----------|--------|----------|---------|
| per0306001a | IPB001     | CWW     | 3/6/2010 14:34 |        |           | 1        |        | USE      | B       |
| per0306002a | IPB001     | CWW     | 3/6/2010 14:43 |        |           | 1        |        | USE      | B       |
| per0306003a | WCLICAL-01 | CWW     | 3/6/2010 14:53 |        |           | 1        |        | USE      | I       |
| per0306004a | WCLICAL-02 | CWW     | 3/6/2010 15:02 |        |           | 1        |        | USE      | I       |
| per0306005a | WCLICAL-03 | CWW     | 3/6/2010 15:11 |        |           | 1        |        | USE      | I       |
| per0306006a | WCLICAL-04 | CWW     | 3/6/2010 15:20 |        |           | 1        |        | USE      | I       |
| per0306007a | WCLICAL-05 | CWW     | 3/6/2010 15:29 |        |           | 1        |        | USE      | I       |
| per0306008a | IPB002     | CWW     | 3/6/2010 15:38 |        |           | 1        |        | USE      | B       |
| per0306009a | WCLICV     | CWW     | 3/6/2010 15:47 |        |           | 1        |        | USE      | C       |
| per0306010a | IPB003     | CWW     | 3/6/2010 15:56 |        |           | 1        |        | USE      | B       |
| per0306011a | WCLCRI     | CWW     | 3/6/2010 16:05 |        |           | 1        |        | USE      | C       |
| per0306012a | 247178011  | CWW     | 3/6/2010 16:15 | 955706 | 10-1861   | 1        | LANL   | USE      | S       |
| per0306013a | 247197001  | CWW     | 3/6/2010 16:24 | 955706 | 10-1865-1 | 1        | LANL   | USE      | S       |
| per0306014a | 247197002  | CWW     | 3/6/2010 16:33 | 955706 | 10-1865-1 | 1        | LANL   | USE      | S       |
| per0306015a | IPB004     | CWW     | 3/6/2010 16:42 |        |           | 1        |        | USE      | B       |
| per0306016a | 1202062446 | CWW     | 3/6/2010 16:51 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306017a | 1202062447 | CWW     | 3/6/2010 17:00 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306018a | 1202062450 | CWW     | 3/6/2010 17:09 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306019a | 248683001  | CWW     | 3/6/2010 17:18 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306020a | 1202062448 | CWW     | 3/6/2010 17:27 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306021a | 1202062449 | CWW     | 3/6/2010 17:36 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306022a | WCLCCV     | CWW     | 3/6/2010 17:45 |        |           | 1        |        | USE      | C       |
| per0306023a | IPB005     | CWW     | 3/6/2010 17:54 |        |           | 1        |        | USE      | B       |
| per0306024a | WCLCRI     | CWW     | 3/6/2010 18:04 |        |           | 1        |        | USE      | C       |
| per0306025a | 1202049039 | CWW     | 3/6/2010 18:13 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306026a | 1202049040 | CWW     | 3/6/2010 18:22 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306027a | 1202049043 | CWW     | 3/6/2010 18:31 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306028a | 247187001  | CWW     | 3/6/2010 18:40 | 955709 | 10-1867   | 1        | LANL   | USE      | S       |
| per0306029a | 247187002  | CWW     | 3/6/2010 18:49 | 955709 | 10-1867   | 1        | LANL   | USE      | S       |

|             |            |     |                |        |           |   |      |         |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|---------|---|
| per0306030a | 247187003  | CWW | 3/6/2010 18:58 | 955709 | 10-1867   | 1 | LANL | USE     | S |
| per0306031a | 247188001  | CWW | 3/6/2010 19:07 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306032a | 1202049041 | CWW | 3/6/2010 19:16 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306033a | 1202049042 | CWW | 3/6/2010 19:25 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306034a | 247188002  | CWW | 3/6/2010 19:34 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306035a | WCLCCV     | CWW | 3/6/2010 19:43 |        |           | 1 |      | USE     | C |
| per0306036a | IPB006     | CWW | 3/6/2010 19:52 |        |           | 1 |      | USE     | B |
| per0306037a | WCLCRI     | CWW | 3/6/2010 20:01 |        |           | 1 |      | USE     | C |
| per0306038a | 247183001  | CWW | 3/6/2010 20:10 | 955727 | 10-1868   | 1 | LANL | USE     | S |
| per0306039a | 247192001  | CWW | 3/6/2010 20:20 | 955727 | 10-1863-1 | 1 | LANL | USE     | S |
| per0306040a | 247203001  | CWW | 3/6/2010 20:29 | 955727 | 10-1873-1 | 1 | LANL | USE     | S |
| per0306041a | 247250001  | CWW | 3/6/2010 20:38 | 955727 | 10-1877-1 | 1 | LANL | USE     | S |
| per0306042a | 247250002  | CWW | 3/6/2010 20:47 | 955727 | 10-1877-1 | 1 | LANL | USE     | S |
| per0306043a | 247256001  | CWW | 3/6/2010 20:56 | 955727 | 10-1879-1 | 1 | LANL | USE     | S |
| per0306044a | 247256002  | CWW | 3/6/2010 21:05 | 955727 | 10-1879-1 | 1 | LANL | USE     | S |
| per0306045a | 247322001  | CWW | 3/6/2010 21:14 | 955727 | 10-1893-1 | 1 | LANL | USE     | S |
| per0306046a | 247322002  | CWW | 3/6/2010 21:23 | 955727 | 10-1893-1 | 1 | LANL | USE     | S |
| per0306047a | 247335001  | CWW | 3/6/2010 21:32 | 955727 | 10-1906   | 1 | LANL | USE     | S |
| per0306048a | WCLCCV     | CWW | 3/6/2010 21:41 |        |           | 1 |      | USE     | C |
| per0306049a | IPB007     | CWW | 3/6/2010 21:50 |        |           | 1 |      | USE     | B |
| per0306050a | WCLCRI     | CWW | 3/6/2010 21:59 |        |           | 1 |      | USE     | C |
| per0306051a | 247339001  | CWW | 3/6/2010 22:08 | 955727 | 10-1909-1 | 1 | LANL | DUSE-RA | S |
| per0306052a | 247339002  | CWW | 3/6/2010 22:18 | 955727 | 10-1909-1 | 1 | LANL | DUSE-RA | S |
| per0306053a | 247350001  | CWW | 3/6/2010 22:27 | 955727 | 10-1912-1 | 1 | LANL | DUSE-RA | S |
| per0306054a | IPB008     | CWW | 3/6/2010 22:36 |        |           | 1 |      | DUSE    | B |
| per0306055a | 1202049027 | CWW | 3/6/2010 22:45 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306056a | 1202049028 | CWW | 3/6/2010 22:54 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306057a | 1202049031 | CWW | 3/6/2010 23:03 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306058a | 247123001  | CWW | 3/6/2010 23:12 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306059a | 247123002  | CWW | 3/6/2010 23:21 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306060a | 247123003  | CWW | 3/6/2010 23:30 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306061a | WCLCCV     | CWW | 3/6/2010 23:39 |        |           | 1 |      | DUSE    | C |
| per0306062a | IPB009     | CWW | 3/6/2010 23:48 |        |           | 1 |      | DUSE    | B |
| per0306063a | WCLCRI     | CWW | 3/6/2010 23:57 |        |           | 1 |      | DUSE    | C |

### Isotope Ratio Criteria

Isotope Ratio  $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

### Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

# LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1863-1**

**Method/Analysis Information**

**Procedure:** **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**

**Analytical Method:** SW846 6850 Modified

**Prep Method:** SW846 6850 Modified

**Analytical Batch Number:** 955727

**Prep Batch Number:** 955726

**Sample Analysis**

| <b>Sample ID</b> | <b>Client ID</b>                                     |
|------------------|--|
| 247192001        | RE15-10-8235   |
| 1202049073       | Interference Check Sample (ICS)                      |
| 1202049069       | Method Blank (MB)                                    |
| 1202049070       | Laboratory Control Sample (LCS)                      |
| 1202049071       | 247139001(RE16-10-3910) Matrix Spike (MS)            |
| 1202049072       | 247139001(RE16-10-3910) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on an "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

**Calibration Information**

**Initial Calibration**

All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

10-1863-1-PERLCMS

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**CCV Requirements**

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

**CCB Requirements**

All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**

All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**

All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MB(s) analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**

The interference check sample (ICS) met all recovery acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Client sample 247139001 (RE16-10-3910) from SDG 10-1854-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

**Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**

The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**

During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

10-1863-1-PERLCMS

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### **Technical Information**

#### **Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

#### **Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

#### **Sample Re-extraction/Re-analysis**

Due to instrument problems, sample 247192001 (RE15-10-8235) was analyzed one day after the QC for the SDG was analyzed.

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

#### **Manual Integrations**

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

#### **Method Comments**

The sample in this SDG was not originally analyzed using EPA Method 314.0.

#### **Additional Comments**

The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

#### **Perchlorate Isotope Ratio**

The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

### **System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

### **Chromatographic Columns**

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

### **Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

### **Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Heather M. Moore Date: 03/12/10



# SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: WATER  
 Extraction Batch ID: 955726  
 Extraction Type: Filter/DAI  
 Sample Volume/Weight: 10.0 mL  
 Concentrated Extract Volume: 10.0  
 Client Sample No. RE15-10-8235  
 Date Received: 16-FEB-10  
 GEL Job No (SDG): 10-1863-1  
 GEL Sample ID: 247192001  
 Date Filtered: 02-MAR-10  
 Injection Volume (uL): 20  
 %Solids:

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate Isotope Ratio |     |    |       |       |   | 1               | 06-MAR-10 20:20 | per0306039a |
| 14797-73-0 | Perchlorate-101           | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate-O(18)         |     |    | 0.479 | ug/L  |   | 1               | 06-MAR-10 20:20 | per0306039a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =  
 Instrument Value X Concentrated Extract Volume X 1 %Solids  
 Aliquot

# QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1863-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049070

| Analyte <sup>^</sup>      | True  | Found | Units | %Rec | Q | Control Limits |
|---------------------------|-------|-------|-------|------|---|----------------|
| Perchlorate               | 0.200 | .18   | ug/L  | 90.1 |   | 85 - 115       |
| Perchlorate Isotope Ratio |       | 3.12  |       |      |   | -              |
| Perchlorate-101           | 0.200 | .188  | ug/L  | 93.9 |   | 85 - 115       |
| Perchlorate-O(18)         |       | .416  | ug/L  |      |   | -              |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1863-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049073

| Analyte^                  | True  | Found | Units | %Rec | Q | Control Limits |
|---------------------------|-------|-------|-------|------|---|----------------|
| Perchlorate               | 0.200 | .163  | ug/L  | 81.6 |   | 70 - 130       |
| Perchlorate Isotope Ratio |       | 2.98  |       |      |   |                |
| Perchlorate-101           | 0.200 | .178  | ug/L  | 89.2 |   | 70 - 130       |
| Perchlorate-O(18)         |       | .456  | ug/L  |      |   |                |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

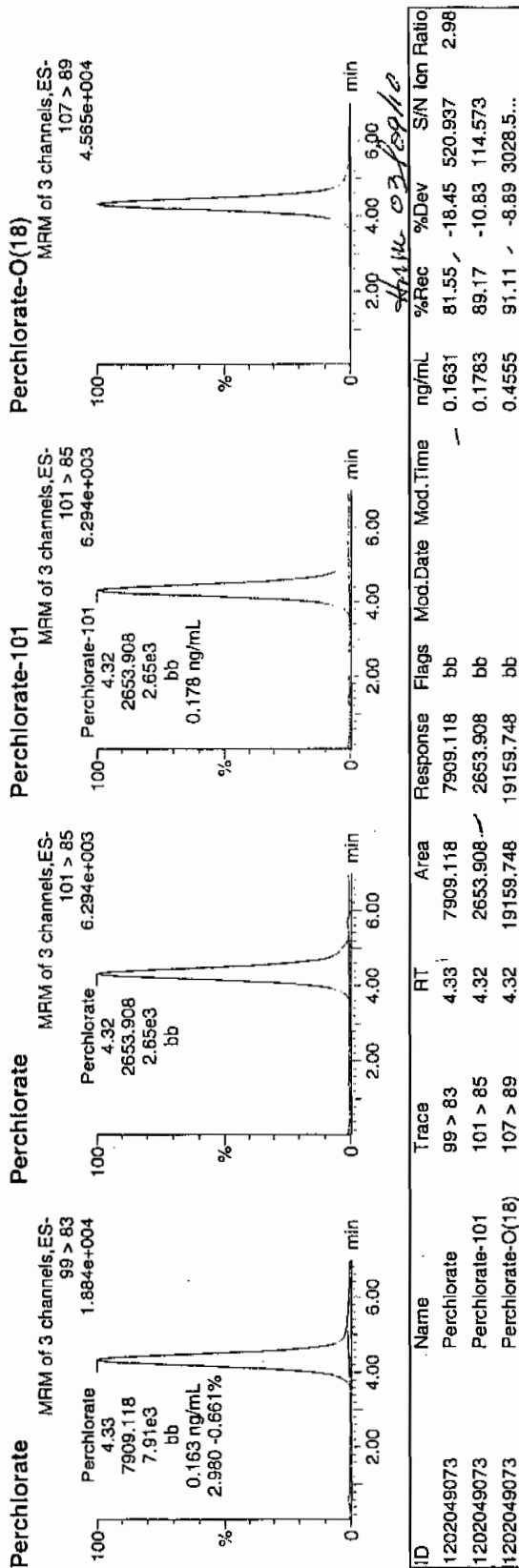
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305115a  
Date: 06-Mar-2010  
Time: 07:52:13  
ID: 1202049073  
Vial: 3:1,C

WJ  
03-26-10

1202049073 | 1202049073 | 11



| ID         | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 1202049073 | Perchlorate       | 99 > 83  | 4.33 | 7909.118  | 7909.118  | bb    |          |          | 0.163  | 81.55 | -18.45 | 520.937   | 2.98      |
| 1202049073 | Perchlorate-101   | 101 > 85 | 4.32 | 2653.908  | 2653.908  | bb    |          |          | 0.1783 | 89.17 | -10.83 | 114.573   |           |
| 1202049073 | Perchlorate-O(18) | 107 > 89 | 4.32 | 19159.748 | 19159.748 | bb    |          |          | 0.4555 | 91.11 | -8.89  | 3028.5... |           |

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1863-1

Extract Batch Code: 955726

Date Extracted: 02-MAR-10

GEL MS/PS ID: 1202049071

Client ID: RE16-10-3910

GEL MSD/PSD ID: 1202049072

QC Type: MS

| Compound^                 | Spike Added | Sample Conc | Units | MS Conc | MS Rec | # | MSD Conc | MSD Rec | # | RPD  | # | RPD Limit | Recovery Limit |
|---------------------------|-------------|-------------|-------|---------|--------|---|----------|---------|---|------|---|-----------|----------------|
| Perchlorate               | 0.200       | 0.00113     | ug/L  | 0.176   | 87.6   |   | .179     | 88.7    |   | 1.33 |   | 30        | 75 - 125       |
| Perchlorate Isotope Ratio | 0           | 0.00        |       | 3.13    |        |   | 3.1      |         |   | 0    |   |           | -              |
| Perchlorate-101           | 0.200       | 0.00083     | ug/L  | 0.184   | 91.4   |   | .188     | 93.5    |   | 2.22 |   | 30        | 75 - 125       |
| Perchlorate-O(18)         | 0           | 0.408       | ug/L  | 0.414   |        |   | .42      |         |   | 1.23 |   |           | -              |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305001a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305001a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305002a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305002a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306001a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306001a | IPB001        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306002a | IPB001        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306002a | IPB001        |



Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

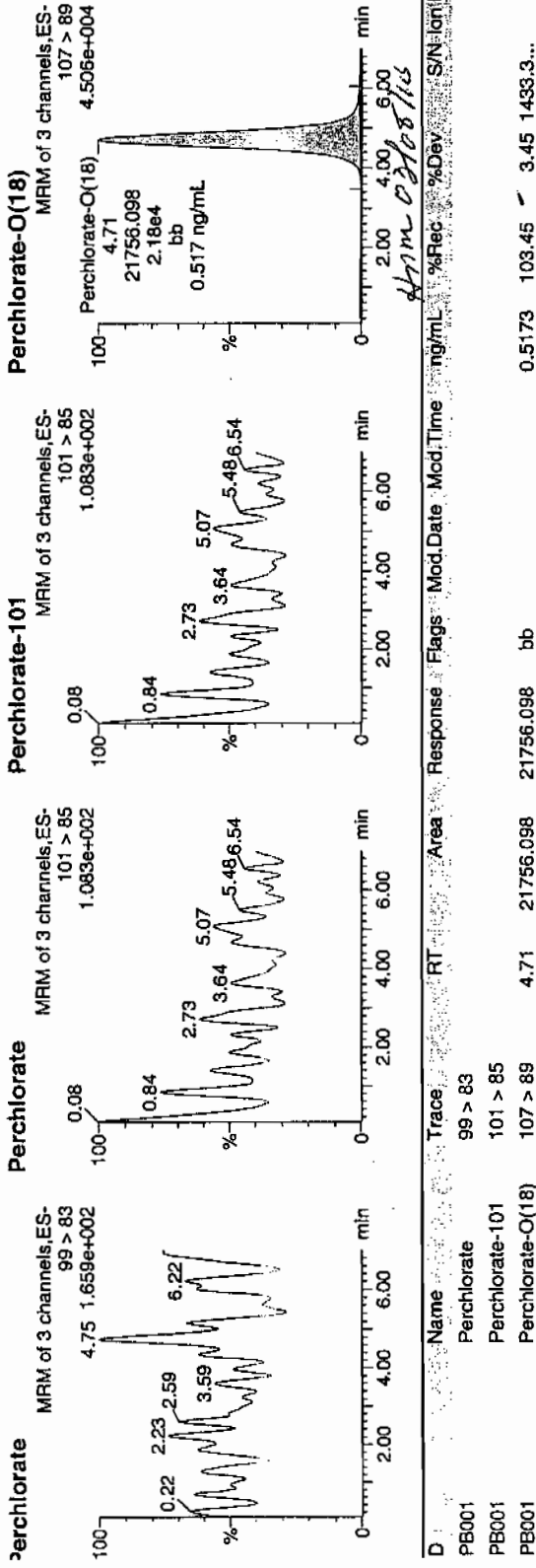
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

Name: per0305001a  
Date: 05-Mar-2010  
Time: 12:39:45  
D: IPB001  
/lat: 1:1,A

0.517  
0.517



| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| PB001 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |        |      |           | 0.00      |
| PB001 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |        |      |           |           |
| PB001 | Perchlorate-O(18) | 107 > 89 | 4.71 | 21756.098 | 21756.098 | bb    |          |          | 0.5173 | 103.45 | 3.45 | 1433.3... |           |

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305002a

Date: 05-Mar-2010

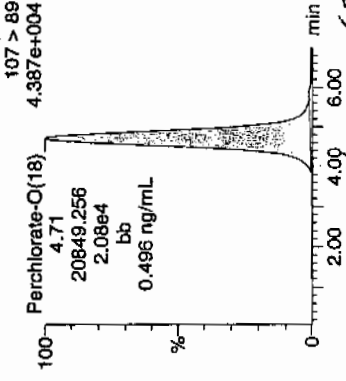
Time: 12:50:06

ID: IPB001

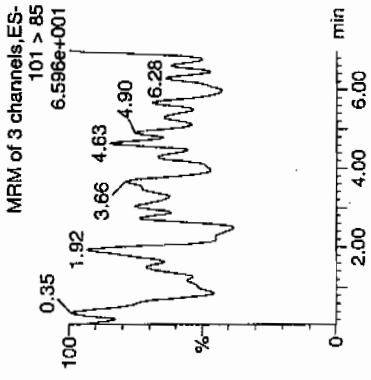
/lal: 1:1,A

0.496 ng/mL

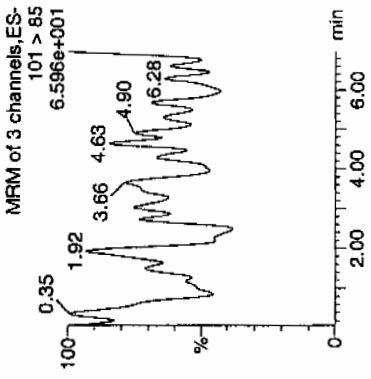
**Perchlorate-O(18)**  
MRM of 3 channels, ES-  
107 > 89  
4.387e+004



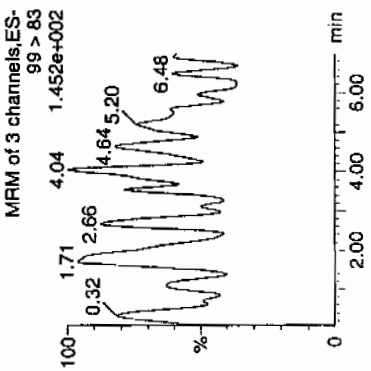
**Perchlorate-101**  
MRM of 3 channels, ES-  
101 > 85  
6.596e+001



**Perchlorate**  
MRM of 3 channels, ES-  
101 > 85  
6.596e+001



**Perchlorate**  
MRM of 3 channels, ES-  
99 > 83  
1.452e+002



| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | SN        | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| PB001 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |           | 0.00      |
| PB001 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |           |           |
| PB001 | Perchlorate-O(18) | 107 > 89 | 4.71 | 20849.256 | 20849.256 | bb    |          |          | 0.4957 | 99.14 | -0.86 | 1295.4... |           |

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

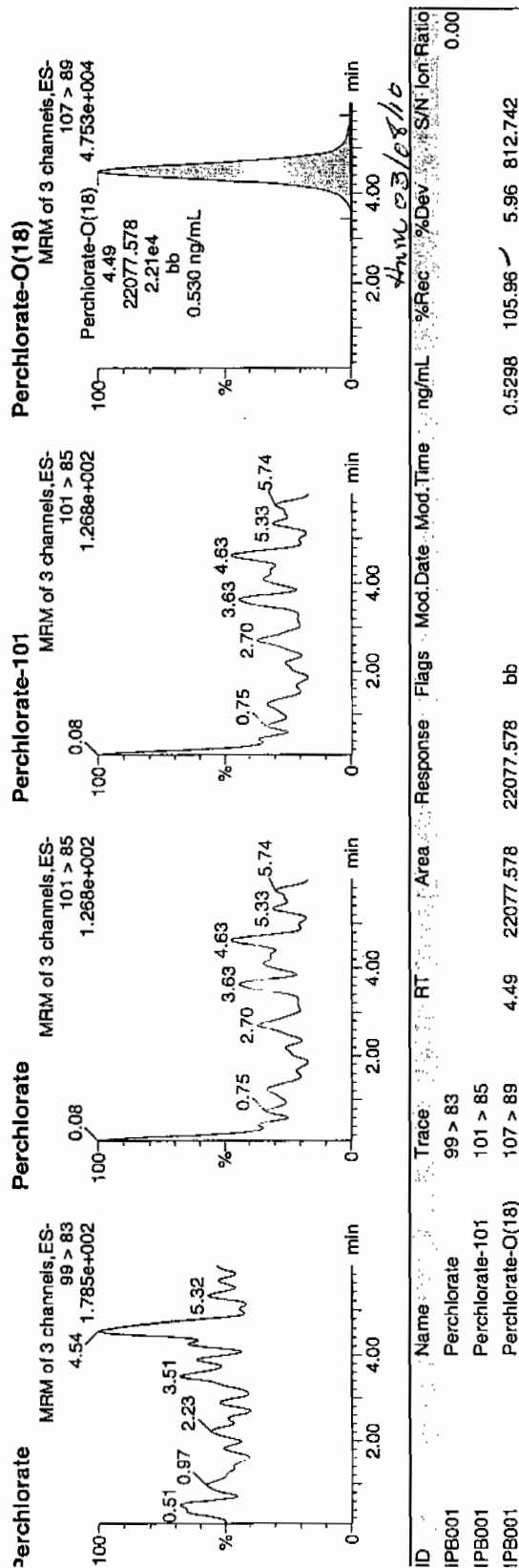
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030610a.mdb 07 Mar 2010 10:54:54  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030610a.cdb 07 Mar 2010 11:00:09

Name: per0306001a  
Date: 06-Mar-2010  
Time: 14:34:56  
D: IPB001  
Vial: 1:1,A

0307-10



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time

Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306002a

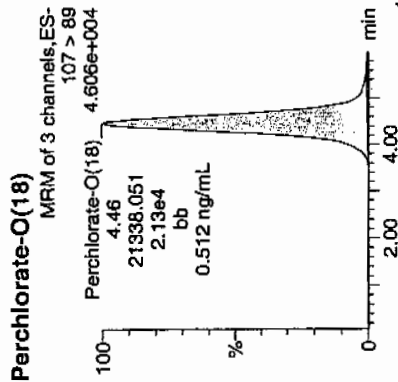
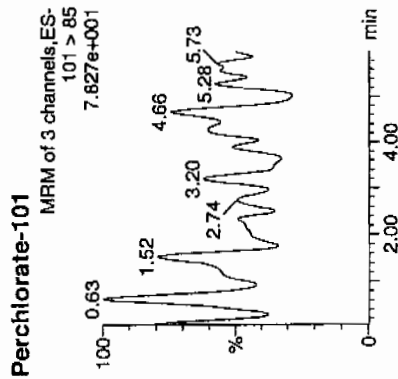
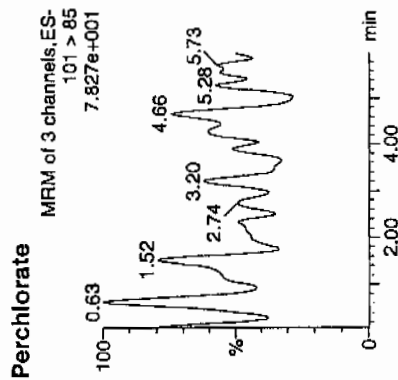
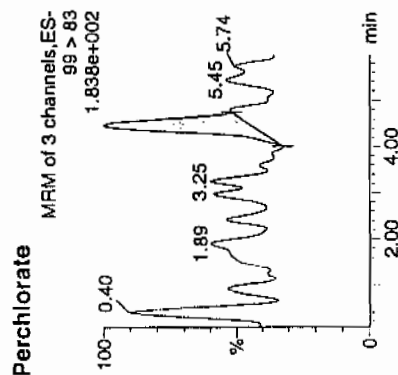
Date: 06-Mar-2010

Time: 14:43:58

ID: IPB001

Vial: 1:1,A

03 of 10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev | S/N       | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| IPB001 | Perchlorate       | 99 > 83  | 4.46 | 33.306    | 33.306    | bb    |          |          | 0.0007 |        |      | 5.502     | 0.00      |
| IPB001 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |        |      |           |           |
| IPB001 | Perchlorate-O(18) | 107 > 89 | 4.46 | 21338.051 | 21338.051 | bb    |          |          | 0.5121 | 102.41 | 2.41 | 1800.9... |           |

## Perchlorate Continuing Calibration Blank

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1863-1Lab Code: GELReporting Units: ug/L

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305008a | IPB002        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305008a | IPB002        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305010a | IPB003        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305010a | IPB003        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305023a | IPB004        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305023a | IPB004        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305036a | IPB005        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305036a | IPB005        |
| Perchlorate     | 0.00 | 0     | NA   | 05-MAR-10     | per0305062a | IPB008        |
| Perchlorate-101 | 0.00 | 0     | NA   | 05-MAR-10     | per0305062a | IPB008        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305075a | IPB009        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305075a | IPB009        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305079a | IPB010        |

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units:  $\mu\text{g/L}$

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305079a | IPB010        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305088a | IPB011        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305088a | IPB011        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305099a | IPB012        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305099a | IPB012        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305111a | IPB013        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305111a | IPB013        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0305124a | IPB014        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0305124a | IPB014        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306008a | IPB002        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306008a | IPB002        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306010a | IPB003        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306010a | IPB003        |

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Reporting Units: ug/L

| Analyte         | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306015a | IPB004        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306015a | IPB004        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306023a | IPB005        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306023a | IPB005        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306036a | IPB006        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306036a | IPB006        |
| Perchlorate     | 0.00 | 0     | NA   | 06-MAR-10     | per0306049a | IPB007        |
| Perchlorate-101 | 0.00 | 0     | NA   | 06-MAR-10     | per0306049a | IPB007        |

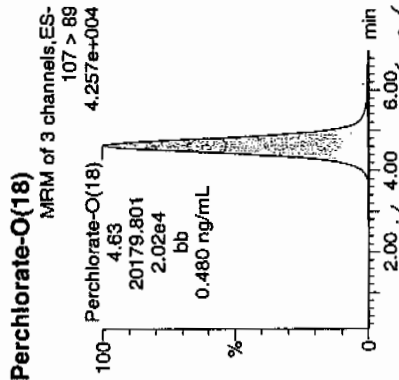
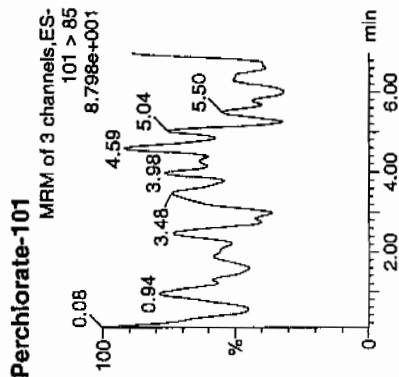
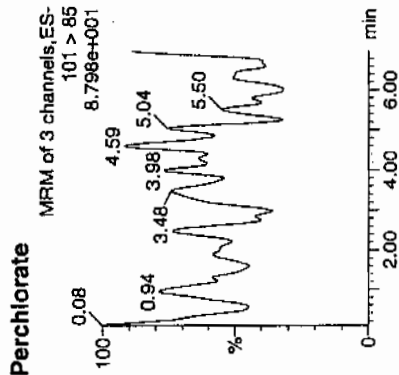
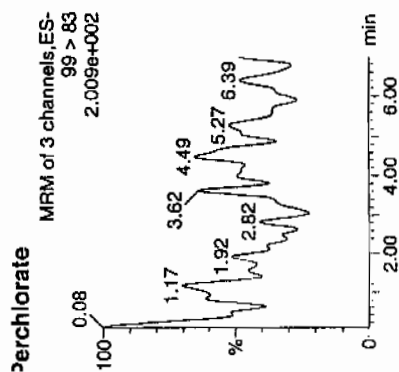
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305008a  
Date: 05-Mar-2010  
Time: 13:50:47  
D: IPB002  
Vial: 1:1,A

03-06-10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N     | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| IPB002 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |         |           |
| IPB002 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |         |           |
| IPB002 | Perchlorate-O(18) | 107 > 89 | 4.63 | 20179.801 | 20179.801 | bb    |          |          | 0.4798 | 95.96 | -4.04 | 336.982 | 0.00      |



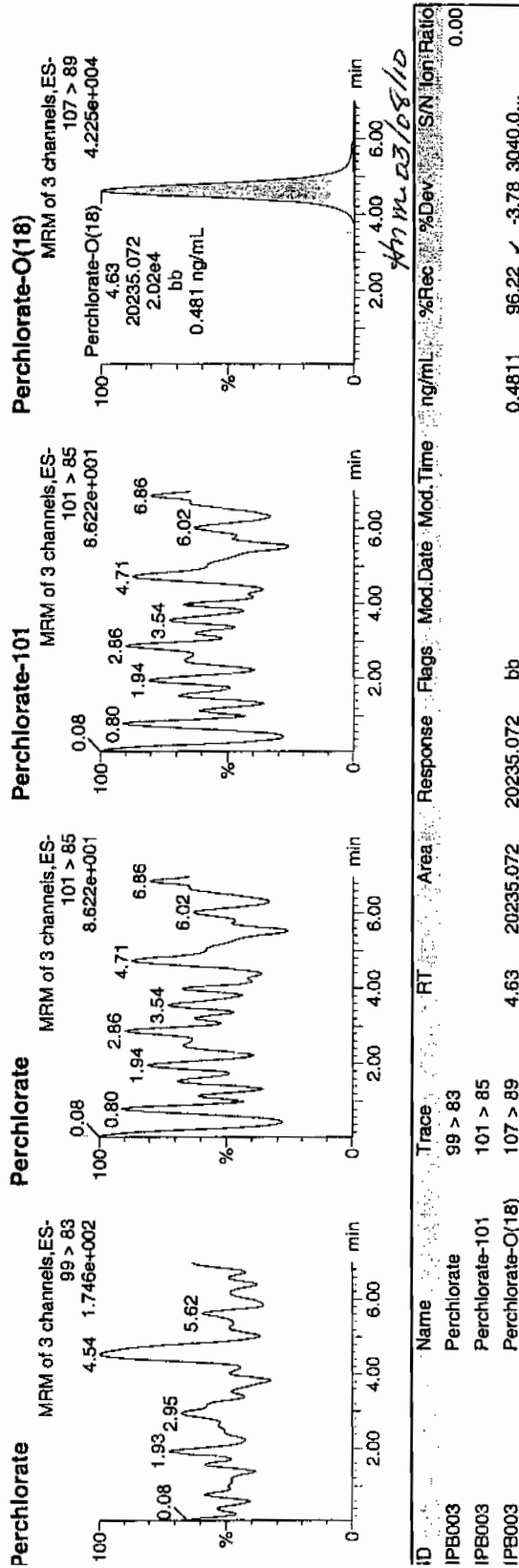
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305010a  
Date: 05-Mar-2010  
Time: 14:11:00  
ID: IPB003  
Vial: 1:1,A

03-06-10



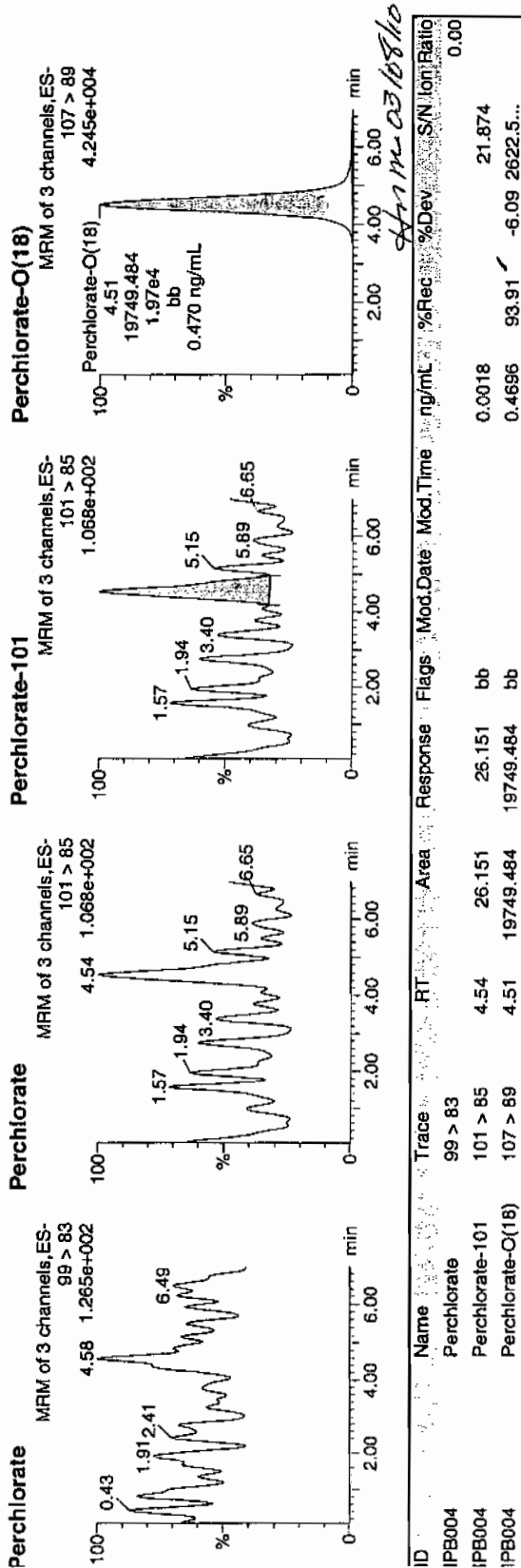
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305023a  
Date: 05-Mar-2010  
Time: 16:21:48  
ID: IPB004  
Vial: 1:1,A

CW  
03-06-10



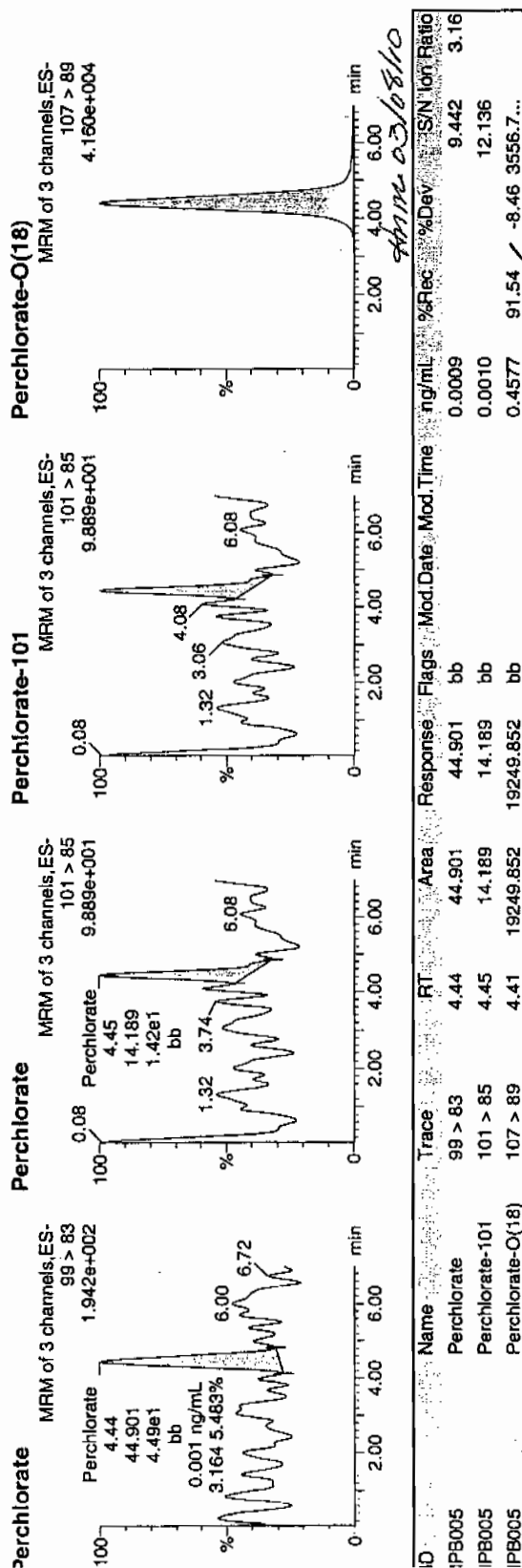
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305036a  
Date: 05-Mar-2010  
Time: 18:32:44  
D: IPB005  
/ial: 1:1,A

03-06-10



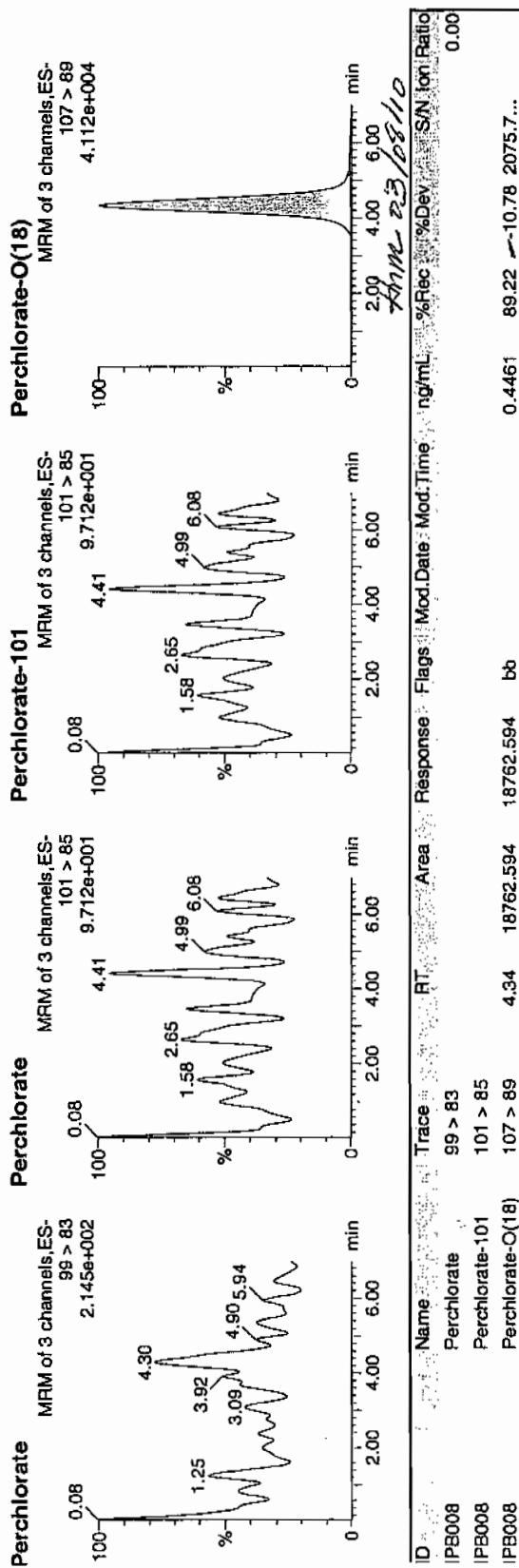
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305062a  
Date: 05-Mar-2010  
Time: 22:55:56  
ID: IPB008  
Vial: 1:1,A

03-06-10



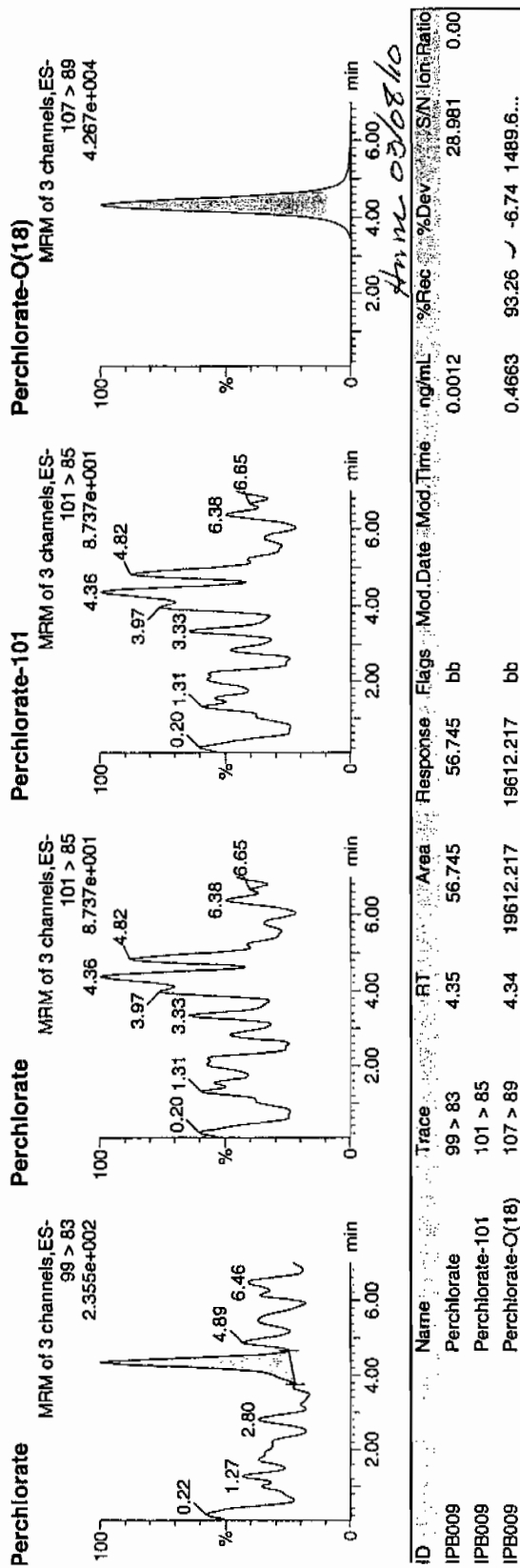
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305075a  
Date: 06-Mar-2010  
Time: 01:07:14  
ID: IPB009  
Vial: 1:1,A

03-06-10



**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305079a

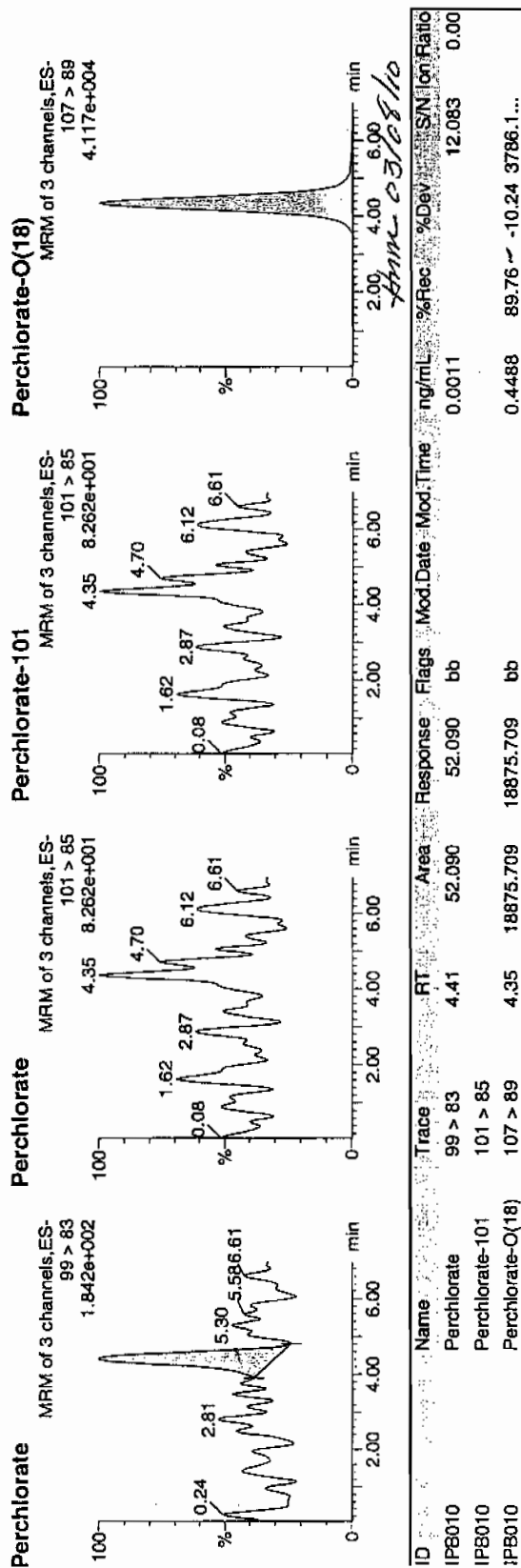
Date: 06-Mar-2010

Time: 01:47:51

ID: IPB010

Vial: 1:1,A

03-06-10

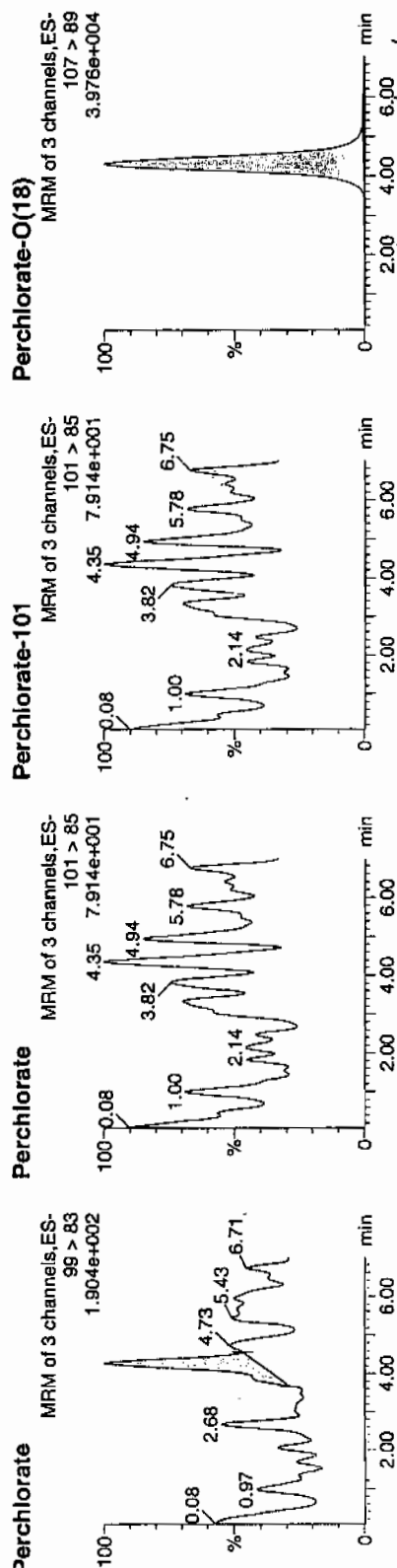


Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson  
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305088a  
Date: 06-Mar-2010  
Time: 03:19:03  
D: IPB011  
/lat: 1:1,A

03-06-10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| IPB011 | Perchlorate       | 99 > 83  | 4.27 | 38.645    | 38.645    | bb    |          |          | 0.0008 |       |        | 9.935     | 0.00      |
| IPB011 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |        |           |           |
| IPB011 | Perchlorate-O(18) | 107 > 89 | 4.32 | 18268.896 | 18268.896 | bb    |          |          | 0.4344 | 86.87 | -13.13 | 3328.6... |           |

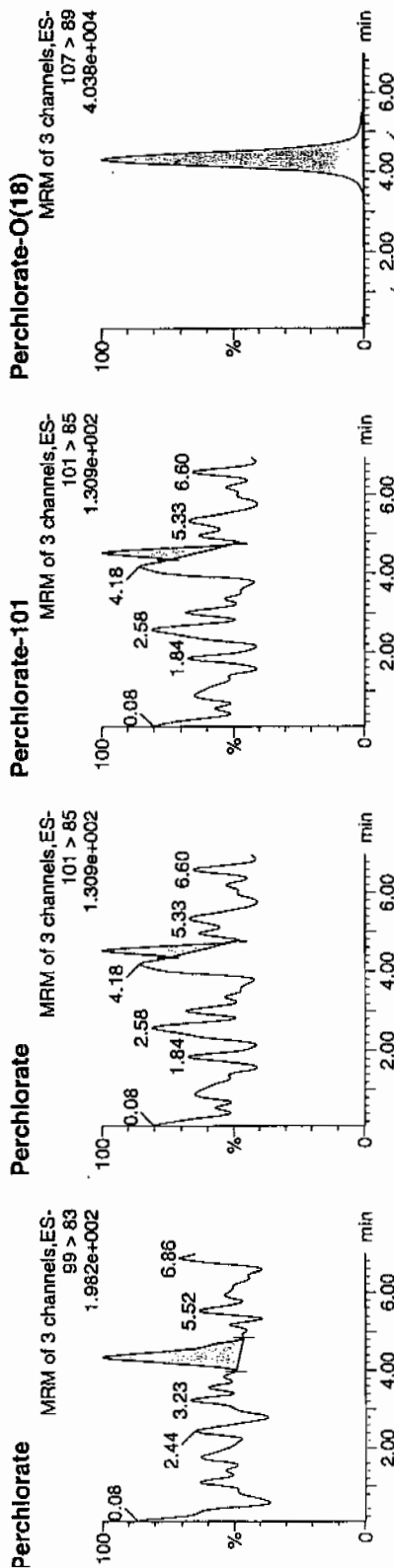
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305099a  
Date: 06-Mar-2010  
Time: 05:10:08  
ID: IPB012  
Vial: 1:1,A

03-06-10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN        | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| IPB012 | Perchlorate       | 99 > 83  | 4.34 | 38.264    | 38.264    | bb    |          |          | 0.0008 |       |        | 12.046    | 3.88      |
| IPB012 | Perchlorate-101   | 101 > 85 | 4.51 | 9.873     | 9.873     | bb    |          |          | 0.0007 |       |        | 12.423    |           |
| IPB012 | Perchlorate-O(18) | 107 > 89 | 4.32 | 18361.596 | 18361.596 | bb    |          |          | 0.4366 | 87.31 | -12.69 | 1563.3... |           |

0.004  
2.0000



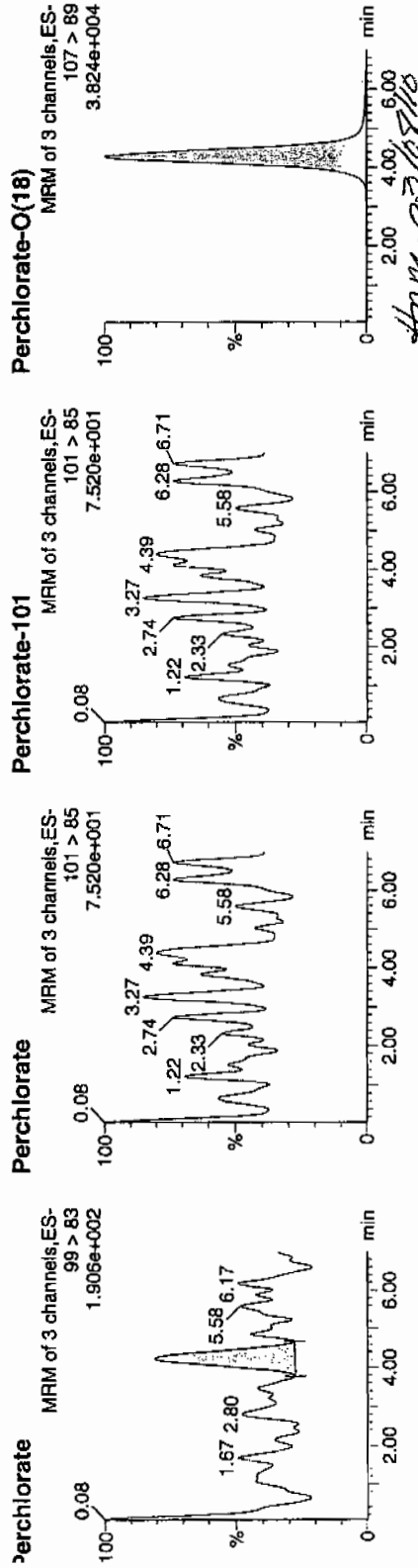
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305111a  
Date: 06-Mar-2010  
Time: 07:11:35  
D: IPB013  
/ial: 1:1,A

03-06-10



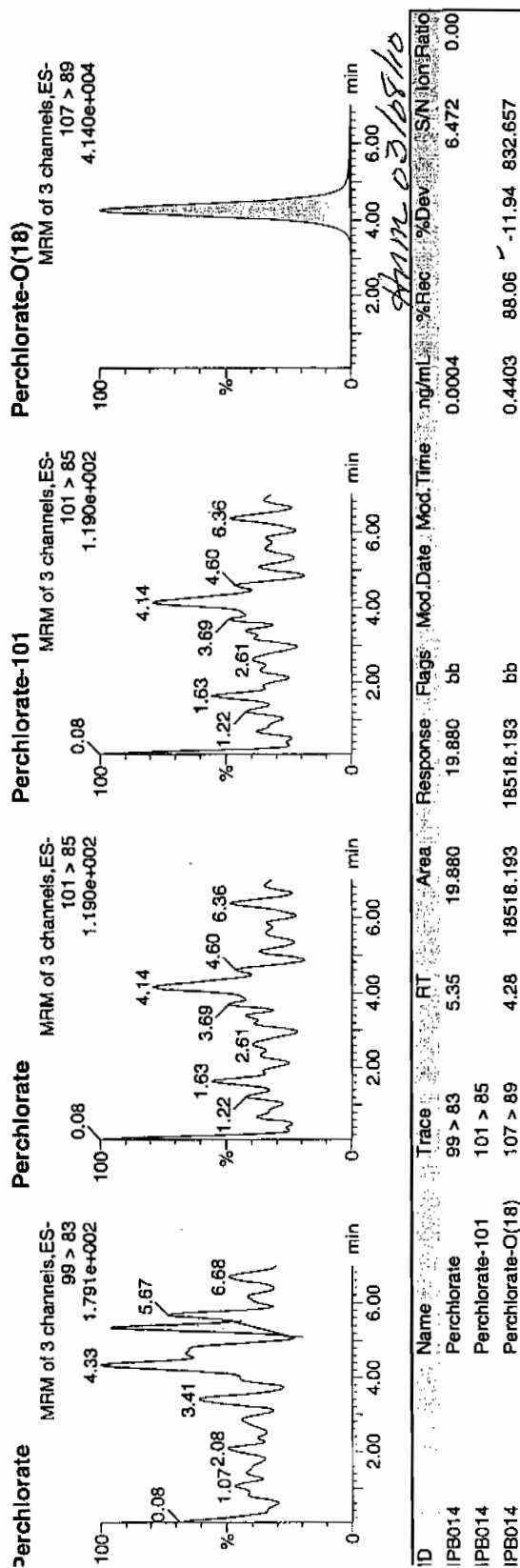
| D     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| PB013 | Perchlorate       | 99 > 83  | 4.23 | 43.508    | 43.509    | bb    |          |          | 0.0009 |       |        | 8.985     | 0.00      |
| PB013 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |        |           |           |
| PB013 | Perchlorate-O(18) | 107 > 89 | 4.29 | 17616.211 | 17616.211 | bb    |          |          | 0.4188 | 83.77 | -16.23 | 3253.1... |           |

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305124a  
Date: 06-Mar-2010  
Time: 09:23:06  
D: IPB014  
Vial: 1:1,A



Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

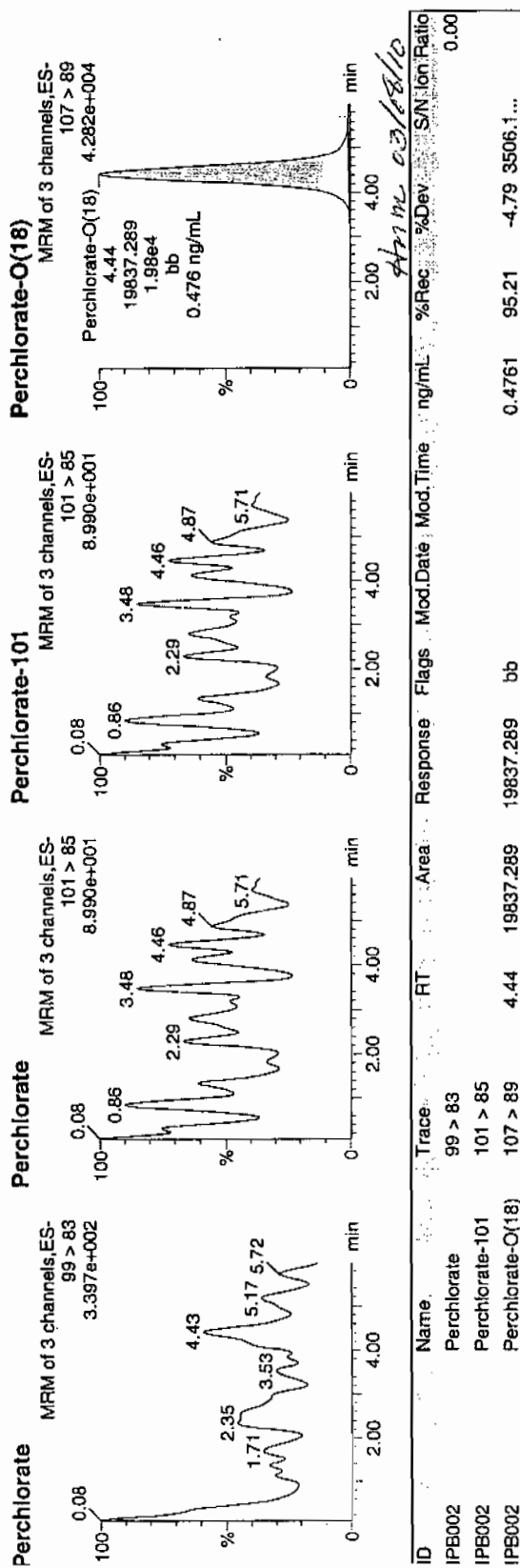
Name: per0306008a

Date: 06-Mar-2010

Time: 15:38:29

ID: IPB002

Vial: 1:1,A



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| IPB002 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |           |           |
| IPB002 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |           |           |
| IPB002 | Perchlorate-O(18) | 107 > 89 | 4.44 | 19837.289 | 19837.289 | bb    |          |          | 0.4761 | 95.21 | -4.79 | 3506.1... |           |

3EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

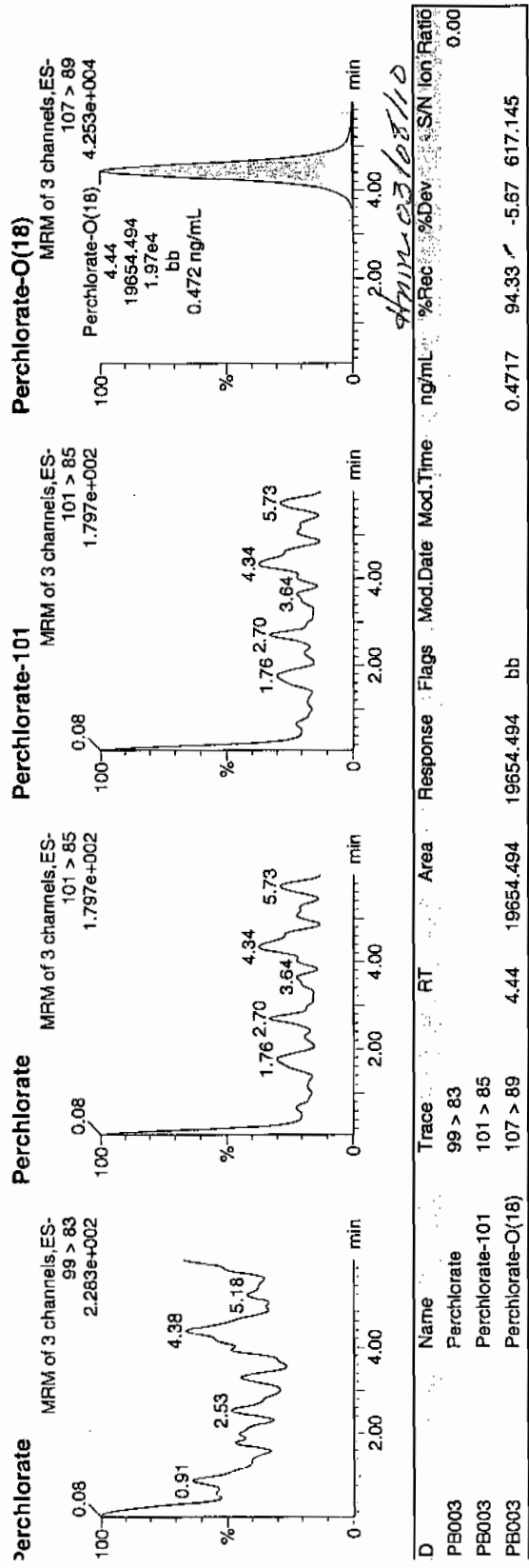
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306010a  
Date: 06-Mar-2010  
Time: 15:56:49  
D: IPB003  
/ial: 1:1,A

03-07-10



Quantify Sample Report MassLynx 4.0 SP4

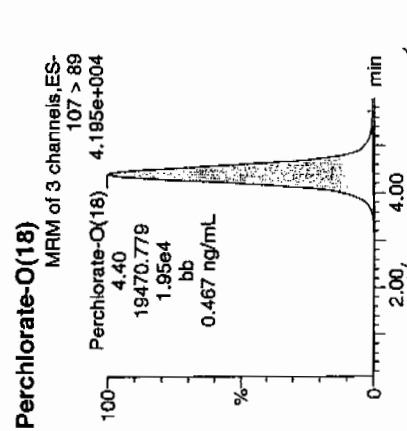
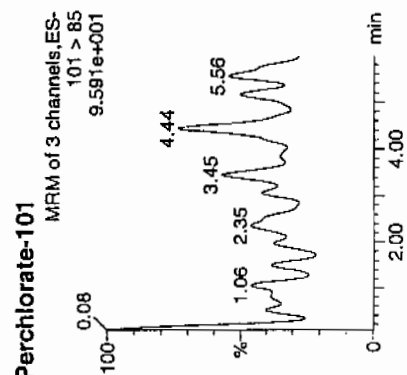
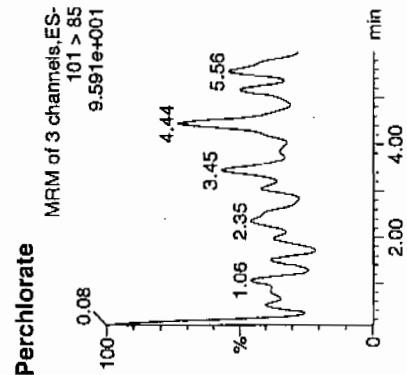
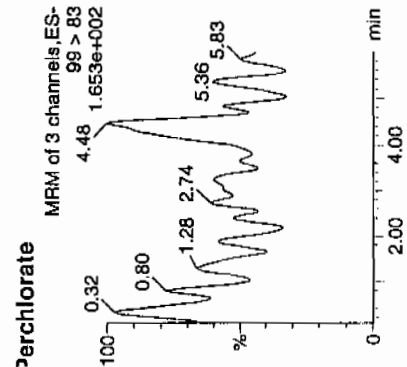
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306015a  
Date: 06-Mar-2010  
Time: 16:42:19  
D: IPB004  
Vial: 1:1,A

0307-10



| ID    | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|-------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| PB004 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |           | 0.00      |
| PB004 | Perchlorate-101   | 101 > 85 | 4.40 | 19470.779 | 19470.779 | bb    |          |          | 0.4673 | 93.45 | -6.55 | 1614.6... |           |
| PB004 | Perchlorate-O(18) | 107 > 89 | 4.40 | 19470.779 | 19470.779 | bb    |          |          | 0.4673 | 93.45 | -6.55 | 1614.6... |           |

Handwritten: 03/08/10

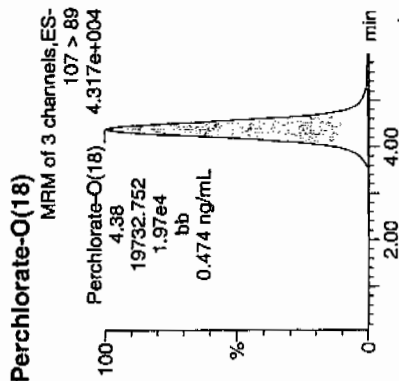
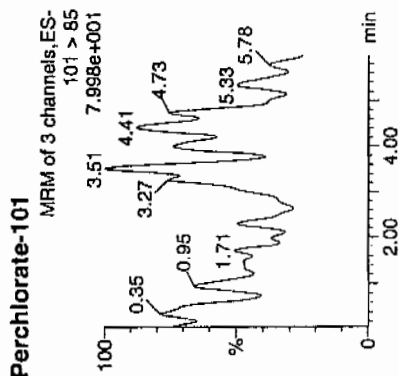
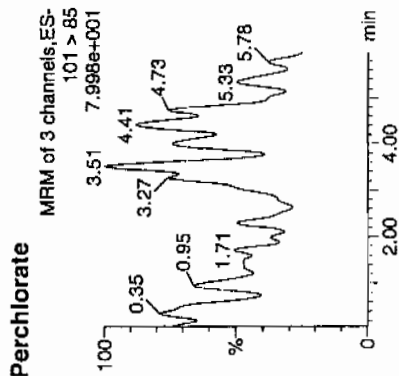
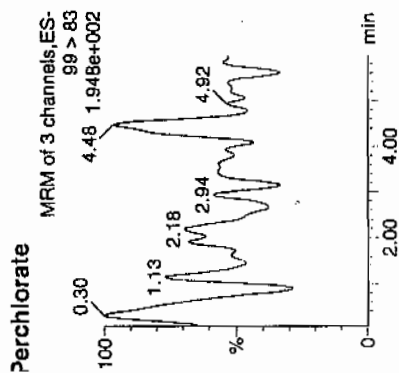
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306023a  
Date: 06-Mar-2010  
Time: 17:54:53  
D: IPB005  
Vial: 1:1,A

03-07-10



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N    | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|--------|-----------|
| IPB005 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |        |           |
| IPB005 | Perchlorate-101   | 101 > 85 |      |           |           |       |          |          |        |       |       |        |           |
| IPB005 | Perchlorate-O(18) | 107 > 89 | 4.38 | 19732.752 | 19732.752 | bb    |          |          | 0.4736 | 94.71 | -5.29 | 1130.4 | 0.00      |

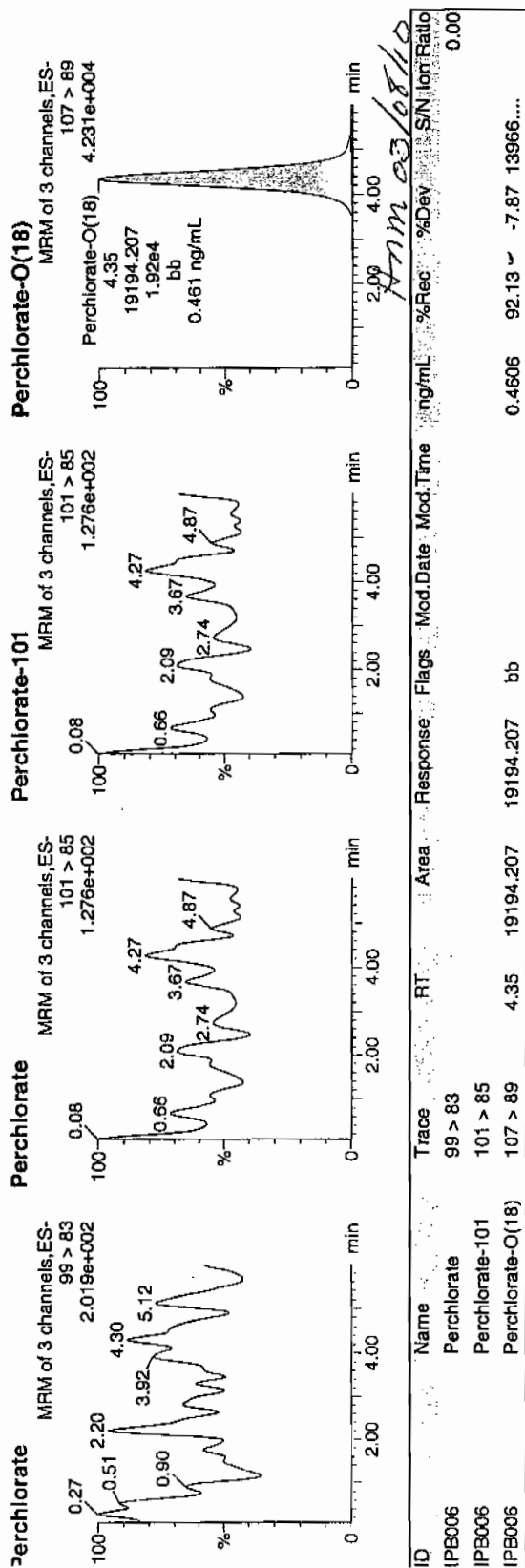
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306036a  
Date: 06-Mar-2010  
Time: 19:52:45  
D: IPB006  
Vial: 1:1,A

03-07-10



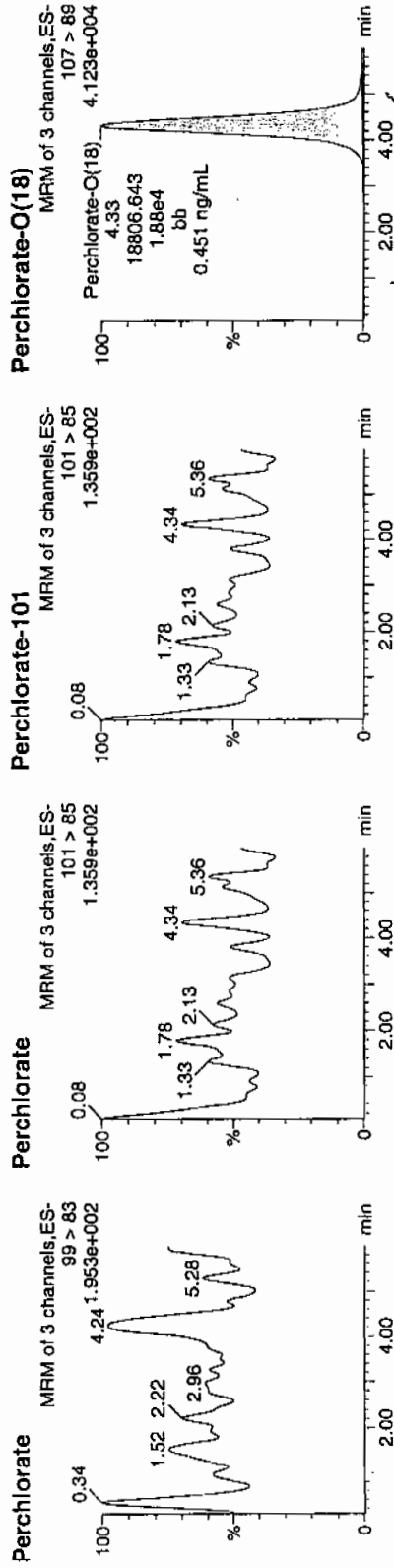
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qtd

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306049a  
Date: 06-Mar-2010  
Time: 21:50:46  
ID: IPB007  
Vial: 1:1,A

0.34  
0.33  
0.32  
0.31  
0.30  
0.29  
0.28  
0.27  
0.26  
0.25  
0.24  
0.23  
0.22  
0.21  
0.20  
0.19  
0.18  
0.17  
0.16  
0.15  
0.14  
0.13  
0.12  
0.11  
0.10  
0.09  
0.08  
0.07  
0.06  
0.05  
0.04  
0.03  
0.02  
0.01  
0.00



| ID     | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | S/N       | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| IPB007 | Perchlorate       | 99 > 83  |      |           |           |       |          |          |        |       |       |           | 0.00      |
| IPB007 | Perchlorate-101   | 101 > 85 | 4.33 | 18806.643 | 18806.643 | bb    |          |          | 0.4513 | 90.27 | -9.73 | 5015.8... |           |
| IPB007 | Perchlorate-O(18) | 107 > 89 | 4.33 | 18806.643 | 18806.643 | bb    |          |          | 0.4513 | 90.27 | -9.73 | 5015.8... |           |



Nairb.ref

; Positive ion monoisotopic and average masses from solution  
 ; of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H<sub>2</sub>O.  
 ; Most useful general purpose calibrant for all low  
 ; MW applications, including MS/MS work.  
 ; At high resolution, readily covers from m/z 50-2000.  
 ; At reduced resolution, can be used to over m/z 3000.  
 ; NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.

Updated 20 April '95

|             |     |
|-------------|-----|
| 22.9898     | 100 |
| 84.9118     | 100 |
| 172.8840    | 100 |
| 322.7782    | 100 |
| 472.6725    | 100 |
| 622.5667    | 100 |
| 772.4610    | 100 |
| 922.3552    | 100 |
| 1072.2494   | 100 |
| ; 1222.1437 | 100 |
| ; 1372.0379 | 100 |
| ; 1521.9321 | 100 |
| ; 1671.8264 | 100 |
| ; 1821.7206 | 100 |
| ; 1971.6149 | 100 |
| ; 2121.5091 | 100 |
| ; 2271.4033 | 100 |
| ; 2421.2976 | 100 |
| ; 2571.1918 | 100 |
| ; 2721.0861 | 100 |
| ; 2870.9803 | 100 |
| ; 3020.8745 | 100 |
| ; 3170.7688 | 100 |
| ; 3320.6630 | 100 |
| ; 3470.5572 | 100 |
| ; 3620.4515 | 100 |
| ; 3770.3457 | 100 |
| ; 3920.2400 | 100 |

QUANTO ULTIMA: nairb 01-08-08.ca

Calibration Report - MS1 Static

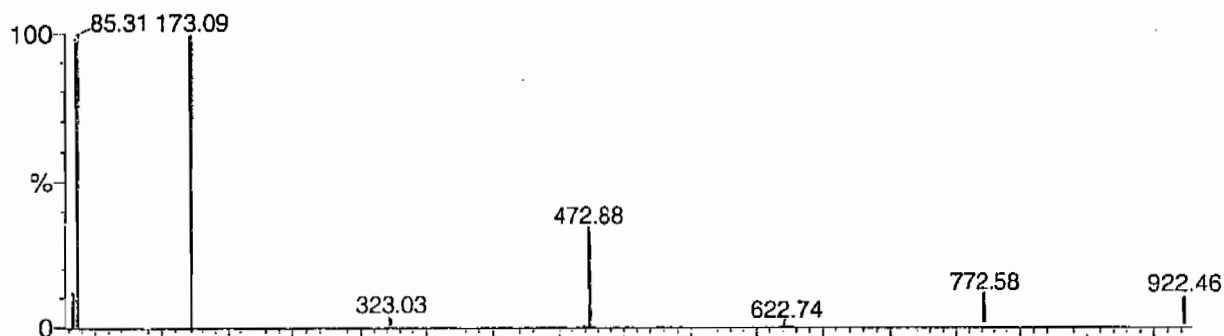
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

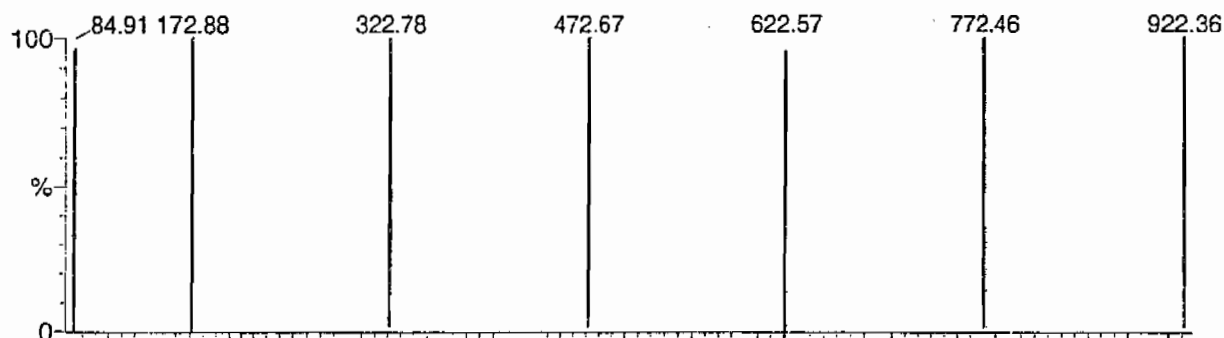
POINTS HIGHLIGHTED BY CURVE 01-07-03

Data file: STATMS1 - Uncalibrated

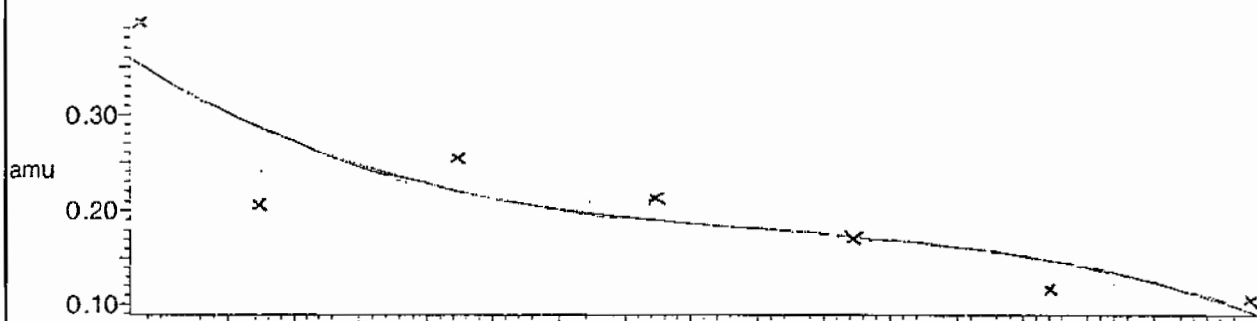
7 matches of 7 tested references



Reference file: Nairb

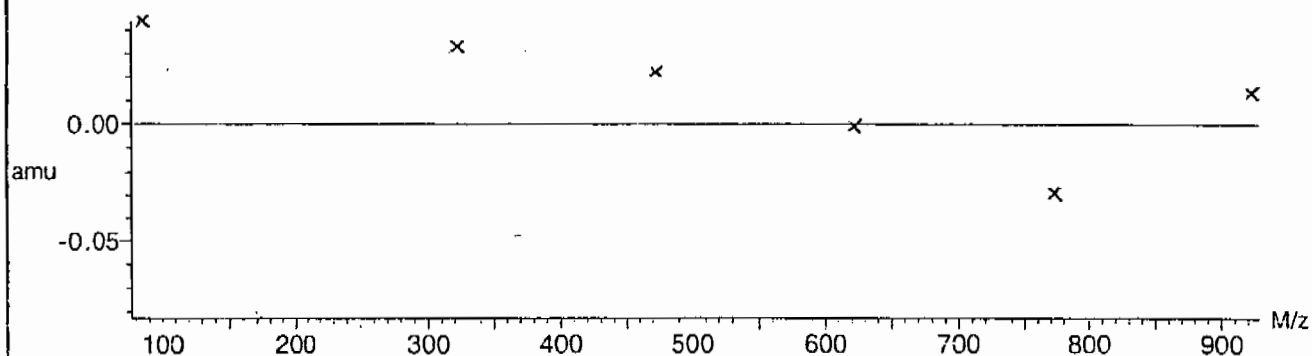


Mass difference (Raw - Ref mass)



Residuals

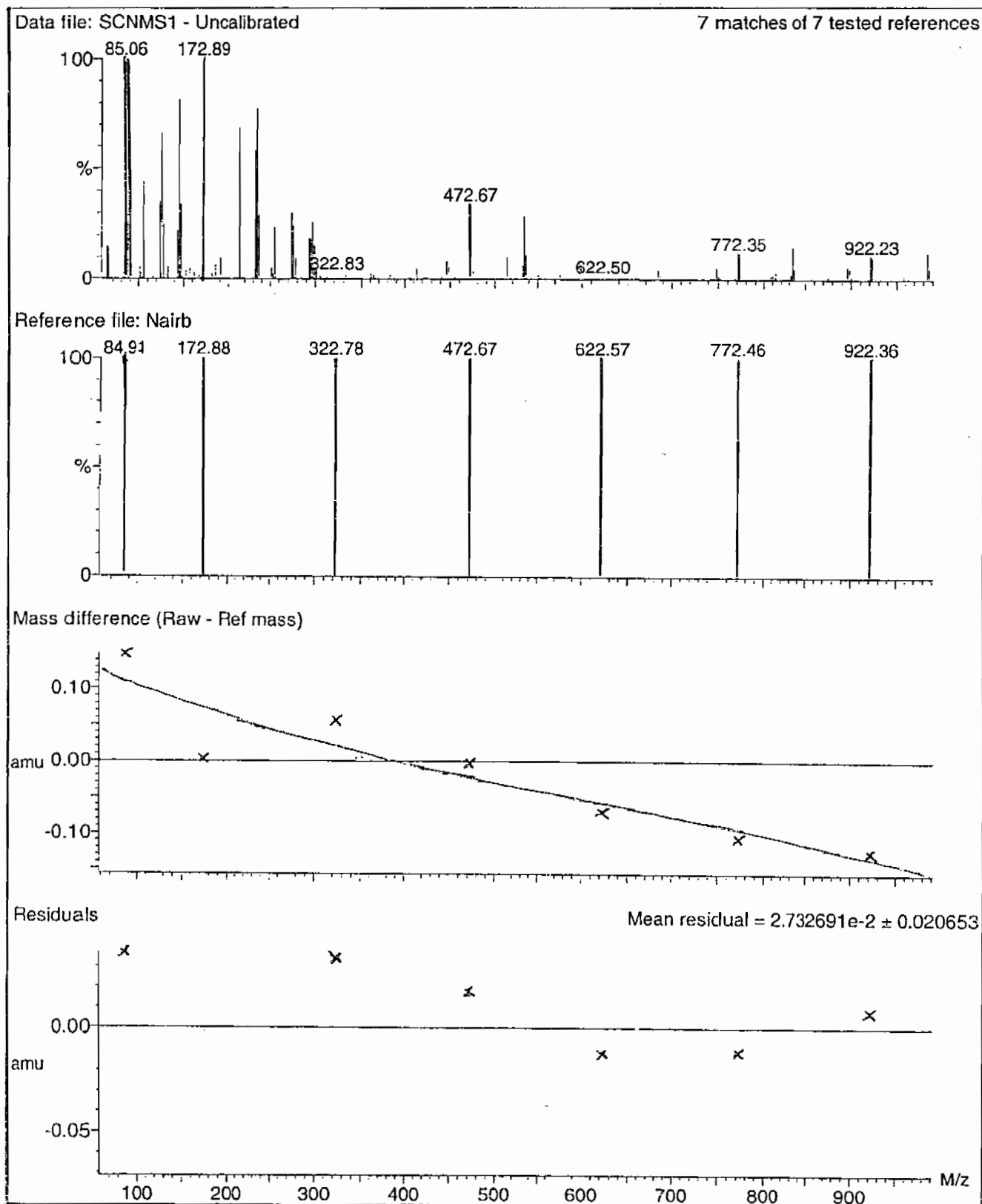
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

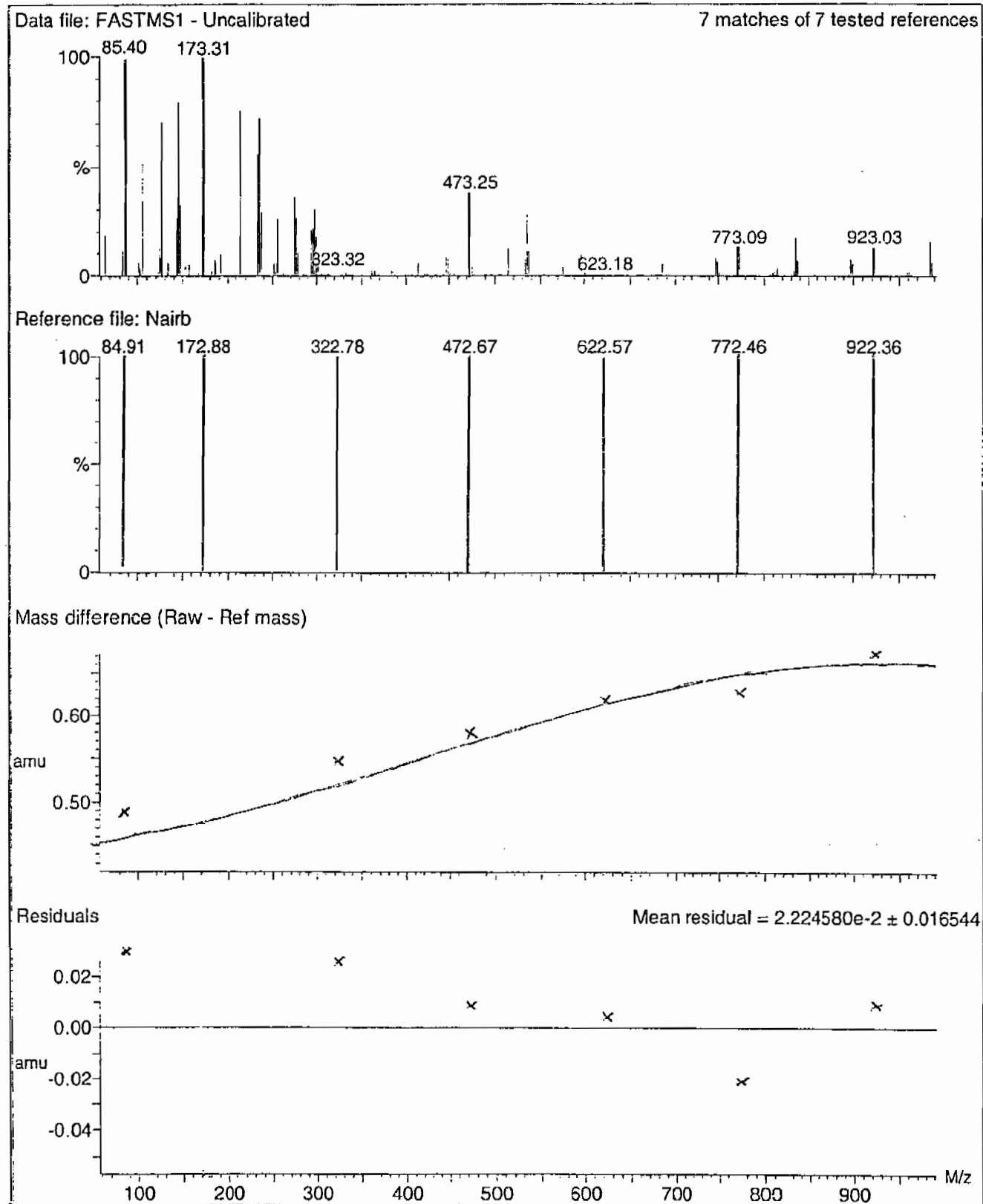
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

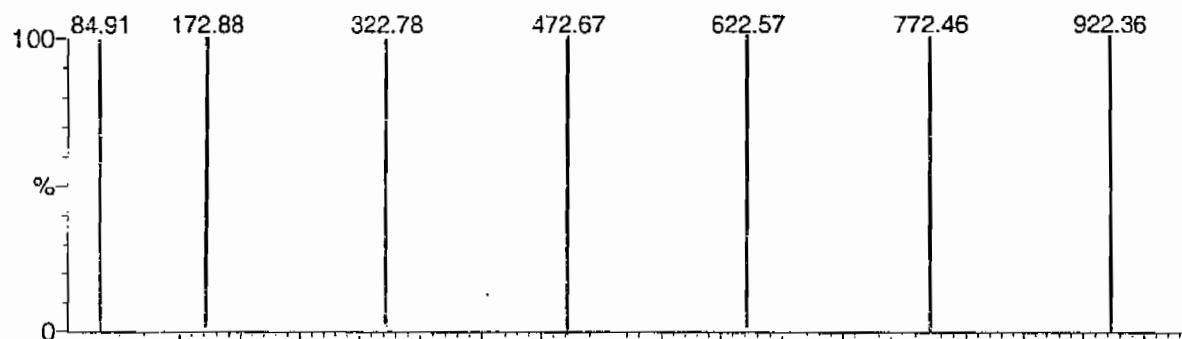
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

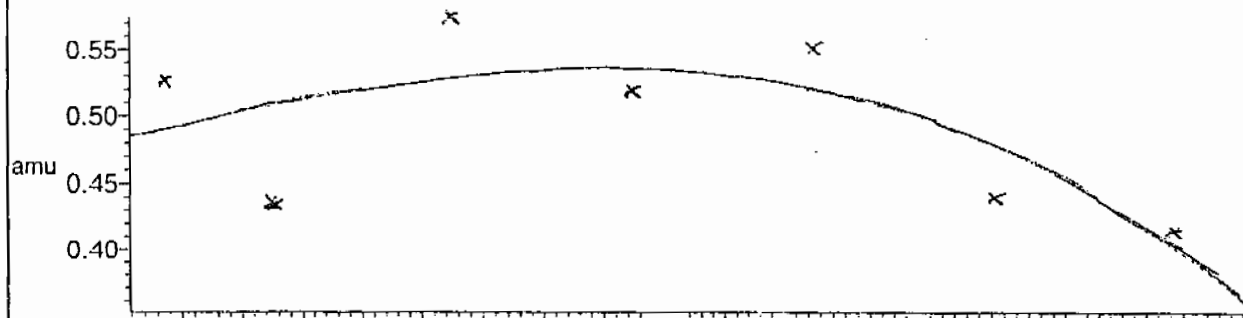
7 matches of 7 tested references



Reference file: Nairb

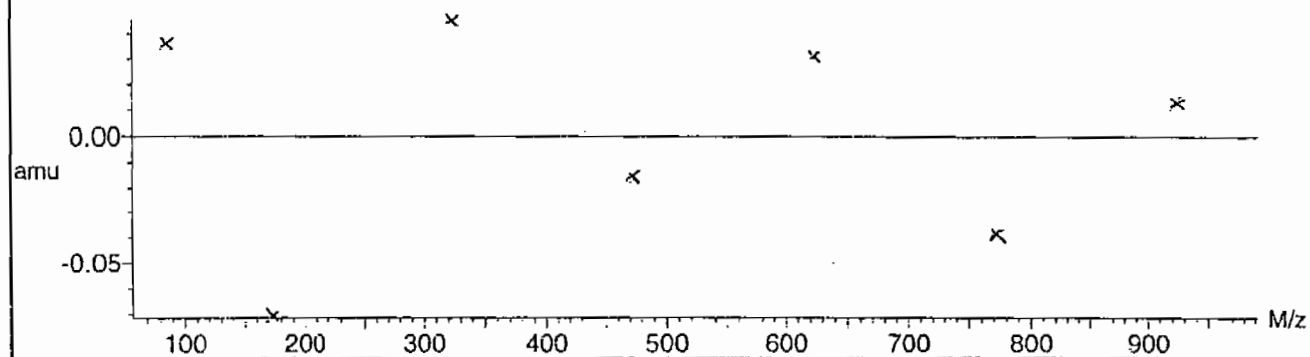


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.598289 \times 10^{-2} \pm 0.017899$



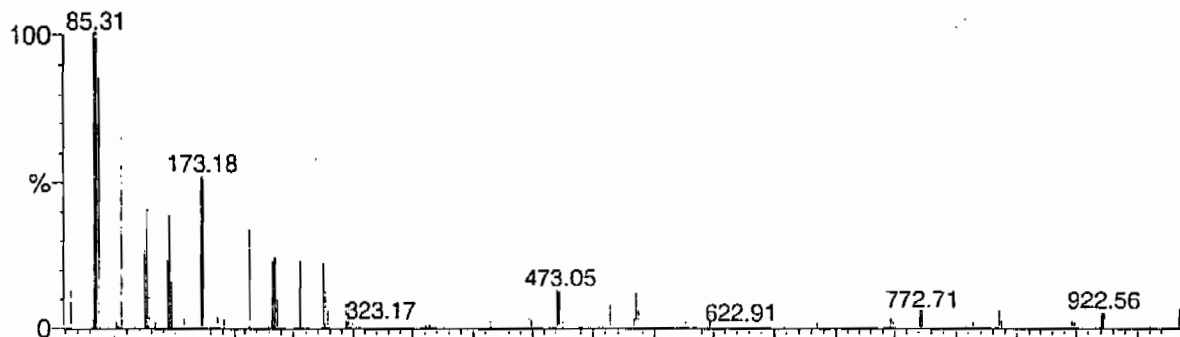
Calibration Report - MS2 Scanning

Page 1 of 1

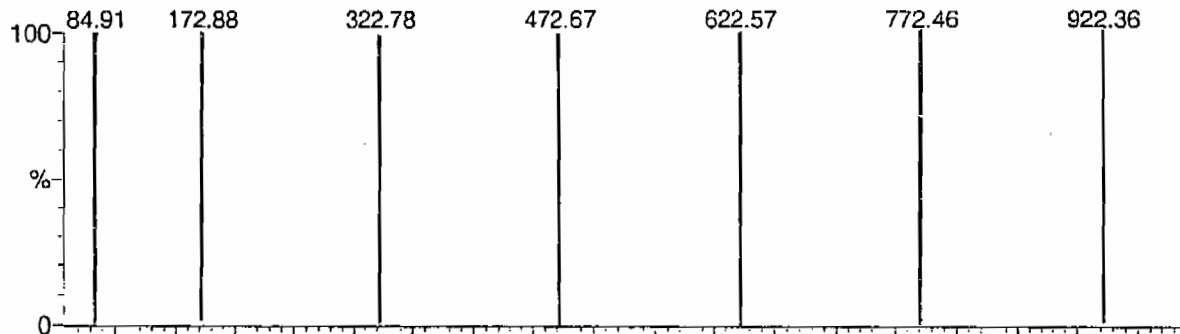
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

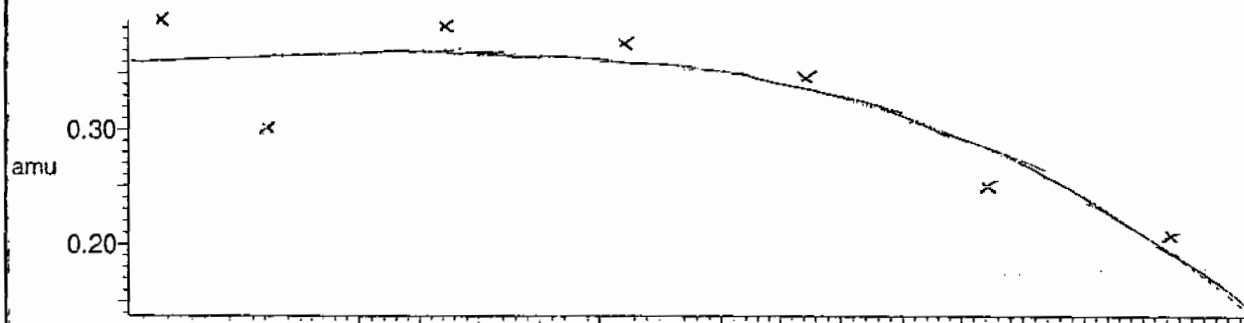
7 matches of 7 tested references



Reference file: Nairb

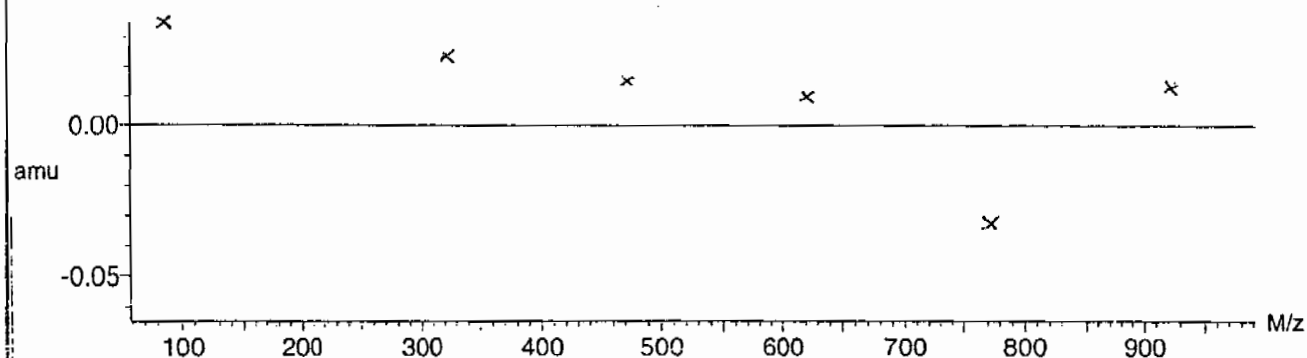


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.782494 \times 10^{-2} \pm 0.017442$



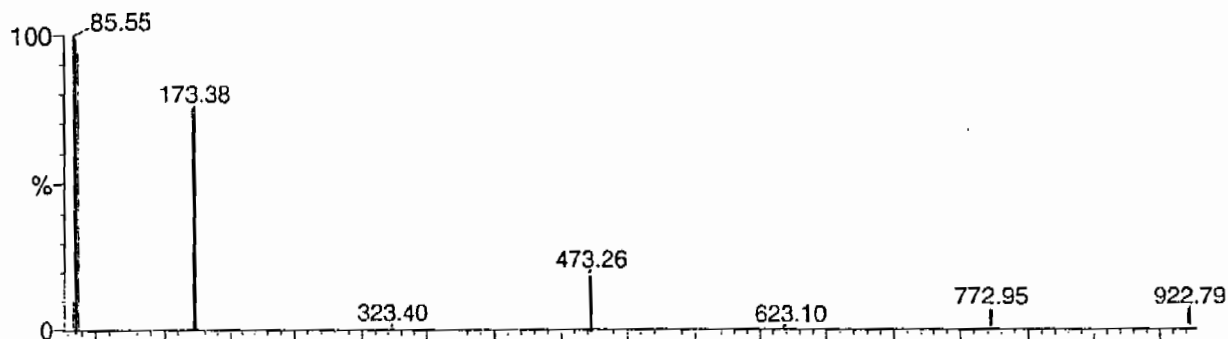
Calibration Report - MS2 Static

Page 1 of 1

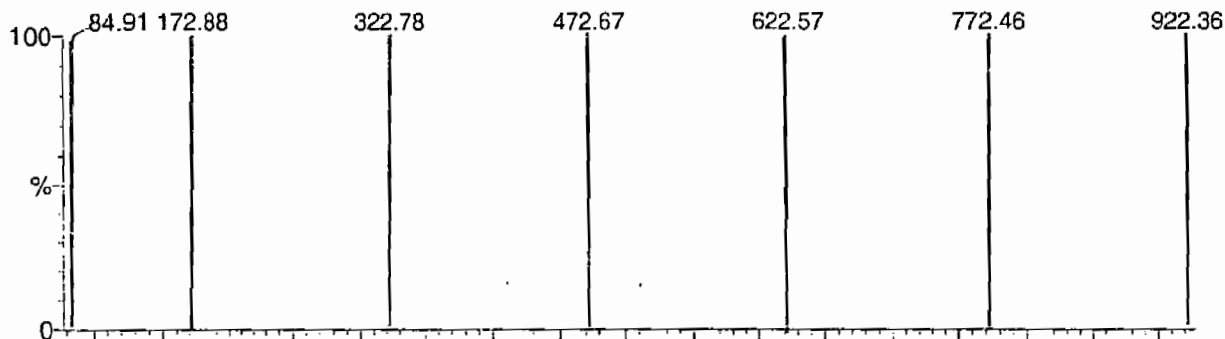
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

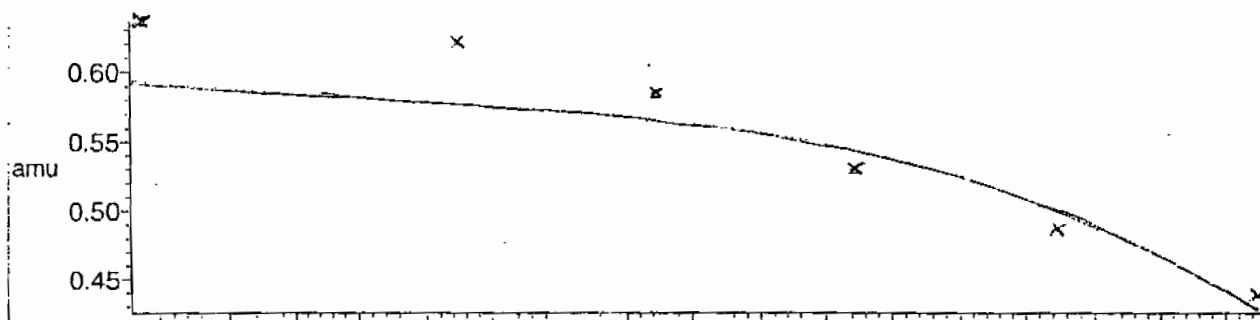
7 matches of 7 tested references



Reference file: Nairb

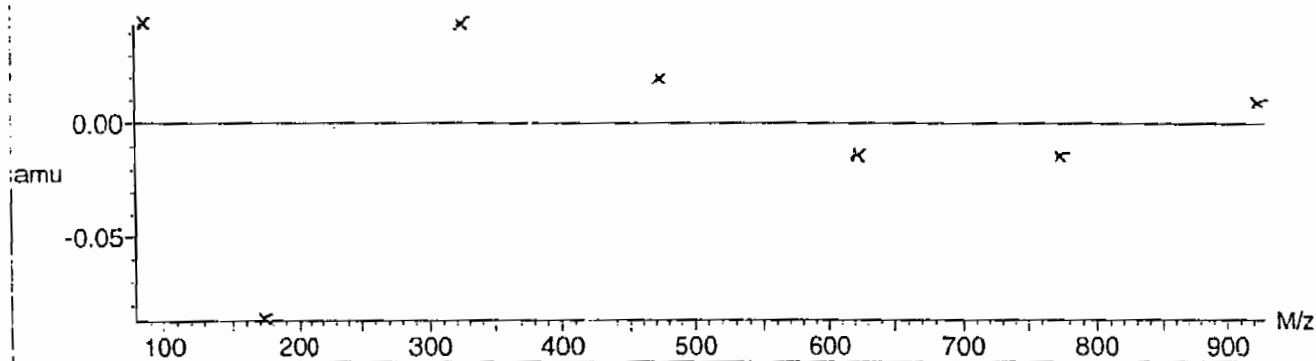


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.295980 \times 10^{-2} \pm 0.025603$



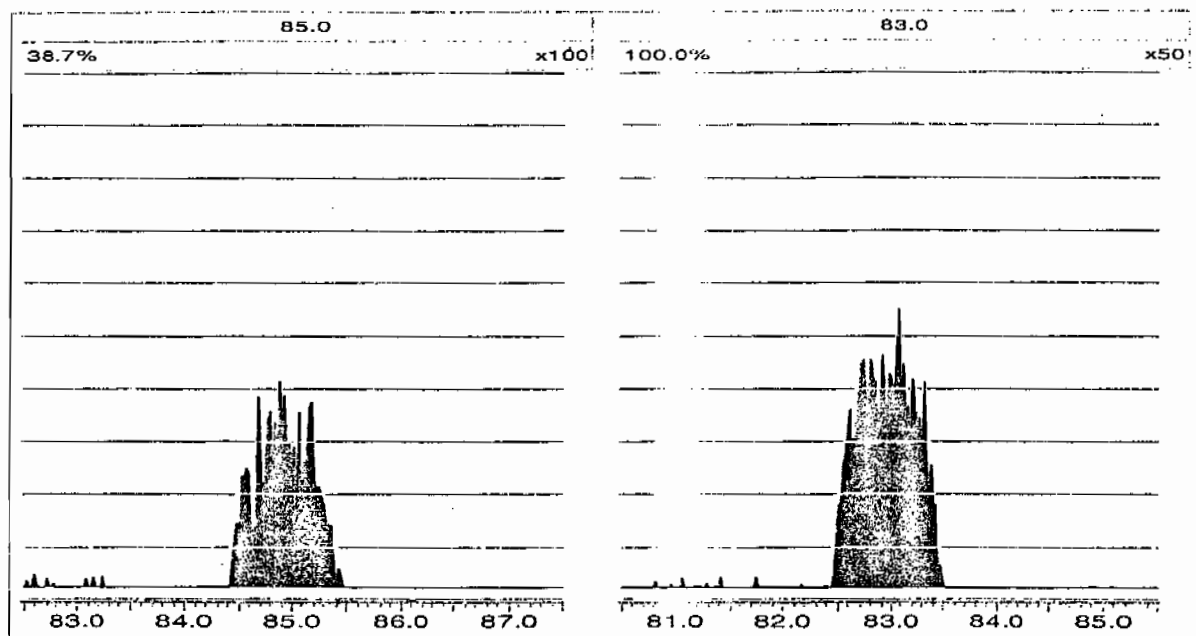
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, March 05, 2010 10:31:47 Eastern Standard Time





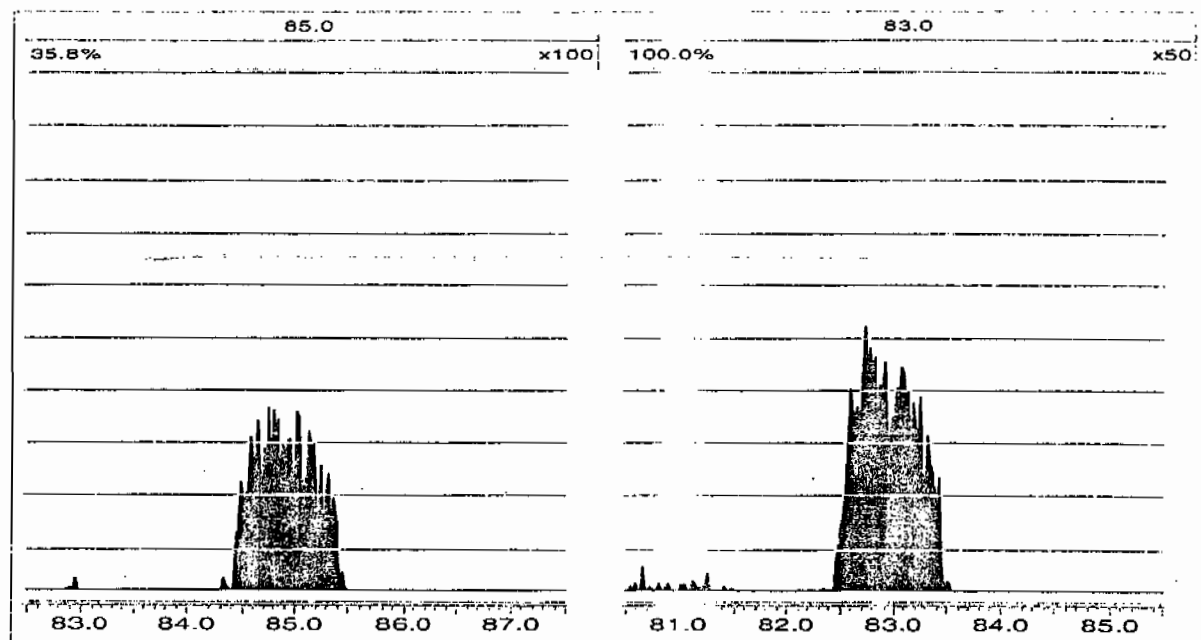
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Saturday, March 06, 2010 11:02:44 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Sample ID              | Datafile    | Run Date        | Area     | RT   | RT<br>CLO4 | RRT   | Q<br>0.98-1.02 |
|------------------------|-------------|-----------------|----------|------|------------|-------|----------------|
| MidLevel Standard Area | per0305006a | 05-MAR-10       | 21416.7  |      |            |       |                |
| Lower Area Limit       |             |                 | 10708.35 |      |            |       |                |
| Upper Area Limit       |             |                 | 42833.4  |      |            |       |                |
| 1202049069             | per0305113a | 06-MAR-10 07:31 | 18340.5  | 4.29 | 4.2778     | .997  |                |
| 1202049070             | per0305114a | 06-MAR-10 07:42 | 17497.8  | 4.29 | 4.30265    | 1.003 |                |
| 1202049073             | per0305115a | 06-MAR-10 07:52 | 19159.7  | 4.32 | 4.3276     | 1.002 |                |

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Sample ID              | Datafile    | Run Date        | Area    | RT   | RT CLO4 | RRT   | Q<br>0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|---------|-------|----------------|
| MidLevel Standard Area | per0306006a | 06-MAR-10       | 20712.4 |      |         |       |                |
| Lower Area Limit       |             |                 | 10356.2 |      |         |       |                |
| Upper Area Limit       |             |                 | 41424.8 |      |         |       |                |
| 247192001              | per0306039a | 06-MAR-10 20:20 | 19943.1 | 4.35 | 4.3896  | 1.009 |                |

# SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8235

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1863-1

GEL Sample ID: 247192001

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

| CAS No.    | Analyte <sup>a</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate Isotope Ratio |     |    |       |       |   | 1               | 06-MAR-10 20:20 | per0306039a |
| 14797-73-0 | Perchlorate-101           | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 20:20 | per0306039a |
|            | Perchlorate-O(18)         |     |    | 0.479 | ug/L  |   | 1               | 06-MAR-10 20:20 | per0306039a |

<sup>a</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4  
 the GEL Group, LLC Analyst: Charlers W. Wilson

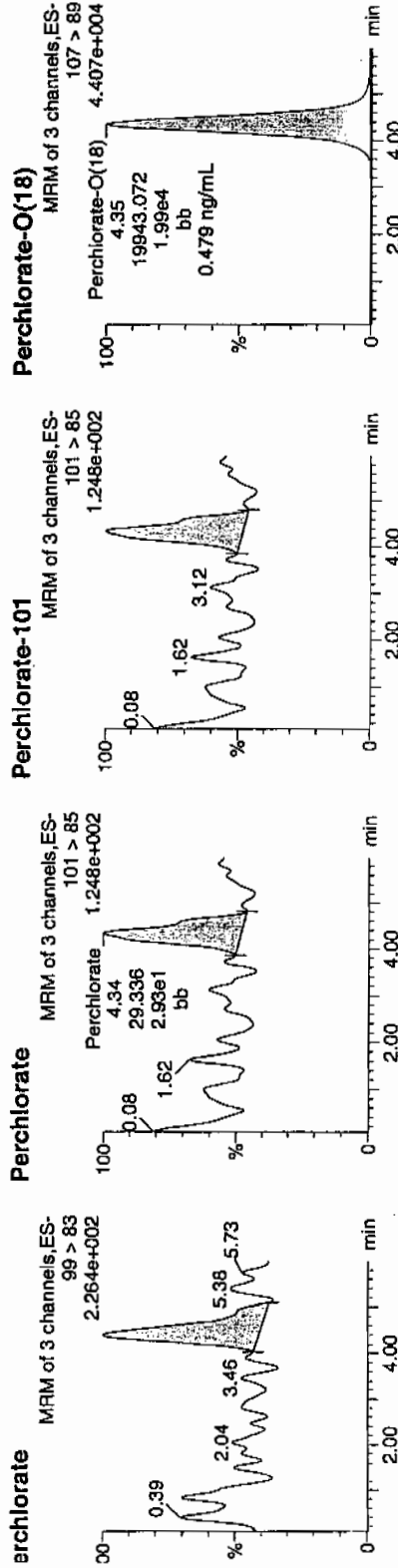
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 rnted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306039a  
 ate: 06-Mar-2010  
 ime: 20:20:01  
 ): 247192001  
 ial: 1:7,A

WJ  
 03-07-10

1620219557271222111



| Name     | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN        | Ion Ratio |
|----------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 17192001 | Perchlorate       | 99 > 83  | 4.39 | 61.871    | bb    |          |          | 0.0012 | -     | 5.937  | 2.11      |           |
| 17192001 | Perchlorate-101   | 101 > 85 | 4.34 | 29.336    | bb    |          |          | 0.0019 | -     | 20.390 |           |           |
| 17192001 | Perchlorate-O(18) | 107 > 89 | 4.35 | 19943.072 | bb    |          |          | 0.4786 | 95.72 | -4.28  | 1381.4... |           |

WJ  
 03-07-10

# STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
|--------------------------|------|-----|------|------|-----|
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 48489.74

Response Type: External Standard

Curve Type: RF



Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 05-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14881.82

Response Type: External Standard

Curve Type: RF

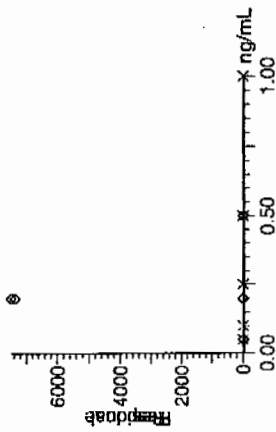
Quantify Calibration Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

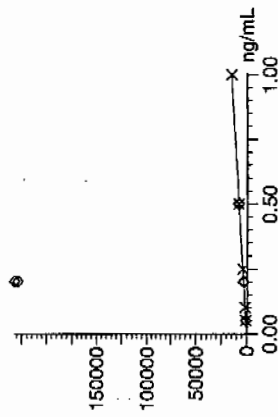
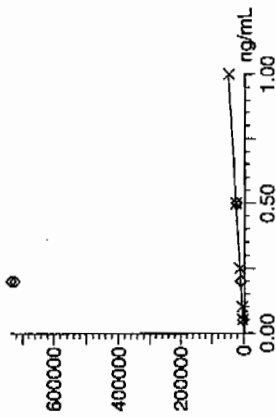
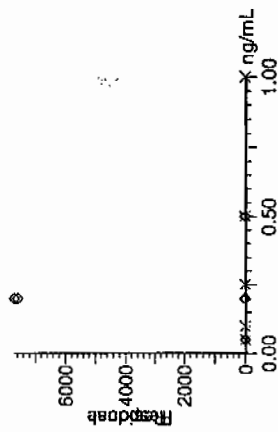
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

Compound name: Perchlorate  
Response Factor: 48489.7  
RF SD: 1243.24, % Relative SD: 2.56392 ✓  
Response type: External Std, Area  
Curve type: RF ✓



Compound name: Perchlorate-101  
Response Factor: 14881.8  
RF SD: 415.715, % Relative SD: 2.79344 ✓  
Response type: External Std, Area  
Curve type: RF ✓



# Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qtd

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

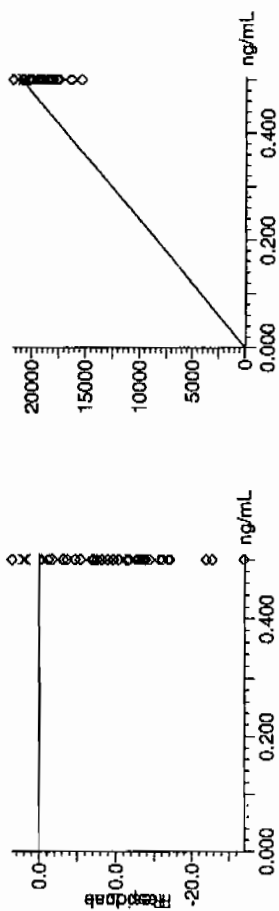
Compound name: Perchlorate-O(18)

Response Factor: 42059.8

RF SD: 811.21, % Relative SD: 1.9287

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 06-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 49865.1

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

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Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 06-MAR-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

|                          |      |     |      |      |     |
|--------------------------|------|-----|------|------|-----|
| Calibration Level        | 1    | 2   | 3    | 4    | 5   |
| Cal Concentration (ug/L) | 0.05 | 0.1 | 0.25 | 0.50 | 1.0 |

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 15687.1

Response Type: External Standard

Curve Type: RF

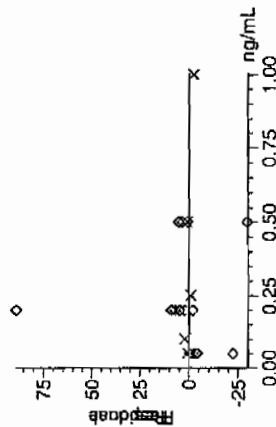
Quantify Calibration Report MassLynx 4.0 SP4  
 the GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

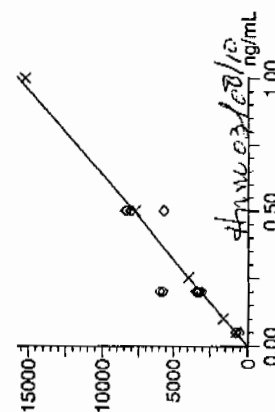
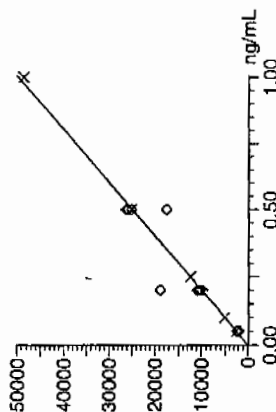
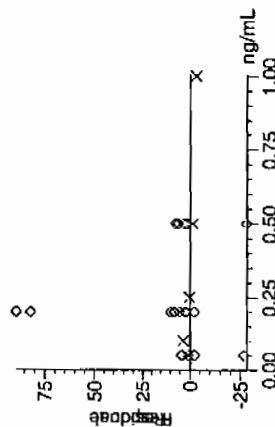
1st Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 1st Altered: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030610a.mdb 07 Mar 2010 10:54:54  
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030610a.cdb 07 Mar 2010 11:00:09

Compound name: Perchlorate  
 Response Factor: 49865.1  
 RF SD: 927.627, % Relative SD: 1.86027  
 Response type: External Std, Area  
 Curve type: RF



Compound name: Perchlorate-101  
 Response Factor: 15687.1  
 RF SD: 395.517, % Relative SD: 2.52129  
 Response type: External Std, Area  
 Curve type: RF



3333-12

Quantify Calibration Report MassLynx 4.0 SP4

ie GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

1st Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 2nd Altered: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

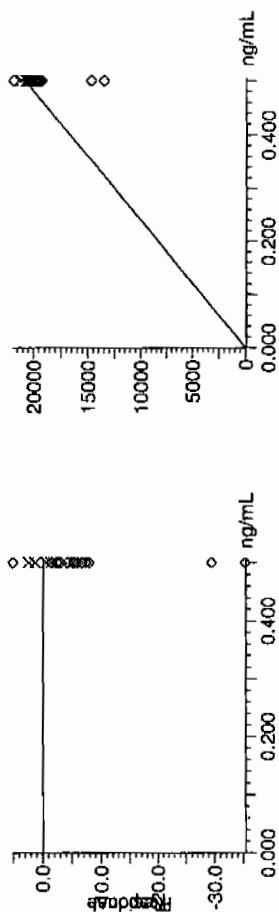
Compound name: Perchlorate-O(18)

Response Factor: 41669.8

RF SD: 770.369, % Relative SD: 1.84875

Response type: External Std, Area

Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Reporting Units: µg/L

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .5   | .51   | 101.59 | 05-MAR-10 14:00 | per0305009a |
| Perchlorate Isotope Ratio |      | 3.02  |        | 05-MAR-10 14:00 | per0305009a |
| Perchlorate-101           | .5   | .55   | 109.45 | 05-MAR-10 14:00 | per0305009a |
| Perchlorate               | .5   | .53   | 105.64 | 06-MAR-10 15:47 | per0306009a |
| Perchlorate Isotope Ratio |      | 3.17  |        | 06-MAR-10 15:47 | per0306009a |
| Perchlorate-101           | .5   | .53   | 105.93 | 06-MAR-10 15:47 | per0306009a |



Quantify Sample Report MassLynx 4.0 SP4

he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305009a

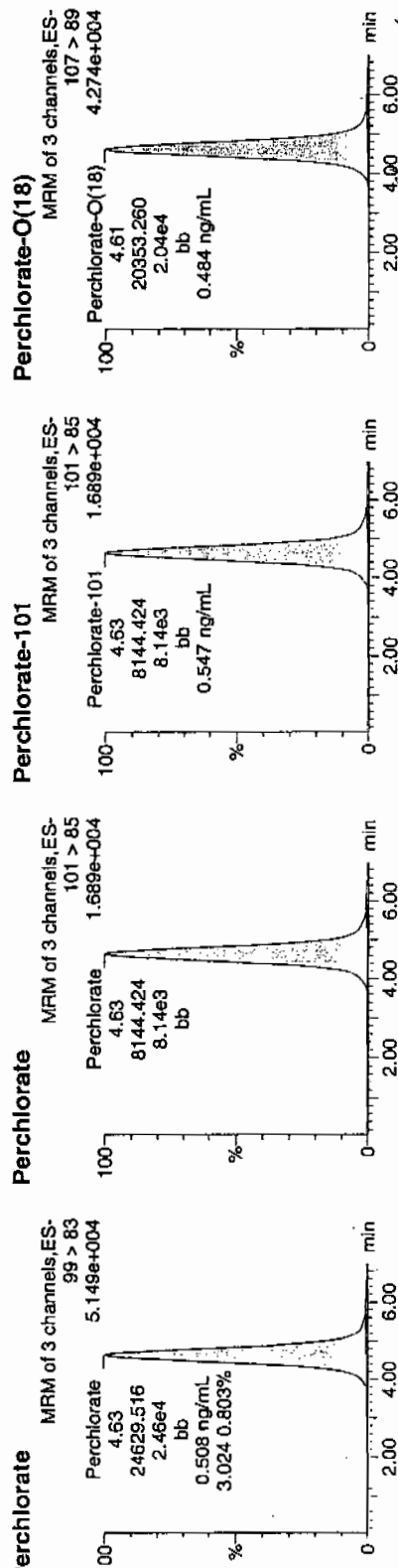
Sample Date: 05-Mar-2010

Sample Time: 14:00:49

Sample ID: WCL100227-06ICV

Sample Label: 1:2,A

Per  
 03-06-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| VCL100227-06ICV | Perchlorate       | 99 > 83  | 4.63 | 24629.516 |       |          |          | 0.5079 | 101.59 | 1.59  | 3539.4... | 3.02      |
| VCL100227-06ICV | Perchlorate-101   | 101 > 85 | 4.63 | 8144.424  | bb    |          |          | 0.5473 | 109.45 | 9.45  | 2045.0... |           |
| VCL100227-06ICV | Perchlorate-O(18) | 107 > 89 | 4.61 | 20353.260 | bb    |          |          | 0.4839 | 96.78  | -3.22 | 3845.3... |           |

MM 03/08/10

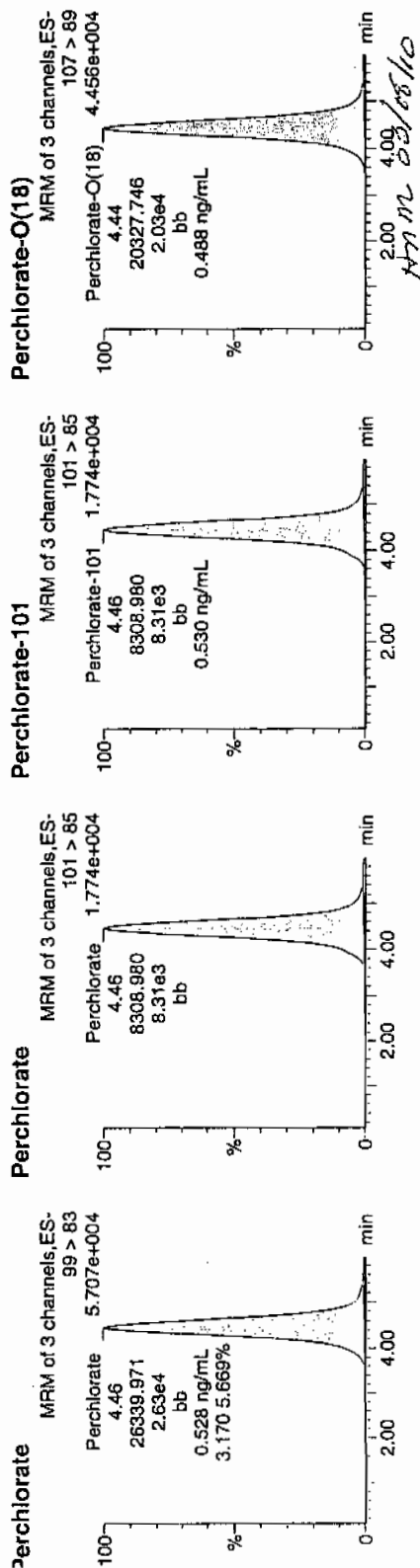
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306009a  
Date: 06-Mar-2010  
Time: 15:47:39  
D: WCL100227-06ICV  
/lat: 1:2,A

*Per*  
*0.528*  
*0.488*  
*030710*



| ID              | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | SN        | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100227-06ICV | Perchlorate       | 99 > 83  | 4.46 | 26339.971 | 26339.971 | bb    |          |          | 0.5282 | 105.64 | 5.64  | 1460.8... | 3.17      |
| WCL100227-06ICV | Perchlorate-101   | 101 > 85 | 4.46 | 8308.980  | 8308.980  | bb    |          |          | 0.5297 | 105.93 | 5.93  | 310.031   |           |
| WCL100227-06ICV | Perchlorate-O(18) | 107 > 89 | 4.44 | 20327.746 | 20327.746 | bb    |          |          | 0.4878 | 97.57  | -2.43 | 842.834   |           |

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Reporting Units: ug/L

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .5   | .5    | 100.84 | 05-MAR-10 16:11 | per0305022a |
| Perchlorate Isotope Ratio |      | 3.08  |        | 05-MAR-10 16:11 | per0305022a |
| Perchlorate-101           | .5   | .53   | 106.73 | 05-MAR-10 16:11 | per0305022a |
| Perchlorate               | .5   | .5    | 100.86 | 05-MAR-10 18:22 | per0305035a |
| Perchlorate Isotope Ratio |      | 3.15  |        | 05-MAR-10 18:22 | per0305035a |
| Perchlorate-101           | .5   | .52   | 104.17 | 05-MAR-10 18:22 | per0305035a |
| Perchlorate               | .5   | .49   | 97.76  | 05-MAR-10 22:45 | per0305061a |
| Perchlorate Isotope Ratio |      | 3.15  |        | 05-MAR-10 22:45 | per0305061a |
| Perchlorate-101           | .5   | .51   | 101.05 | 05-MAR-10 22:45 | per0305061a |
| Perchlorate               | .5   | .49   | 98.25  | 06-MAR-10 00:56 | per0305074a |
| Perchlorate Isotope Ratio |      | 3.17  |        | 06-MAR-10 00:56 | per0305074a |
| Perchlorate-101           | .5   | .51   | 101.04 | 06-MAR-10 00:56 | per0305074a |
| Perchlorate               | .5   | .47   | 93.47  | 06-MAR-10 03:08 | per0305087a |

## Perchlorate Continuing Calibration Verification

**Lab Name:** General Engineering Laboratories

**GEL Job No.(SDG):** 10-1863-1

**Lab Code:** GEL

**Reporting Units:** ug/L

|                           |    |      |        |                 |             |
|---------------------------|----|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio |    | 3.06 |        | 06-MAR-10 03:08 | per0305087a |
| Perchlorate-101           | .5 | .5   | 99.39  | 06-MAR-10 03:08 | per0305087a |
| Perchlorate               | .5 | .46  | 92.94  | 06-MAR-10 04:59 | per0305098a |
| Perchlorate Isotope Ratio |    | 3.07 |        | 06-MAR-10 04:59 | per0305098a |
| Perchlorate-101           | .5 | .49  | 98.61  | 06-MAR-10 04:59 | per0305098a |
| Perchlorate               | .5 | .47  | 93.15  | 06-MAR-10 07:01 | per0305110a |
| Perchlorate Isotope Ratio |    | 3.12 |        | 06-MAR-10 07:01 | per0305110a |
| Perchlorate-101           | .5 | .49  | 97.44  | 06-MAR-10 07:01 | per0305110a |
| Perchlorate               | .5 | .46  | 92.21  | 06-MAR-10 09:12 | per0305123a |
| Perchlorate Isotope Ratio |    | 3.1  |        | 06-MAR-10 09:12 | per0305123a |
| Perchlorate-101           | .5 | .49  | 97.06  | 06-MAR-10 09:12 | per0305123a |
| Perchlorate               | .5 | .52  | 103.44 | 06-MAR-10 17:45 | per0306022a |
| Perchlorate Isotope Ratio |    | 3.23 |        | 06-MAR-10 17:45 | per0306022a |

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Reporting Units: ug/L

|                           |    |      |        |                 |             |
|---------------------------|----|------|--------|-----------------|-------------|
| Perchlorate-101           | .5 | .51  | 101.86 | 06-MAR-10 17:45 | per0306022a |
| Perchlorate               | .5 | .53  | 105.31 | 06-MAR-10 19:43 | per0306035a |
| Perchlorate Isotope Ratio |    | 3.11 |        | 06-MAR-10 19:43 | per0306035a |
| Perchlorate-101           | .5 | .54  | 107.48 | 06-MAR-10 19:43 | per0306035a |
| Perchlorate               | .5 | .5   | 100.64 | 06-MAR-10 21:41 | per0306048a |
| Perchlorate Isotope Ratio |    | 3.1  |        | 06-MAR-10 21:41 | per0306048a |
| Perchlorate-101           | .5 | .52  | 103.12 | 06-MAR-10 21:41 | per0306048a |

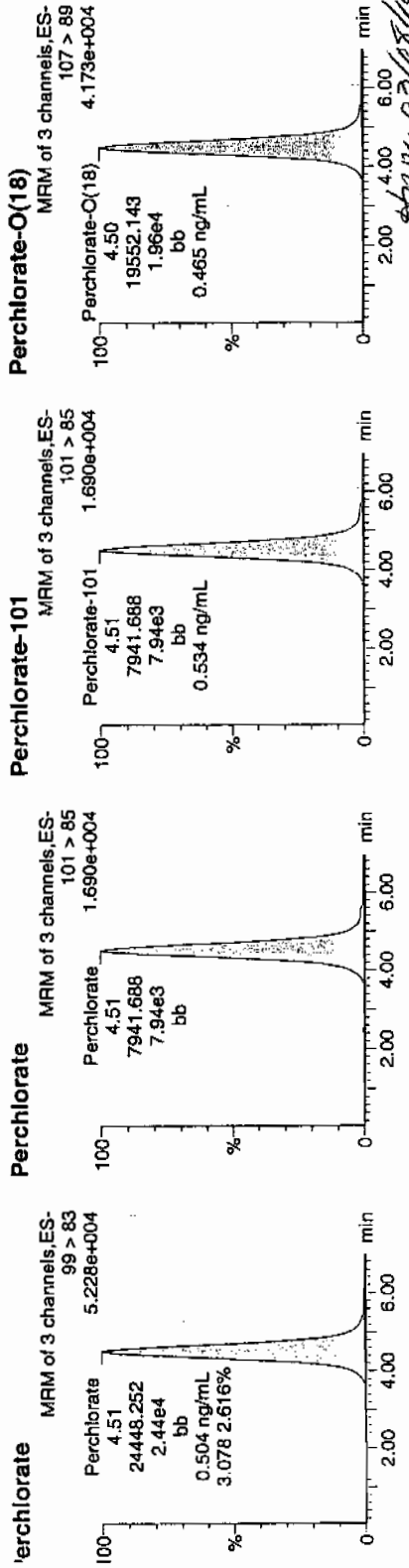
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305022a  
Date: 05-Mar-2010  
Time: 16:11:38  
File: WCL100227-06CCV  
Label: 1:2,A

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and  
07-06-10



| Name            | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | SN        | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100227-06CCV | Perchlorate       | 99 > 83  | 4.51 | 24448.252 | 24448.252 | bb       |          | 0.5042 | 100.84 | 0.84  | 2170.1... | 3.08      |
| WCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.51 | 7941.688  | 7941.688  | bb       |          | 0.5337 | 106.73 | 6.73  | 534.771   |           |
| WCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.50 | 19552.143 | 19552.143 | bb       |          | 0.4649 | 92.97  | -7.03 | 2384.2... |           |

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305035a

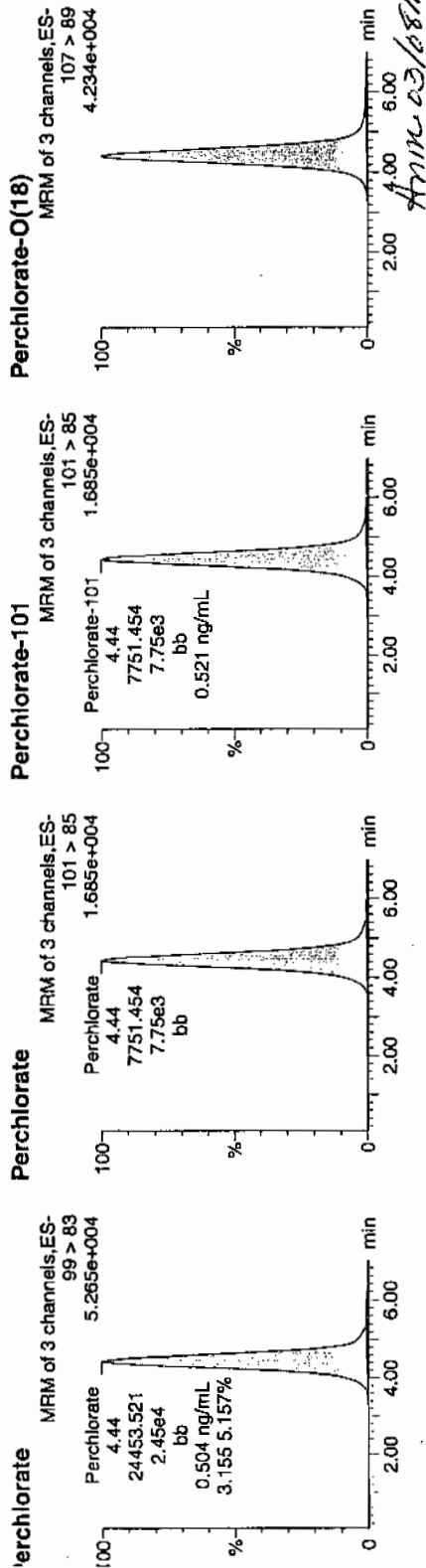
Date: 05-Mar-2010

Time: 18:22:27

ID: WCL100227-06CCV

Label: 1:2,A

Per  
0305035a  
03-06-10



| Name            | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| VCL100227-06CCV | 99 > 83  | 4.44 | 24453.521 | 24453.521 | bb    |          |          | 0.5043 | 100.86 | 0.86  | 2843.3... | 3.15      |
| VCL100227-06CCV | 101 > 85 | 4.44 | 7751.454  | 7751.454  | bb    |          |          | 0.5209 | 104.17 | 4.17  | 512.645   |           |
| VCL100227-06CCV | 107 > 89 | 4.41 | 19898.803 | 19898.803 | bb    |          |          | 0.4731 | 94.62  | -5.38 | 2133.5... |           |

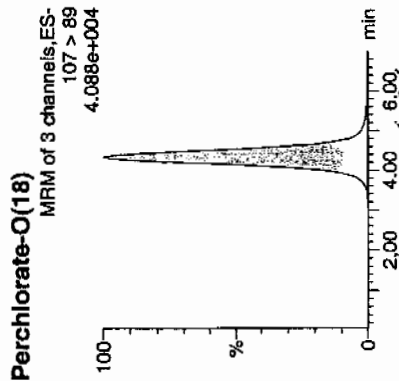
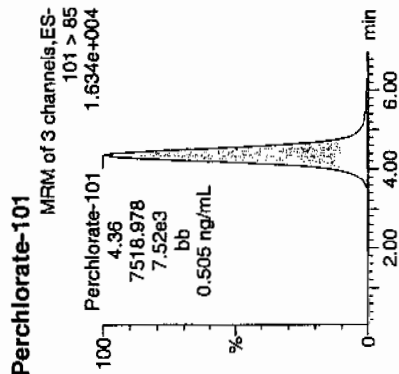
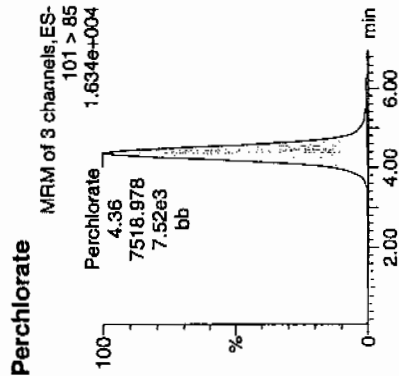
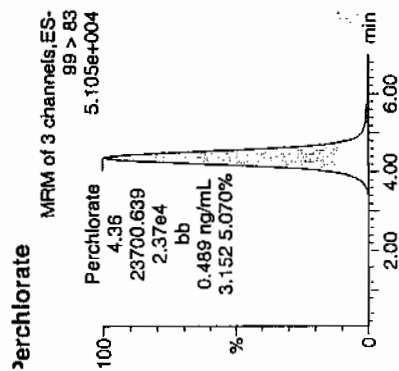
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305061a  
Date: 05-Mar-2010  
Time: 22:45:32  
D: WCL100227-06CCV  
/ial: 1:2,A

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and  
03-06-10



| D | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|---|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
|   | Perchlorate       | 99 > 83  | 4.36 | 23700.639 | 23700.639 | bb    |          |          | 0.4888 | 97.76  | -2.24 | 1855.8... | 3.15      |
|   | Perchlorate-101   | 101 > 85 | 4.36 | 7518.978  | 7518.978  | bb    |          |          | 0.5052 | 101.05 | 1.05  | 619.599   |           |
|   | Perchlorate-O(18) | 107 > 89 | 4.34 | 18982.309 | 18982.309 | bb    |          |          | 0.4513 | 90.26  | -9.74 | 1438.8... |           |



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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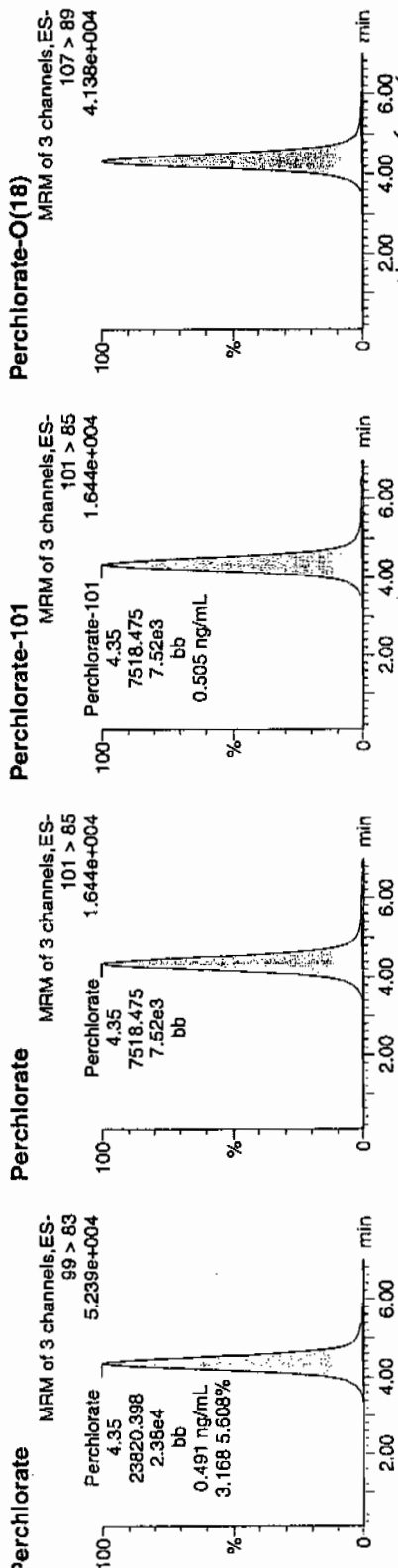
Date: 06-Mar-2010

Time: 00:56:49

D: WCL100227-06CCV

/ial: 1:2,A

*Per* *and* *030610*



| D | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev   | S/N       | Ion Ratio |
|---|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|-----------|-----------|
|   | Perchlorate       | 99 > 83  | 4.35 | 23820.398 | 23820.398 | bb    |          |          | 0.4912 | 98.25  | -1.75  | 1882.8... | 3.17      |
|   | Perchlorate-101   | 101 > 85 | 4.35 | 7518.475  | 7518.475  | bb    |          |          | 0.5052 | 101.04 | 1.04   | 1244.3... |           |
|   | Perchlorate-O(18) | 107 > 89 | 4.34 | 18849.641 | 18849.641 | bb    |          |          | 0.4482 | 89.63  | -10.37 | 3023.5... |           |

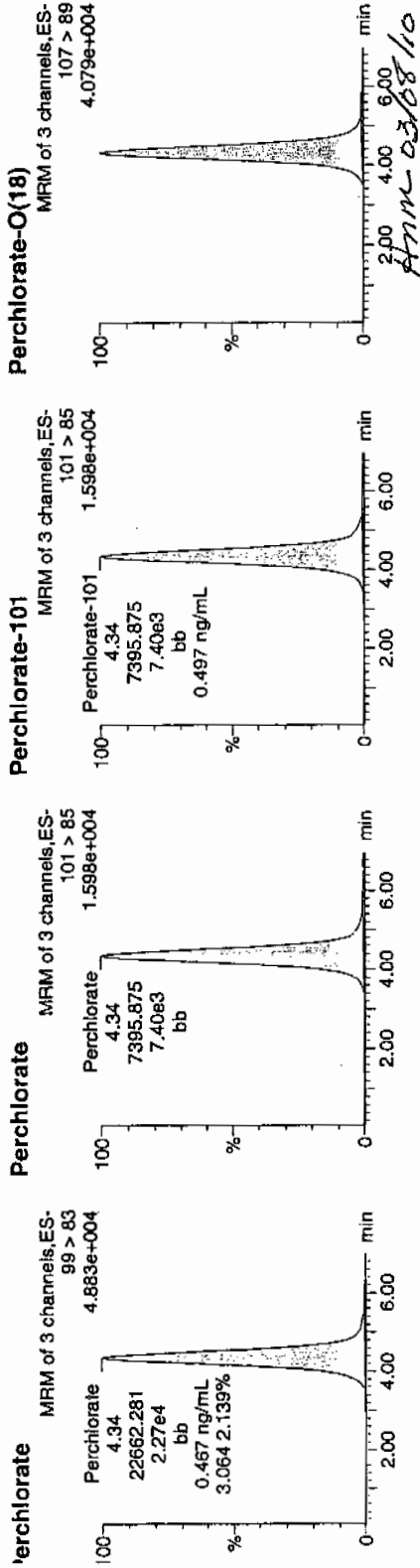
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305087a  
Date: 06-Mar-2010  
Time: 03:08:46  
File: WCL100227-06CCV  
File: 1:2,A

Pure  
0.03  
03-06-10



| Name            | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| WCL100227-06CCV | Perchlorate       | 99 > 83  | 4.34 | 22662.281 | bb    |          |          | 0.4674 | 93.47 | -6.53  | 1088.5... | 3.06      |
| WCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.34 | 7395.875  | bb    |          |          | 0.4970 | 99.39 | -0.61  | 829.416   |           |
| WCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.32 | 18312.898 | bb    |          |          | 0.4354 | 87.08 | -12.92 | 1929.6... |           |

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305098a

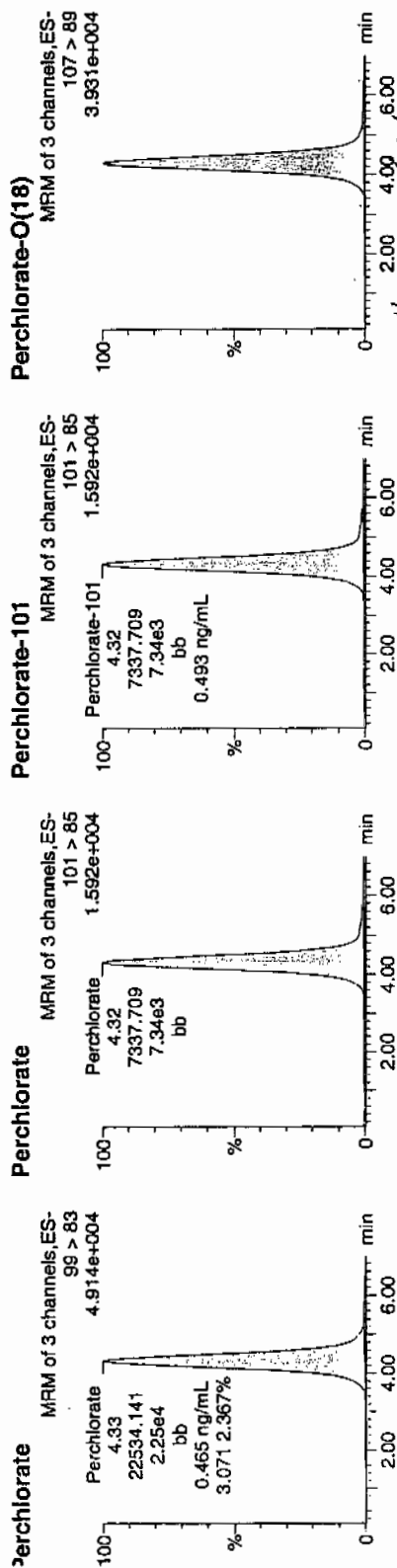
Date: 06-Mar-2010

Time: 04:59:51

D: WCL100227-06CCV

/Inl: 1:2,A

*Per  
03-06-10*



| D               | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| WCL100227-06CCV | Perchlorate       | 99 > 83  | 4.33 | 22534.141 | 22534.141 | bb    |          |          | 0.4647 | 92.94 | -7.06  | 255.249   | 3.07      |
| WCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.32 | 7337.709  | 7337.709  | bb    |          |          | 0.4931 | 98.61 | -1.39  | 1249.7... |           |
| WCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.30 | 18199.572 | 18199.572 | bb    |          |          | 0.4327 | 86.54 | -13.46 | 3457.1... |           |

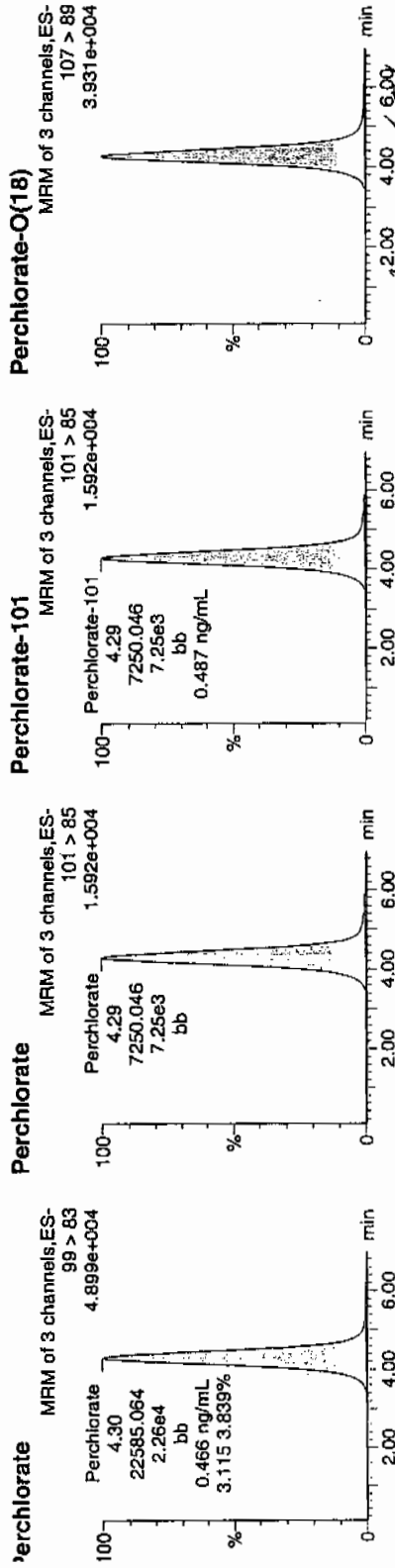
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305110a  
Date: 06-Mar-2010  
Time: 07:01:18  
D: WCL100227-06CCV  
Vial: 1:2,A

*Per  
03-06-10*



| D               | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| WCL100227-06CCV | Perchlorate       | 99 > 83  | 4.30 | 22585.064 | 22585.064 | bb    |          |          | 0.4658 | 93.15 | -6.85  | 2395.1... | 3.12      |
| WCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.29 | 7250.046  | 7250.046  | bb    |          |          | 0.4872 | 97.43 | -2.57  | 732.143   |           |
| WCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.28 | 18011.781 | 18011.781 | bb    |          |          | 0.4282 | 85.65 | -14.35 | 2249.1... |           |

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample: per0305123a

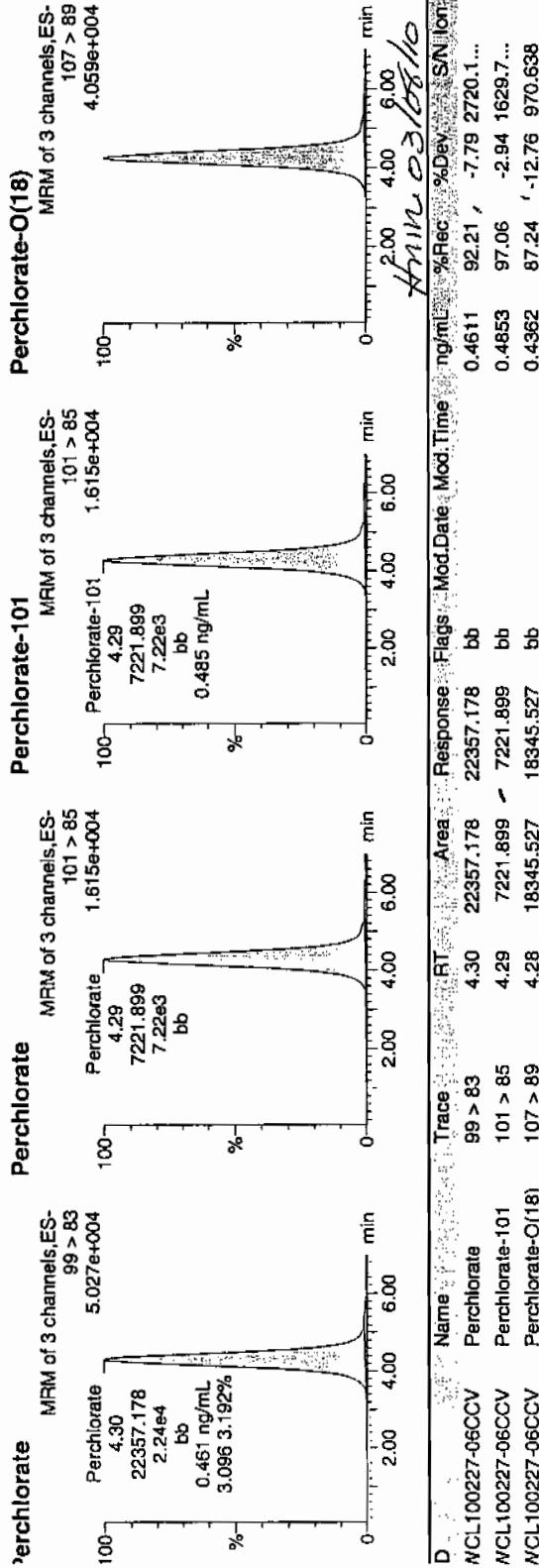
Date: 06-Mar-2010

Time: 09:12:51

D: WCL100227-06CCV

File: 1:2,A

per  
03-06-10



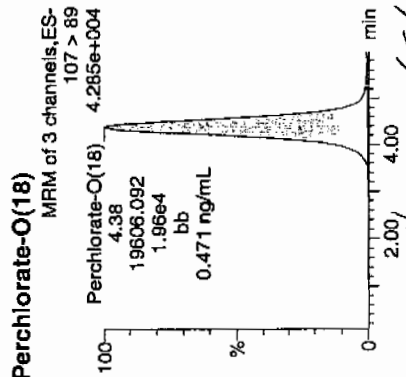
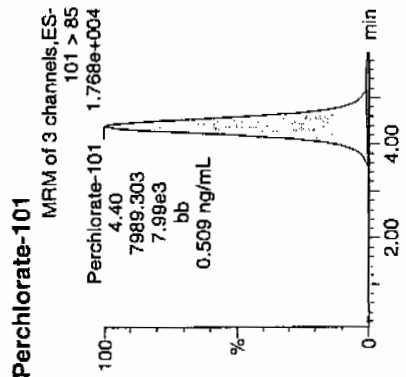
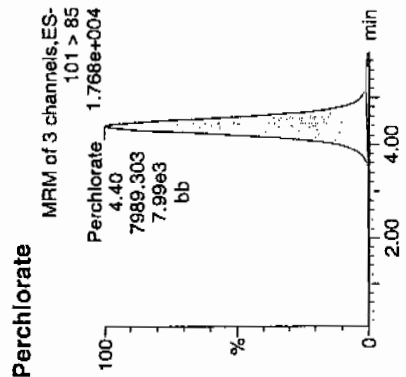
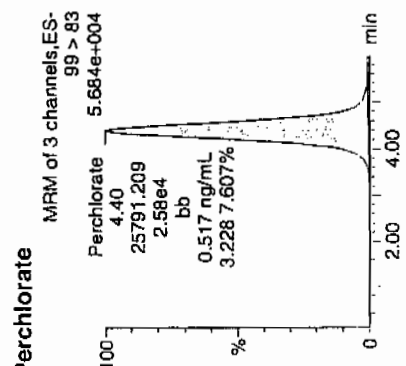
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306022a  
Date: 06-Mar-2010  
Time: 17:45:51  
Job: WCL100227-06CCV  
Vial: 1:2,A

*Perchlorate*  
*03-07-10*



| D | Name            | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|---|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
|   | WCL100227-06CCV | Perchlorate       | 99 > 83  | 4.40 | 25791.209 | 25791.209 | bb       |          | 0.5172 | 103.44 | 3.44  | 2256.3... | 3.23      |
|   | WCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.40 | 7989.303  | 7989.303  | bb       |          | 0.5093 | 101.86 | 1.86  | 1287.2... |           |
|   | WCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.38 | 19606.092 | 19606.092 | bb       |          | 0.4705 | 94.10  | -5.90 | 6406.1... |           |

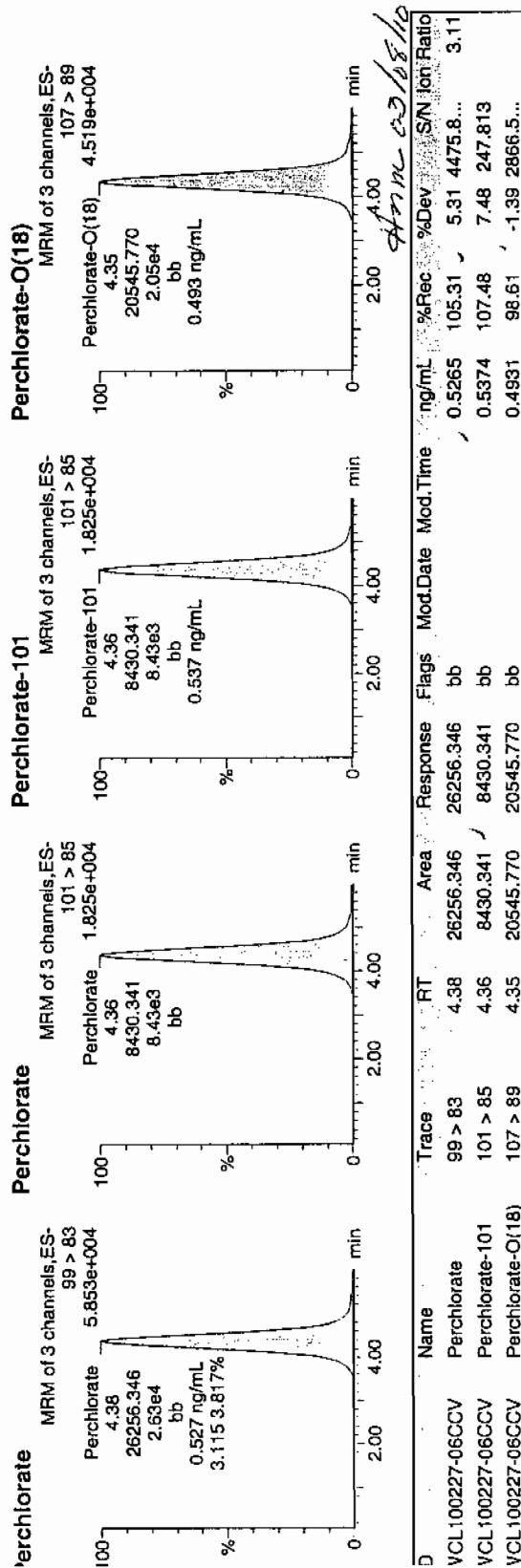
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306035a  
Date: 06-Mar-2010  
Time: 19:43:43  
D: WCL100227-06CCV  
File: 1:2,A

Pure  
33  
03-07-10



| D | Name            | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|---|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
|   | VCL100227-06CCV | Perchlorate       | 99 > 83  | 4.38 | 26256.346 | 26256.346 | bb       |          | 0.5265 | 105.31 | 5.31  | 4475.8... | 3.11      |
|   | VCL100227-06CCV | Perchlorate-101   | 101 > 85 | 4.36 | 8430.341  | 8430.341  | bb       |          | 0.5374 | 107.48 | 7.48  | 247.813   |           |
|   | VCL100227-06CCV | Perchlorate-O(18) | 107 > 89 | 4.35 | 20545.770 | 20545.770 | bb       |          | 0.4931 | 98.61  | -1.39 | 2866.5... |           |

Handwritten: 03/08/10

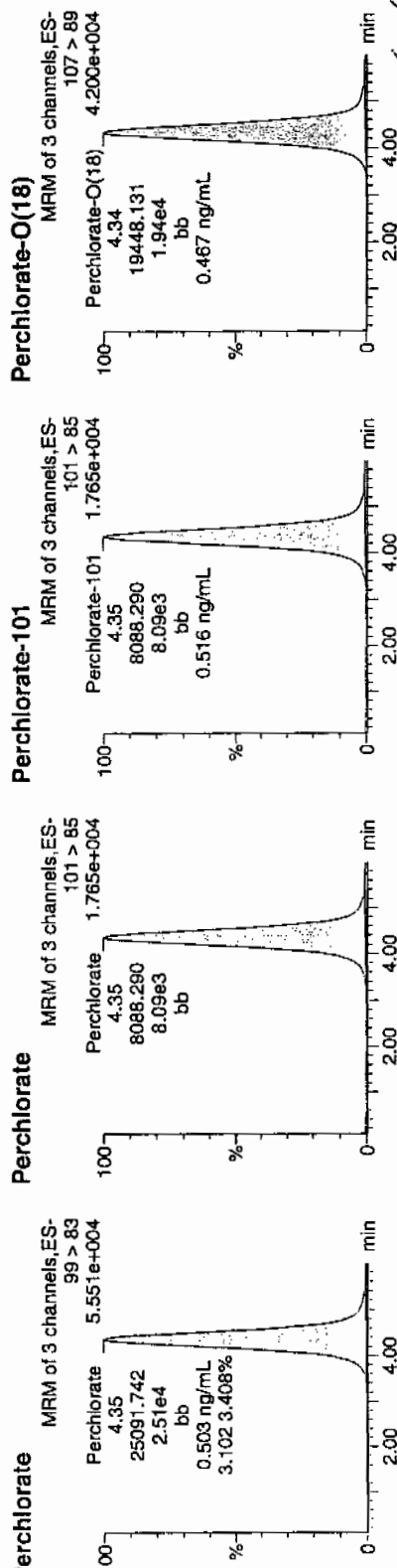
Quantify Sample Report MassLynx 4.0 SP4  
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
 Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306048a  
 Date: 06-Mar-2010  
 Time: 21:41:36  
 File: WCL100227-06CCV  
 Label: 1:2,A

*Perchlorate*



| D | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|---|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
|   | Perchlorate       | 99 > 83  | 4.35 | 25091.742 | 25091.742 | bb    |          |          | 0.5032 | 100.64 | 0.64  | 6712.1... | 3.10      |
|   | Perchlorate-101   | 101 > 85 | 4.35 | 8088.290  | 8088.290  | bb    |          |          | 0.5156 | 103.12 | 3.12  | 2495.8... |           |
|   | Perchlorate-O(18) | 107 > 89 | 4.34 | 19448.131 | 19448.131 | bb    |          |          | 0.4667 | 93.34  | -6.66 | 1228.5... |           |



Perchlorate MDL Verification

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

| Analyte                   | True | Found | %Rec   | Date Analyzed   | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate               | .05  | .05   | 97.42  | 05-MAR-10 14:21 | per0305011a |
| Perchlorate Isotope Ratio |      | 3.39  |        | 05-MAR-10 14:21 | per0305011a |
| Perchlorate-101           | .05  | .05   | 93.73  | 05-MAR-10 14:21 | per0305011a |
| Perchlorate               | .05  | .05   | 94.34  | 05-MAR-10 16:31 | per0305024a |
| Perchlorate Isotope Ratio |      | 2.94  |        | 05-MAR-10 16:31 | per0305024a |
| Perchlorate-101           | .05  | .05   | 104.64 | 05-MAR-10 16:31 | per0305024a |
| Perchlorate               | .05  | .04   | 88.33  | 05-MAR-10 18:42 | per0305037a |
| Perchlorate Isotope Ratio |      | 2.97  |        | 05-MAR-10 18:42 | per0305037a |
| Perchlorate-101           | .05  | .05   | 96.82  | 05-MAR-10 18:42 | per0305037a |
| Perchlorate               | .05  | .04   | 85.02  | 05-MAR-10 23:06 | per0305063a |
| Perchlorate Isotope Ratio |      | 3.14  |        | 05-MAR-10 23:06 | per0305063a |

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

|                           |     |      |       |                 |             |
|---------------------------|-----|------|-------|-----------------|-------------|
| Perchlorate-101           | .05 | .04  | 88.26 | 05-MAR-10 23:06 | per0305063a |
| Perchlorate               | .05 | .04  | 89.21 | 06-MAR-10 01:17 | per0305076a |
| Perchlorate Isotope Ratio |     | 3.29 |       | 06-MAR-10 01:17 | per0305076a |
| Perchlorate-101           | .05 | .04  | 88.45 | 06-MAR-10 01:17 | per0305076a |
| Perchlorate               | .05 | .04  | 85.29 | 06-MAR-10 03:29 | per0305089a |
| Perchlorate Isotope Ratio |     | 3.36 |       | 06-MAR-10 03:29 | per0305089a |
| Perchlorate-101           | .05 | .04  | 82.59 | 06-MAR-10 03:29 | per0305089a |
| Perchlorate               | .05 | .04  | 88.04 | 06-MAR-10 05:20 | per0305100a |
| Perchlorate Isotope Ratio |     | 3.45 |       | 06-MAR-10 05:20 | per0305100a |
| Perchlorate-101           | .05 | .04  | 83.27 | 06-MAR-10 05:20 | per0305100a |
| Perchlorate               | .05 | .04  | 89.34 | 06-MAR-10 07:21 | per0305112a |

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1863-1

Lab Code: GEL

Reporting Units: ug/L

|                           |     |      |        |                 |             |
|---------------------------|-----|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio |     | 3.08 |        | 06-MAR-10 07:21 | per0305112a |
| Perchlorate-101           | .05 | .05  | 94.48  | 06-MAR-10 07:21 | per0305112a |
| Perchlorate               | .05 | .05  | 90.32  | 06-MAR-10 09:33 | per0305125a |
| Perchlorate Isotope Ratio |     | 3.21 |        | 06-MAR-10 09:33 | per0305125a |
| Perchlorate-101           | .05 | .05  | 91.78  | 06-MAR-10 09:33 | per0305125a |
| Perchlorate               | .05 | .05  | 96.41  | 06-MAR-10 16:05 | per0306011a |
| Perchlorate Isotope Ratio |     | 2.95 |        | 06-MAR-10 16:05 | per0306011a |
| Perchlorate-101           | .05 | .05  | 103.98 | 06-MAR-10 16:05 | per0306011a |
| Perchlorate               | .05 | .05  | 97.89  | 06-MAR-10 18:04 | per0306024a |
| Perchlorate Isotope Ratio |     | 2.98 |        | 06-MAR-10 18:04 | per0306024a |
| Perchlorate-101           | .05 | .05  | 104.42 | 06-MAR-10 18:04 | per0306024a |

Form 3

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1863-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

|                           |     |      |       |                 |             |
|---------------------------|-----|------|-------|-----------------|-------------|
| Perchlorate               | .05 | .05  | 99.71 | 06-MAR-10 20:01 | per0306037a |
| Perchlorate Isotope Ratio |     | 3.24 |       | 06-MAR-10 20:01 | per0306037a |
| Perchlorate-101           | .05 | .05  | 97.72 | 06-MAR-10 20:01 | per0306037a |
| Perchlorate               | .05 | .05  | 95.51 | 06-MAR-10 21:59 | per0306050a |
| Perchlorate Isotope Ratio |     | 3.01 |       | 06-MAR-10 21:59 | per0306050a |
| Perchlorate-101           | .05 | .05  | 100.9 | 06-MAR-10 21:59 | per0306050a |

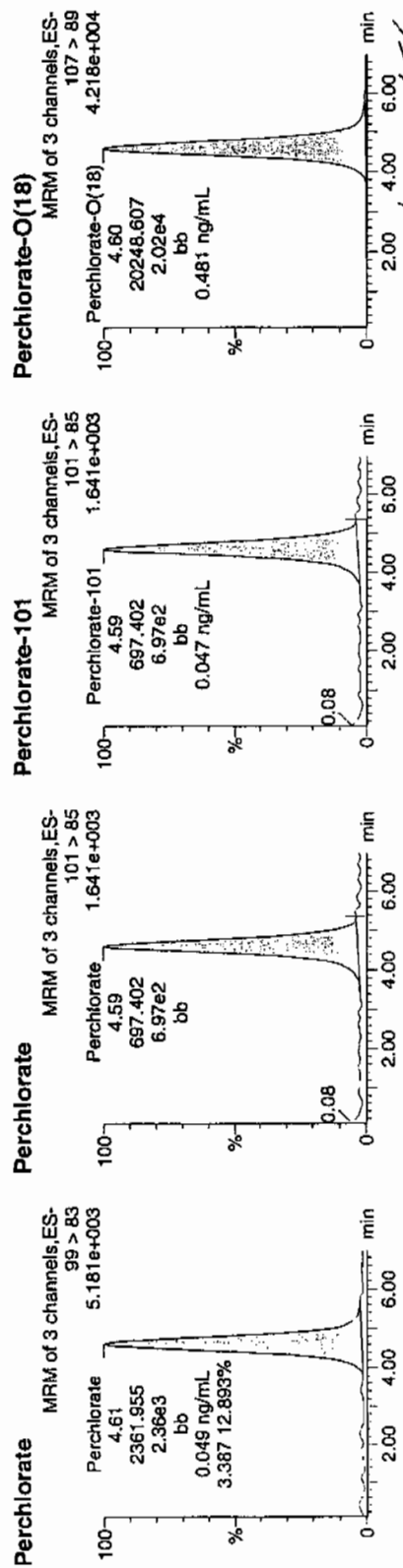
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305011a  
Date: 05-Mar-2010  
Time: 14:21:02  
ID: WCL100227-07CRI  
Vial: 1:2,B

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03-06-10



| ID              | Name              | Trace    | RT   | Area      | Response  | Flags | Mod Date | Mod Time | ng/mL  | %Rec  | %Dev  | SN      | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|---------|-----------|
| WCL100227-07CRI | Perchlorate       | 99 > 83  | 4.61 | 2361.955  | 2361.955  | bb    |          |          | 0.0487 | 97.42 | -2.58 | 227.404 | 3.39      |
| WCL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.59 | 697.402   | 697.402   | bb    |          |          | 0.0469 | 93.73 | -6.27 | 49.831  |           |
| WCL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.60 | 20248.607 | 20248.607 | bb    |          |          | 0.4814 | 96.28 | -3.72 | 305.789 |           |

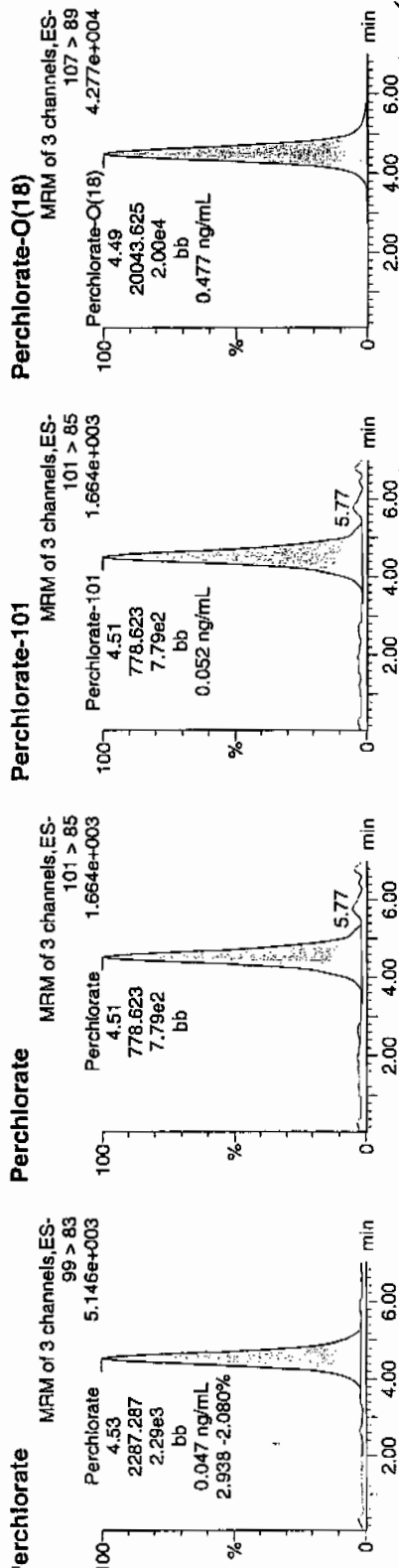
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Acq: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample: per0305024a  
Date: 05-Mar-2010  
Time: 16:31:58  
J: WCL100227-07CRI  
File: 1:2,B

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03-06-10



| Name            | Trace             | RT       | Area | Response  | Flags     | Mod Date | Mod Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|--------|-------|-----------|-----------|
| VCL100227-07CRI | Perchlorate       | 99 > 83  | 4.53 | 2287.287  | 2287.287  | bb       |          | 0.0472 | 94.34  | -5.66 | 193.383   | 2.94      |
| VCL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.51 | 778.623   | 778.623   | bb       |          | 0.0523 | 104.64 | 4.64  | 32.800    |           |
| VCL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.49 | 20043.625 | 20043.625 | bb       |          | 0.4766 | 95.31  | -4.69 | 1708.4... |           |

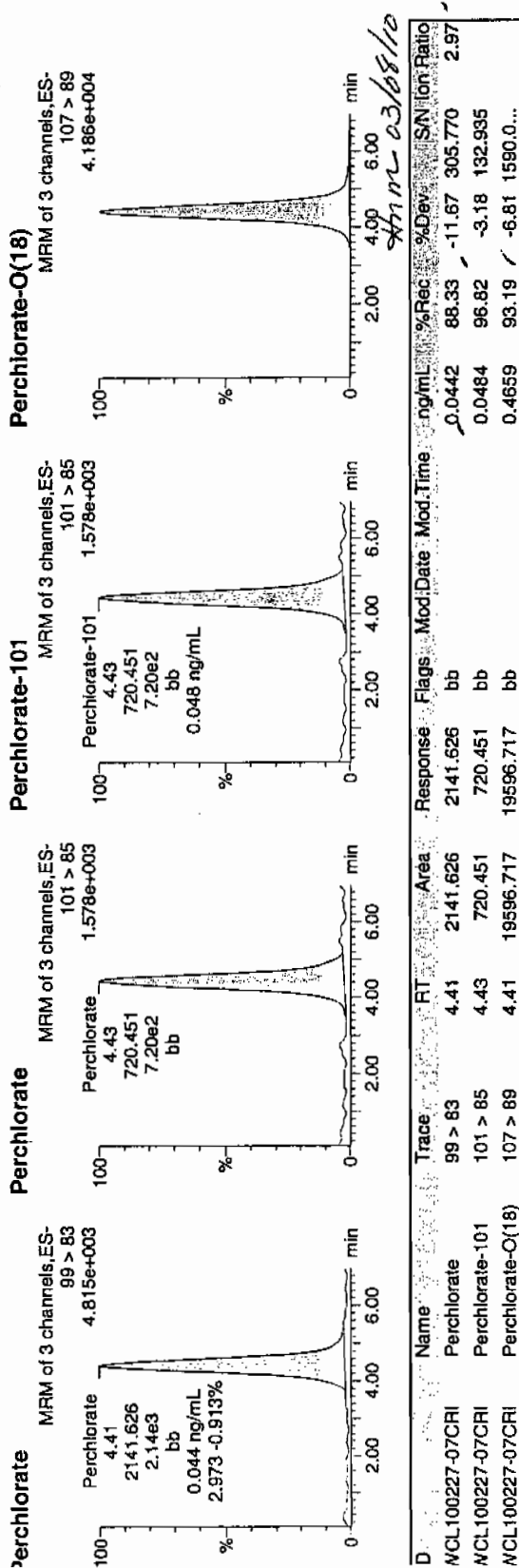
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305037a  
Date: 05-Mar-2010  
Time: 18:42:54  
D: WCL100227-07CRI  
/lal: 1:2,B

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0306-10



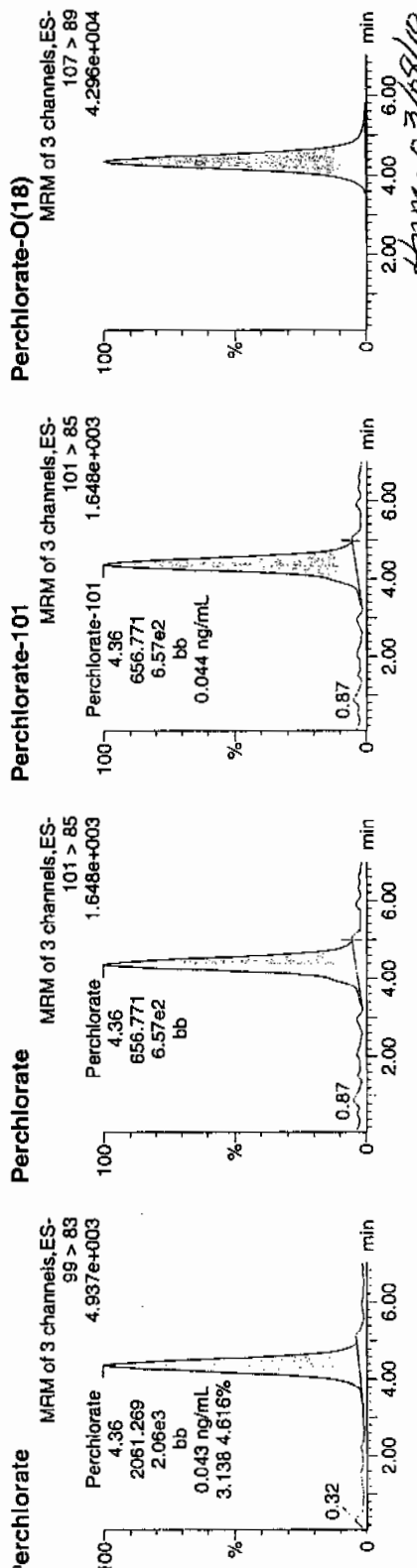
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305063a  
Date: 05-Mar-2010  
Time: 23:06:06  
File: WCL100227-07CRI  
Label: 1:2,B

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33  
03-06-10



| Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| Perchlorate       | 99 > 83  | 4.36 | 2061.269  | 2061.269  | bb    |          |          | 0.0425 | 85.02 | -14.98 | 66.938    | 3.14      |
| Perchlorate-101   | 101 > 85 | 4.36 | 656.771   | 656.771   | bb    |          |          | 0.0441 | 88.26 | -11.74 | 112.286   |           |
| Perchlorate-O(18) | 107 > 89 | 4.34 | 19344.582 | 19344.582 | bb    |          |          | 0.4599 | 91.99 | -8.01  | 2975.6... |           |



Quantify Sample Report MassLynx 4.0 SP4  
 he GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ast Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305076a

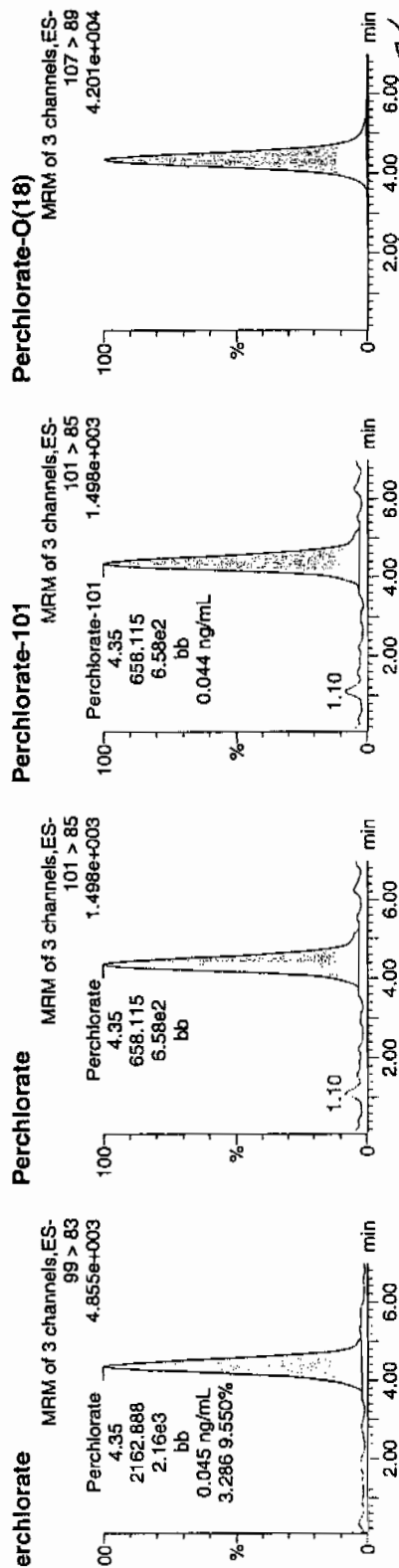
ate: 06-Mar-2010

ime: 01:17:24

); WCL100227-07CRI

ial: 1:2,B

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 and  
 03-06-10



| Name            | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| VCL100227-07CRI | 99 > 83  | 4.35 | 2162.888  | 2162.888  | bb    |          |          | 0.0446 | 89.21 | -10.79 | 223.515   | 3.29      |
| VCL100227-07CRI | 101 > 85 | 4.35 | 658.115   | 658.115   | bb    |          |          | 0.0442 | 88.45 | -11.55 | 76.826    |           |
| VCL100227-07CRI | 107 > 89 | 4.34 | 19454.201 | 19454.201 | bb    |          |          | 0.4625 | 92.51 | -7.49  | 1998.1... |           |

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qtd

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305089a

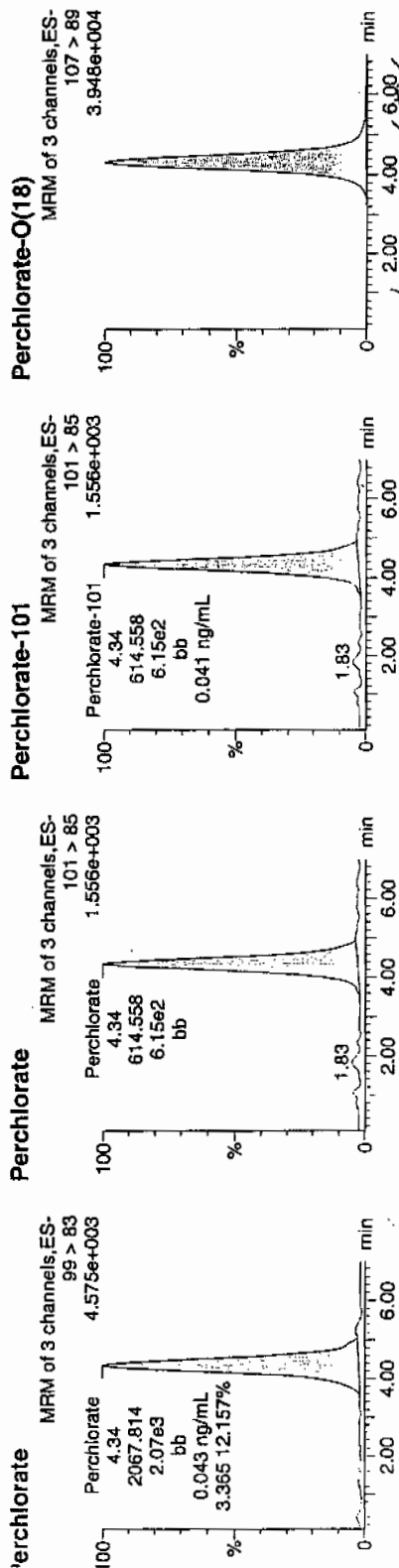
Date: 06-Mar-2010

Time: 03:29:13

File: WCL100227-07CRI

File: 1:2,B

03-06-10



| Name            | Trace             | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| WCL100227-07CRI | Perchlorate       | 4.34 | 2067.814  | 2067.814  | bb    |          |          | 0.0426 | 85.29 | -14.71 | 261.095   | 3.36      |
| WCL100227-07CRI | Perchlorate-101   | 4.34 | 614.558   | 614.558   | bb    |          |          | 0.0413 | 82.59 | -17.41 | 104.546   |           |
| WCL100227-07CRI | Perchlorate-O(18) | 4.33 | 18267.762 | 18267.762 | bb    |          |          | 0.4343 | 86.87 | -13.13 | 1288.7... |           |

Quantify Sample Report MassLynx 4.0 SP4

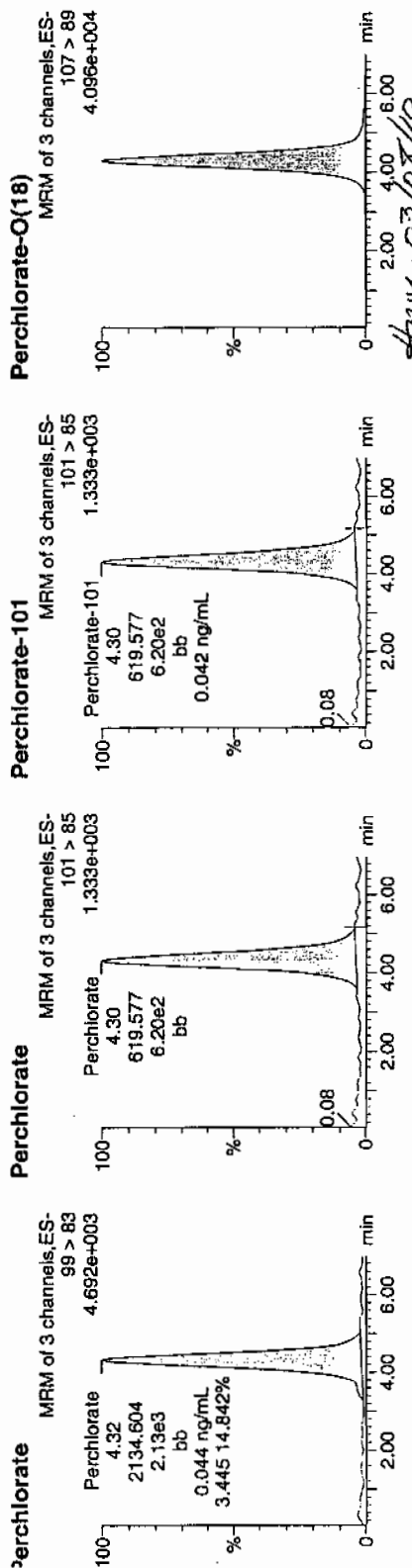
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305100a  
Date: 06-Mar-2010  
Time: 05:20:11  
D: WCL100227-07CRI  
/lal: 1:2,B

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03-06-10



| D | Name            | Trace             | RT       | Area | Response  | Flags     | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|---|-----------------|-------------------|----------|------|-----------|-----------|----------|----------|--------|-------|--------|-----------|-----------|
|   | WCL100227-07CRI | Perchlorate       | 99 > 83  | 4.32 | 2134.604  | 2134.604  | bb       |          | 0.0440 | 88.04 | -11.96 | 100.010   | 3.45      |
|   | WCL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.30 | 619.577   | 619.577   | bb       |          | 0.0416 | 83.27 | -16.73 | 22.917    |           |
|   | WCL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.30 | 18652.084 | 18652.084 | bb       |          | 0.4435 | 88.69 | -11.31 | 1487.4... |           |

IEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305112a

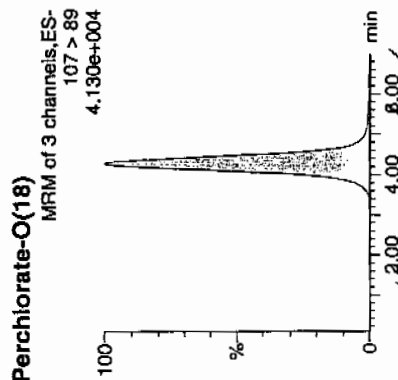
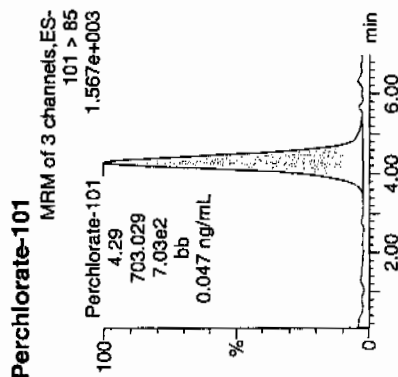
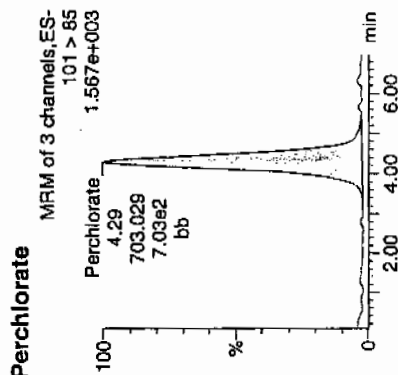
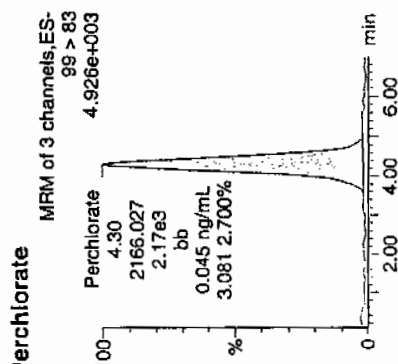
Sample Date: 06-Mar-2010

Sample Time: 07:21:38

Sample ID: WCL100227-07CRI

Sample Label: 1:2,B

Per  
03/06/10



| D | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN        | Ion Ratio |
|---|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
|   | Perchlorate       | 99 > 83  | 4.30 | 2166.027  | 2166.027  | bb    |          |          | 0.0447 | 89.34 | -10.66 | 111.737   | 3.08      |
|   | Perchlorate-101   | 101 > 85 | 4.29 | 703.029   | 703.029   | bb    |          |          | 0.0472 | 94.48 | -5.52  | 132.902   |           |
|   | Perchlorate-O(18) | 107 > 89 | 4.28 | 18598.717 | 18598.717 | bb    |          |          | 0.4422 | 88.44 | -11.56 | 2205.4... |           |

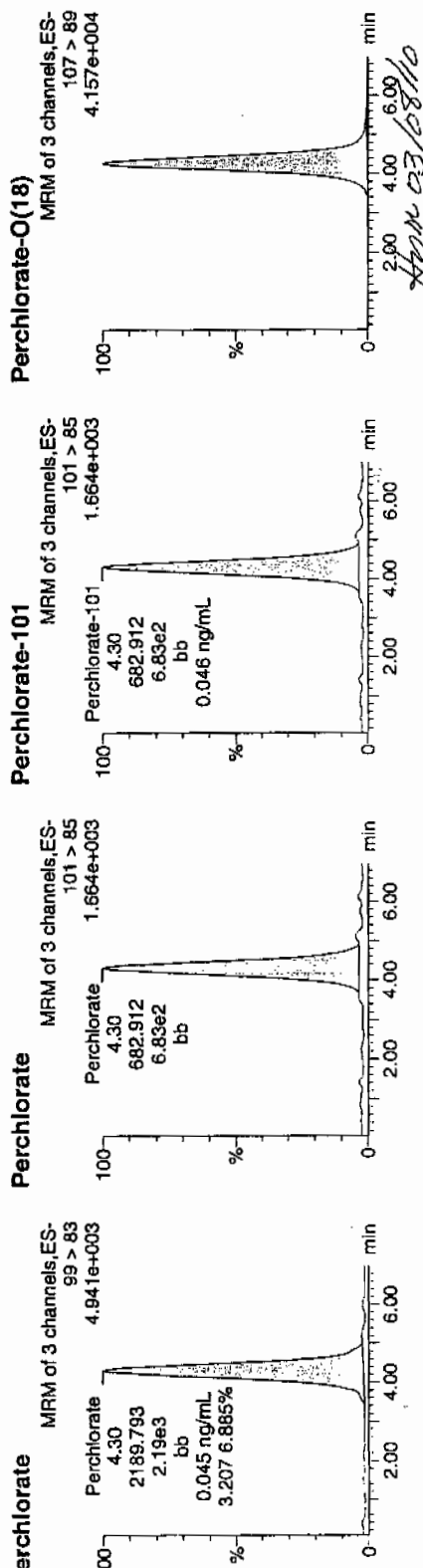
Identify Sample Report MassLynx 4.0 SP4  
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

First Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
 Initiated: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Sample Name: per0305125a  
 Date: 06-Mar-2010  
 Time: 09:33:16  
 File: WCL100227-07CRI  
 Label: 1:2,B

*Per 030510a-10*



| Name            | Trace             | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------------|-------------------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| /CL100227-07CRI | Perchlorate       | 4.30 | 2189.793  | 2189.793  | bb    |          |          | 0.0452 | 90.32 | -9.68  | 217.886   | 3.21      |
| /CL100227-07CRI | Perchlorate-101   | 4.30 | 682.912   | 682.912   | bb    |          |          | 0.0459 | 91.78 | -8.22  | 123.453   |           |
| /CL100227-07CRI | Perchlorate-Q(18) | 4.28 | 18871.918 | 18871.918 | bb    |          |          | 0.4487 | 89.74 | -10.26 | 3389.5... |           |

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306011a

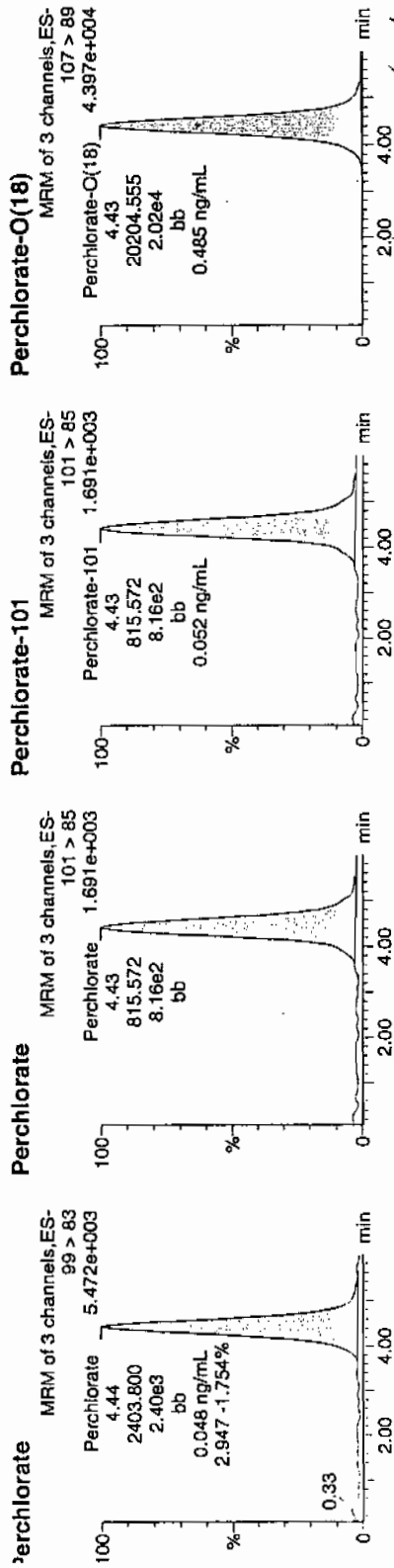
Date: 06-Mar-2010

Time: 16:05:59

D: WCL100227-07CRI

Vial: 1:2,B

*Per*  
*03-07-10*



| D | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|---|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
|   | Perchlorate       | 99 > 83  | 4.44 | 2403.800  | 2403.800  | bb    |          |          | 0.0482 | 96.41  | -3.59 | 30.940    | 2.95      |
|   | Perchlorate-101   | 101 > 85 | 4.43 | 815.572   | 815.572   | bb    |          |          | 0.0520 | 103.98 | 3.98  | 105.676   |           |
|   | Perchlorate-O(18) | 107 > 89 | 4.43 | 20204.555 | 20204.555 | bb    |          |          | 0.4849 | 96.97  | -3.03 | 3173.0... |           |

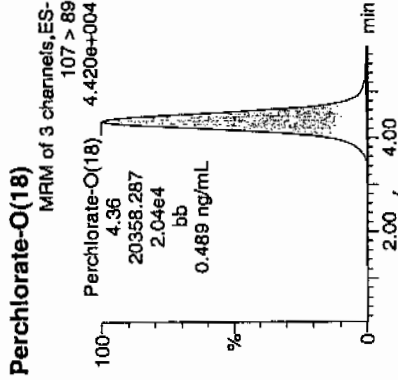
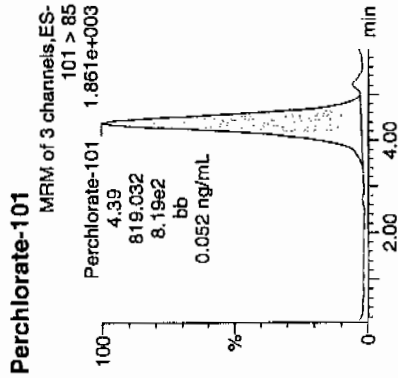
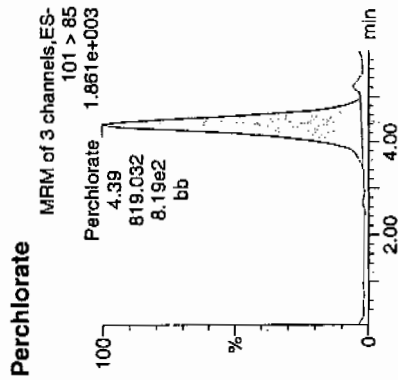
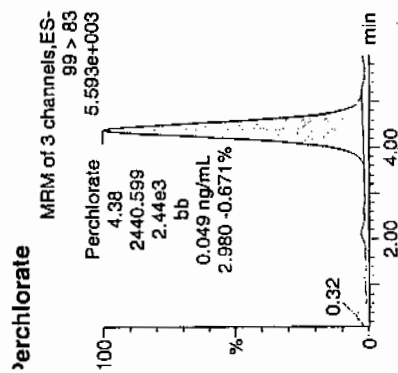
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306024a  
Date: 06-Mar-2010  
Time: 18:04:03  
D: WCL100227-07CRI  
/tai: 1:2,B

03-07-10



| D               | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec   | %Dev  | S/N       | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100227-07CRI | Perchlorate       | 99 > 83  | 4.38 | 2440.599  | 2440.599  | bb    |          |          | 0.0489 | 97.89  | -2.11 | 254.348   | 2.98      |
| WCL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.39 | 819.032   | 819.032   | bb    |          |          | 0.0522 | 104.42 | 4.42  | 96.508    |           |
| WCL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.36 | 20358.287 | 20358.287 | bb    |          |          | 0.4886 | 97.71  | -2.29 | 1453.1... |           |

Shim 03/07/10

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Sample Name: per0306037a

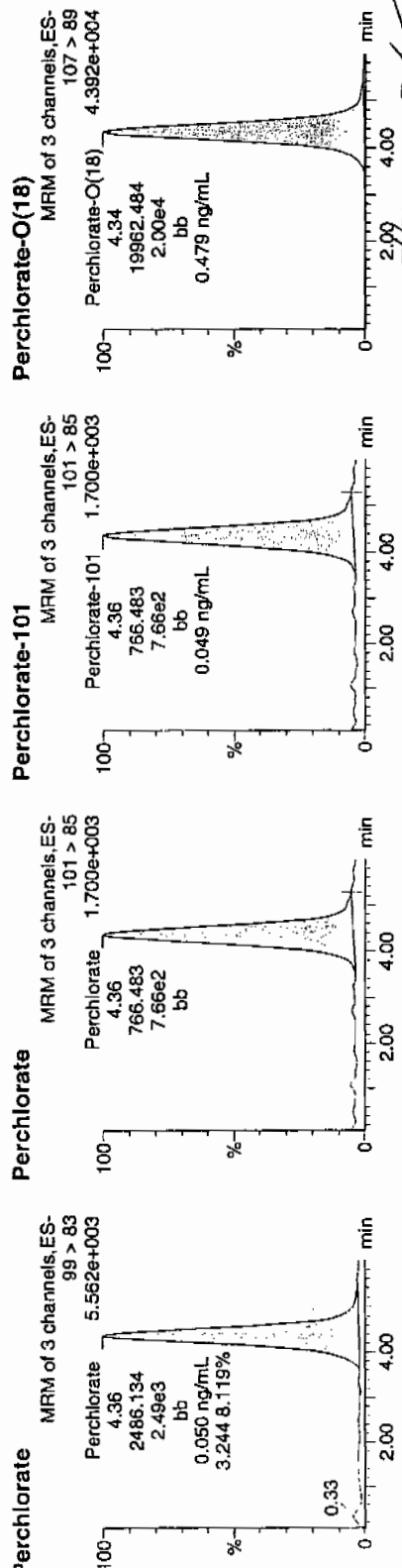
Date: 06-Mar-2010

Time: 20:01:55

Sample ID: WCL100227-07CRI

Vial: 1:2,B

Per  
032  
3-07-10



| D               | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev  | SN        | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| WCL100227-07CRI | Perchlorate       | 99 > 83  | 4.36 | 2486.134  | 2486.134  | bb    |          |          | 0.0499 | 99.71 | -0.29 | 46.862    | 3.24      |
| WCL100227-07CRI | Perchlorate-101   | 101 > 85 | 4.36 | 766.483   | 766.483   | bb    |          |          | 0.0489 | 97.72 | -2.28 | 9.797     |           |
| WCL100227-07CRI | Perchlorate-O(18) | 107 > 89 | 4.34 | 19962.484 | 19962.484 | bb    |          |          | 0.4791 | 95.81 | -4.19 | 1837.9... |           |



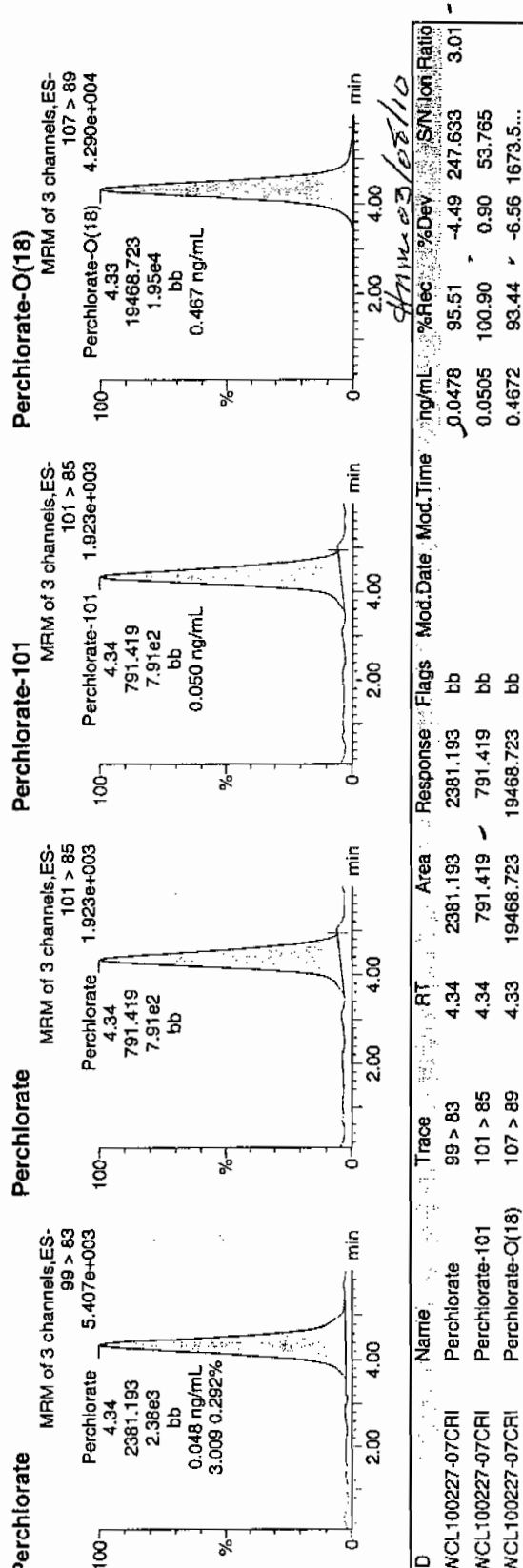
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time  
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306050a  
Date: 06-Mar-2010  
Time: 21:59:56  
D: WCL100227-07CRI  
File: 1:2,B

*Per  
WCL  
03-07-10*



WCL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

# QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 02-MAR-10

GEL Job No (SDG): 10-1863-1

GEL Sample ID: 1202049069

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 07:31 | per0305113a |
|            | Perchlorate Isotope Ratio |     |    |       |       |   | 1               | 06-MAR-10 07:31 | per0305113a |
| 14797-73-0 | Perchlorate-101           | .05 | .2 | 0.050 | ug/L  | U | 1               | 06-MAR-10 07:31 | per0305113a |
|            | Perchlorate-O(18)         |     |    | 0.436 | ug/L  |   | 1               | 06-MAR-10 07:31 | per0305113a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids  
Aliquot

Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305113a

Date: 06-Mar-2010

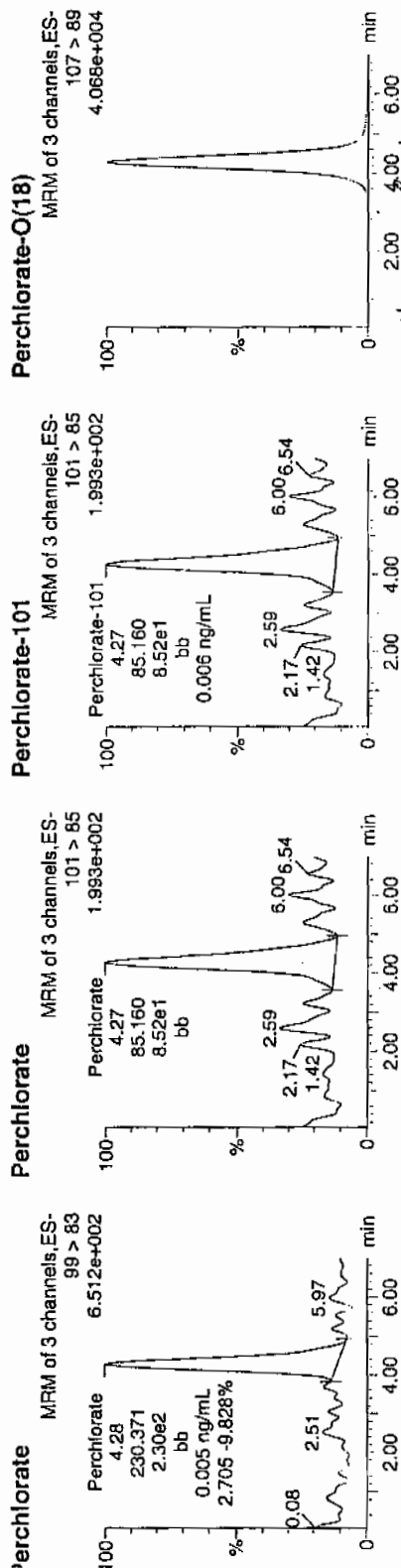
Time: 07:31:49

ID: 1202049069

File: 3:1,A

0.005  
0.006-10

1202049069 | 1202049069 | 1202049069



| ID         | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 1202049069 | Perchlorate       | 99 > 83  | 4.28 | 230.371   | 230.371   | bb    |          |          | 0.0048 |       |        | 29.862    | 2.71      |
| 1202049069 | Perchlorate-101   | 101 > 85 | 4.27 | 85.160    | 85.160    | bb    |          |          | 0.0057 |       |        | 20.845    |           |
| 1202049069 | Perchlorate-O(18) | 107 > 89 | 4.29 | 18340.451 | 18340.451 | bb    |          |          | 0.4361 | 87.21 | -12.79 | 2029.6... |           |

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 02-MAR-10

GEL Job No (SDG): 10-1863-1

GEL Sample ID: 1202049070

Date Filtered: 02-MAR-10

Injection Volume (uL): 20

%Solids:

| CAS No.    | Analyte <sup>^</sup>      | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed   | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate               | .05 | .2 | 0.180 | ug/L  | J | 1               | 06-MAR-10 07:42 | per0305114a |
|            | Perchlorate Isotope Ratio |     |    | 3.12  |       |   | 1               | 06-MAR-10 07:42 | per0305114a |
| 14797-73-0 | Perchlorate-101           | .05 | .2 | 0.188 | ug/L  | J | 1               | 06-MAR-10 07:42 | per0305114a |
|            | Perchlorate-O(18)         |     |    | 0.416 | ug/L  |   | 1               | 06-MAR-10 07:42 | per0305114a |

<sup>^</sup> When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

\*Concentration =

Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$  X  $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4  
GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305114a

ate: 06-Mar-2010

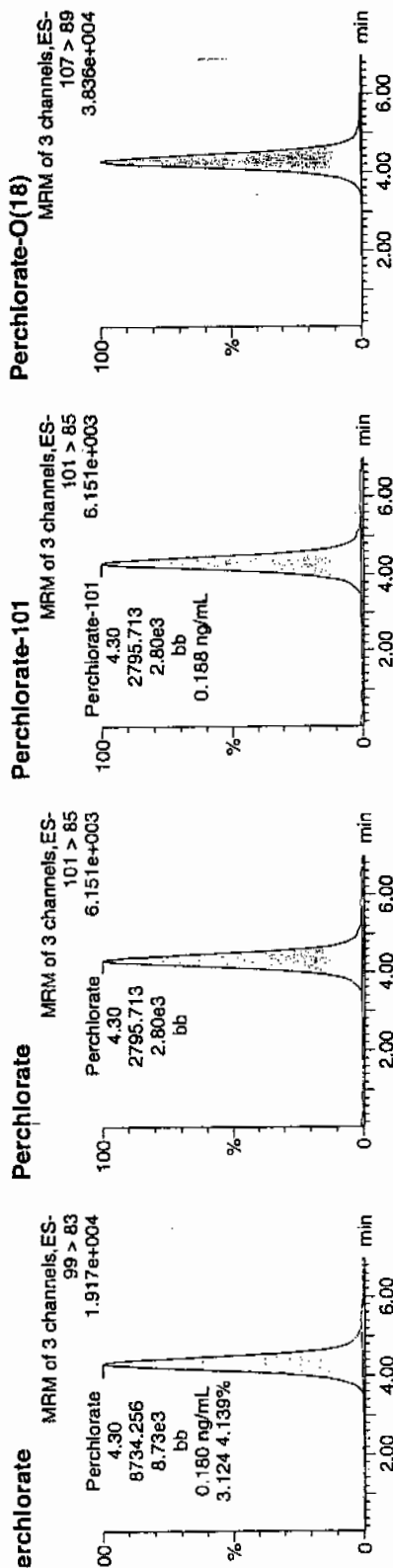
ime: 07:42:03

i: 1202049070

ia: 3:1,B

LANU | 955727 | L22 | L25 | 11

W3  
03-06-10



| Name      | Trace             | RT       | Area | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | S/N       | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-------|----------|----------|--------|-------|--------|-----------|-----------|
| 202049070 | Perchlorate       | 99 > 83  | 4.30 | 8734.256  | bb    |          |          | 0.1801 | 90.06 | -9.94  | 2607.4... | 3.12      |
| 202049070 | Perchlorate-101   | 101 > 85 | 4.30 | 2795.713  | bb    |          |          | 0.1879 | 93.93 | -6.07  | 624.279   |           |
| 202049070 | Perchlorate-O(18) | 107 > 89 | 4.29 | 17497.846 | bb    |          |          | 0.4160 | 83.20 | -16.80 | 1738.9... |           |

9734.256  
484897  
= 0.1801  
HMM 03/09/10

# MISCELLANEOUS DATA

# Prep Logbook

## Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 955726 Verified by:  
 Analyst: Kaylie Westmoreland  
 Method: SW846 6850 Modified  
 Lab SOP: GL-OA-E-067 REV# 6  
 Instrument: MicroMass Quattro Ultima

| Sample ID                  | Run Date             | Initial Volume (mL) | Final Volume (mL) | Prepped Factor (mL/mL) |
|----------------------------|----------------------|---------------------|-------------------|------------------------|
| 1202049069 MB              | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 1202049070 LCS             | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247127001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247130001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247139001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 1202049071 MS (247139001)  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 1202049072 MSD (247139001) | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247179001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247182001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247183001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247192001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247203001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247250001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247250002                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247256001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247256002                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247322001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247322002                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247335001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247339001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247339002                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 247350001                  | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |
| 1202049073 LCS             | 02-MAR-2010 14:28:00 | 10                  | 10                | 1                      |

| Type | Sample ID  | Description                                       | Serial Number  | Spike Amt | Units | Comments  |
|------|------------|---|----------------|-----------|-------|---|
| KS   | 1202049073 | 10 ug/L ICV/CCV Second Source                     | UCL100210-02.2 | .2        | mL    | Desalting cartridges used: 100217-1-H & 100209-1-Ba |
| LS   | 1202049070 | 10 ug/L ICV/CCV Second Source                     | UCL100210-02.2 | .2        | mL    |   |
| MS   | 1202049071 | 10 ug/L ICV/CCV Second Source                     | UCL100210-02.2 | .2        | mL    |   |
| MSD  | 1202049072 | 10 ug/L ICV/CCV Second Source                     | UCL100210-02.2 | .2        | mL    |   |
| BLNT | All        | 500 ppm Carbonate, Bicarbonate, Chloride, Sulfate | 1267890        | 10        | mL    |   |
| BLNT | All        | 0.25I HPLC Grade Water                            | 1271949        | 10        | mL    |   |



# GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/05/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per030510a  
 Initial Calibration Date: 03/05/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100126-01  
 Mobile Phase Lot#: 1278688, 1271949  
 Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *HNH*  
 Date: *03/09/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100227-06

| DataFile    | Sample     | Analyst | Injection Date | Batch  | SDG     | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|----------------|--------|---------|----------|--------|----------|---------|
| per0305001a | IPB001     | CWW     | 3/5/2010 12:39 |        |         | 1        |        | USE      | B       |
| per0305002a | IPB001     | CWW     | 3/5/2010 12:50 |        |         | 1        |        | USE      | B       |
| per0305003a | WCLICAL-01 | CWW     | 3/5/2010 13:00 |        |         | 1        |        | USE      | I       |
| per0305004a | WCLICAL-02 | CWW     | 3/5/2010 13:10 |        |         | 1        |        | USE      | I       |
| per0305005a | WCLICAL-03 | CWW     | 3/5/2010 13:20 |        |         | 1        |        | USE      | I       |
| per0305006a | WCLICAL-04 | CWW     | 3/5/2010 13:30 |        |         | 1        |        | USE      | I       |
| per0305007a | WCLICAL-05 | CWW     | 3/5/2010 13:40 |        |         | 1        |        | USE      | I       |
| per0305008a | IPB002     | CWW     | 3/5/2010 13:50 |        |         | 1        |        | USE      | B       |
| per0305009a | WCLICV     | CWW     | 3/5/2010 14:00 |        |         | 1        |        | USE      | C       |
| per0305010a | IPB003     | CWW     | 3/5/2010 14:11 |        |         | 1        |        | USE      | B       |
| per0305011a | WCLCRI     | CWW     | 3/5/2010 14:21 |        |         | 1        |        | USE      | C       |
| per0305012a | 1202049034 | CWW     | 3/5/2010 14:31 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305013a | 1202049035 | CWW     | 3/5/2010 14:41 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305014a | 1202049038 | CWW     | 3/5/2010 14:51 | 955706 | VARIOUS | 1        | LANL   | USE      | S       |
| per0305015a | 247141001  | CWW     | 3/5/2010 15:01 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305016a | 247141002  | CWW     | 3/5/2010 15:11 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305017a | 247141003  | CWW     | 3/5/2010 15:21 | 955706 | 10-1859 | 1        | LANL   | USE      | S       |
| per0305018a | 247172001  | CWW     | 3/5/2010 15:31 | 955706 | 10-1866 | 1        | LANL   | USE      | S       |
| per0305019a | 247172002  | CWW     | 3/5/2010 15:41 | 955706 | 10-1866 | 1        | LANL   | USE      | S       |
| per0305020a | 247178001  | CWW     | 3/5/2010 15:51 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305021a | 247178002  | CWW     | 3/5/2010 16:01 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305022a | WCLCCV     | CWW     | 3/5/2010 16:11 |        |         | 1        |        | USE      | C       |
| per0305023a | IPB004     | CWW     | 3/5/2010 16:21 |        |         | 1        |        | USE      | B       |
| per0305024a | WCLCRI     | CWW     | 3/5/2010 16:31 |        |         | 1        |        | USE      | C       |
| per0305025a | 1202049036 | CWW     | 3/5/2010 16:42 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305026a | 1202049037 | CWW     | 3/5/2010 16:52 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305027a | 247178003  | CWW     | 3/5/2010 17:02 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305028a | 247178004  | CWW     | 3/5/2010 17:12 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |
| per0305029a | 247178005  | CWW     | 3/5/2010 17:22 | 955706 | 10-1861 | 1        | LANL   | USE      | S       |

|             |            |     |                |        |           |   |      |         |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|---------|---|
| per0305030a | 247178006  | CWW | 3/5/2010 17:32 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305031a | 247178007  | CWW | 3/5/2010 17:42 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305032a | 247178008  | CWW | 3/5/2010 17:52 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305033a | 247178009  | CWW | 3/5/2010 18:02 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305034a | 247178010  | CWW | 3/5/2010 18:12 | 955706 | 10-1861   | 1 | LANL | USE     | S |
| per0305035a | WCLCCV     | CWW | 3/5/2010 18:22 |        |           | 1 |      | USE     | C |
| per0305036a | IPB005     | CWW | 3/5/2010 18:32 |        |           | 1 |      | USE     | B |
| per0305037a | WCLCRI     | CWW | 3/5/2010 18:42 |        |           | 1 |      | USE     | C |
| per0305038a | 247178011  | CWW | 3/5/2010 18:53 | 955706 | 10-1861   | 1 | LANL | DUSE-RA | S |
| per0305039a | 247197001  | CWW | 3/5/2010 19:03 | 955706 | 10-1865-1 | 1 | LANL | DUSE-RA | S |
| per0305040a | 247197002  | CWW | 3/5/2010 19:13 | 955706 | 10-1865-1 | 1 | LANL | DUSE-RA | S |
| per0305041a | IPB006     | CWW | 3/5/2010 19:23 |        |           | 1 |      | DUSE-RA | B |
| per0305042a | 1202062446 | CWW | 3/5/2010 19:33 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305043a | 1202062447 | CWW | 3/5/2010 19:43 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305044a | 1202062450 | CWW | 3/5/2010 19:53 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305045a | 248683001  | CWW | 3/5/2010 20:03 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305046a | 1202062448 | CWW | 3/5/2010 20:13 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305047a | 1202062449 | CWW | 3/5/2010 20:23 | 961557 | 248683    | 1 | LANL | DUSE-RA | S |
| per0305048a | WCLCCV     | CWW | 3/5/2010 20:34 |        |           | 1 |      | DUSE    | C |
| per0305049a | IPB007     | CWW | 3/5/2010 20:44 |        |           | 1 |      | DUSE    | B |
| per0305050a | WCLCRI     | CWW | 3/5/2010 20:54 |        |           | 1 |      | DUSE    | C |
| per0305051a | 1202049039 | CWW | 3/5/2010 21:04 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305052a | 1202049040 | CWW | 3/5/2010 21:14 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305053a | 1202049043 | CWW | 3/5/2010 21:24 | 955709 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0305054a | 247187001  | CWW | 3/5/2010 21:34 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305055a | 247187002  | CWW | 3/5/2010 21:45 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305056a | 247187003  | CWW | 3/5/2010 21:55 | 955709 | 10-1867   | 1 | LANL | DUSE-RA | S |
| per0305057a | 247188001  | CWW | 3/5/2010 22:05 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305058a | 1202049041 | CWW | 3/5/2010 22:15 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305059a | 1202049042 | CWW | 3/5/2010 22:25 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305060a | 247188002  | CWW | 3/5/2010 22:35 | 955709 | 10-1863   | 1 | LANL | DUSE-RA | S |
| per0305061a | WCLCCV     | CWW | 3/5/2010 22:45 |        |           | 1 |      | USE     | C |
| per0305062a | IPB008     | CWW | 3/5/2010 22:55 |        |           | 1 |      | USE     | B |
| per0305063a | WCLCRI     | CWW | 3/5/2010 23:06 |        |           | 1 |      | USE     | C |
| per0305064a | 247188003  | CWW | 3/5/2010 23:16 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0305065a | 247188004  | CWW | 3/5/2010 23:26 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0305066a | 247188005  | CWW | 3/5/2010 23:36 | 955709 | 10-1863   | 1 | LANL | USE     | S |

|             |            |     |                |        |           |   |      |     |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|-----|---|
| per0305067a | 247188006  | CWW | 3/5/2010 23:46 | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305068a | 247188007  | CWW | 3/5/2010 23:56 | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305069a | 247188008  | CWW | 3/6/2010 0:06  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305070a | 247188009  | CWW | 3/6/2010 0:16  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305071a | 247188010  | CWW | 3/6/2010 0:26  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305072a | 247188011  | CWW | 3/6/2010 0:36  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305073a | 247188012  | CWW | 3/6/2010 0:46  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305074a | WCLCCV     | CWW | 3/6/2010 0:56  |        |           | 1 |      | USE | C |
| per0305075a | IPB009     | CWW | 3/6/2010 1:07  |        |           | 1 |      | USE | B |
| per0305076a | WCLCRI     | CWW | 3/6/2010 1:17  |        |           | 1 |      | USE | C |
| per0305077a | 247188013  | CWW | 3/6/2010 1:27  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305078a | 247188014  | CWW | 3/6/2010 1:37  | 955709 | 10-1863   | 1 | LANL | USE | S |
| per0305079a | IPB010     | CWW | 3/6/2010 1:47  |        |           | 1 |      | USE | B |
| per0305080a | 1202049044 | CWW | 3/6/2010 1:58  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305081a | 1202049045 | CWW | 3/6/2010 2:08  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305082a | 1202049048 | CWW | 3/6/2010 2:18  | 955712 | VARIOUS   | 1 | LANL | USE | S |
| per0305083a | 247181001  | CWW | 3/6/2010 2:28  | 955712 | 10-1871-1 | 1 | LANL | USE | S |
| per0305084a | 247181002  | CWW | 3/6/2010 2:38  | 955712 | 10-1871-1 | 1 | LANL | USE | S |
| per0305085a | 247186001  | CWW | 3/6/2010 2:48  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305086a | 247186002  | CWW | 3/6/2010 2:58  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305087a | WCLCCV     | CWW | 3/6/2010 3:08  |        |           | 1 |      | USE | C |
| per0305088a | IPB011     | CWW | 3/6/2010 3:19  |        |           | 1 |      | USE | B |
| per0305089a | WCLCRI     | CWW | 3/6/2010 3:29  |        |           | 1 |      | USE | C |
| per0305090a | 247186003  | CWW | 3/6/2010 3:39  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305091a | 247186004  | CWW | 3/6/2010 3:49  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305092a | 247186005  | CWW | 3/6/2010 3:59  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305093a | 247186006  | CWW | 3/6/2010 4:09  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305094a | 247186007  | CWW | 3/6/2010 4:19  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305095a | 247186008  | CWW | 3/6/2010 4:29  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305096a | 247186009  | CWW | 3/6/2010 4:39  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305097a | 247186010  | CWW | 3/6/2010 4:49  | 955712 | 10-1868-1 | 1 | LANL | USE | S |
| per0305098a | WCLCCV     | CWW | 3/6/2010 4:59  |        |           | 1 |      | USE | C |
| per0305099a | IPB012     | CWW | 3/6/2010 5:10  |        |           | 1 |      | USE | B |
| per0305100a | WCLCRI     | CWW | 3/6/2010 5:20  |        |           | 1 |      | USE | C |
| per0305101a | 247201001  | CWW | 3/6/2010 5:30  | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305102a | 1202049046 | CWW | 3/6/2010 5:40  | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305103a | 1202049047 | CWW | 3/6/2010 5:50  | 955712 | 10-1873   | 1 | LANL | USE | S |

|             |            |     |               |        |           |   |      |     |   |
|-------------|------------|-----|---------------|--------|-----------|---|------|-----|---|
| per0305104a | 247201002  | CWW | 3/6/2010 6:00 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305105a | 247201003  | CWW | 3/6/2010 6:10 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305106a | 247201004  | CWW | 3/6/2010 6:20 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305107a | 247201005  | CWW | 3/6/2010 6:31 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305108a | 247201006  | CWW | 3/6/2010 6:41 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305109a | 247201007  | CWW | 3/6/2010 6:51 | 955712 | 10-1873   | 1 | LANL | USE | S |
| per0305110a | WCLCCV     | CWW | 3/6/2010 7:01 |        |           | 1 |      | USE | C |
| per0305111a | IPB013     | CWW | 3/6/2010 7:11 |        |           | 1 |      | USE | B |
| per0305112a | WCLCRI     | CWW | 3/6/2010 7:21 |        |           | 1 |      | USE | C |
| per0305113a | 1202049069 | CWW | 3/6/2010 7:31 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305114a | 1202049070 | CWW | 3/6/2010 7:42 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305115a | 1202049073 | CWW | 3/6/2010 7:52 | 955727 | VARIOUS   | 1 | LANL | USE | S |
| per0305116a | 247127001  | CWW | 3/6/2010 8:02 | 955727 | 10-1849-1 | 1 | LANL | USE | S |
| per0305117a | 247130001  | CWW | 3/6/2010 8:12 | 955727 | 10-1850-1 | 1 | LANL | USE | S |
| per0305118a | 247139001  | CWW | 3/6/2010 8:22 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305119a | 1202049071 | CWW | 3/6/2010 8:32 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305120a | 1202049072 | CWW | 3/6/2010 8:42 | 955727 | 10-1854-1 | 1 | LANL | USE | S |
| per0305121a | 247179001  | CWW | 3/6/2010 8:52 | 955727 | 10-1871   | 1 | LANL | USE | S |
| per0305122a | 247182001  | CWW | 3/6/2010 9:02 | 955727 | 10-1861-1 | 1 | LANL | USE | S |
| per0305123a | WCLCCV     | CWW | 3/6/2010 9:12 |        |           | 1 |      | USE | C |
| per0305124a | IPB014     | CWW | 3/6/2010 9:23 |        |           | 1 |      | USE | B |
| per0305125a | WCLCRI     | CWW | 3/6/2010 9:33 |        |           | 1 |      | USE | C |

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/06/10  
Extr. Injection Volume: 20uL  
Sequence Number: per030610a  
Initial Calibration Date: 03/06/10

Method: EPA 6850-Modified  
Int. Std.: UCL100126-01  
Mobile Phase Lot#: 1278668, 1271949  
Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *ANM*  
Date: *23 Feb 11*  
SOP: GL-OA-E-067 Rev.6  
Alt Check Std. ID: WCL100227-06

| DataFile    | Sample     | Analyst | Injection Date | Batch  | SDG       | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|----------------|--------|-----------|----------|--------|----------|---------|
| per0306001a | IPB001     | CWW     | 3/6/2010 14:34 |        |           | 1        |        | USE      | B       |
| per0306002a | IPB001     | CWW     | 3/6/2010 14:43 |        |           | 1        |        | USE      | B       |
| per0306003a | WCLICAL-01 | CWW     | 3/6/2010 14:53 |        |           | 1        |        | USE      | I       |
| per0306004a | WCLICAL-02 | CWW     | 3/6/2010 15:02 |        |           | 1        |        | USE      | I       |
| per0306005a | WCLICAL-03 | CWW     | 3/6/2010 15:11 |        |           | 1        |        | USE      | I       |
| per0306006a | WCLICAL-04 | CWW     | 3/6/2010 15:20 |        |           | 1        |        | USE      | I       |
| per0306007a | WCLICAL-05 | CWW     | 3/6/2010 15:29 |        |           | 1        |        | USE      | I       |
| per0306008a | IPB002     | CWW     | 3/6/2010 15:38 |        |           | 1        |        | USE      | B       |
| per0306009a | WCLICV     | CWW     | 3/6/2010 15:47 |        |           | 1        |        | USE      | C       |
| per0306010a | IPB003     | CWW     | 3/6/2010 15:56 |        |           | 1        |        | USE      | B       |
| per0306011a | WCLCRI     | CWW     | 3/6/2010 16:05 |        |           | 1        |        | USE      | C       |
| per0306012a | 247178011  | CWW     | 3/6/2010 16:15 | 955706 | 10-1861   | 1        | LANL   | USE      | S       |
| per0306013a | 247197001  | CWW     | 3/6/2010 16:24 | 955706 | 10-1865-1 | 1        | LANL   | USE      | S       |
| per0306014a | 247197002  | CWW     | 3/6/2010 16:33 | 955706 | 10-1865-1 | 1        | LANL   | USE      | S       |
| per0306015a | IPB004     | CWW     | 3/6/2010 16:42 |        |           | 1        |        | USE      | B       |
| per0306016a | 1202062446 | CWW     | 3/6/2010 16:51 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306017a | 1202062447 | CWW     | 3/6/2010 17:00 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306018a | 1202062450 | CWW     | 3/6/2010 17:09 | 961557 | 248683    | 1        | LANL   | USE      | S       |
| per0306019a | 248683001  | CWW     | 3/6/2010 17:18 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306020a | 1202062448 | CWW     | 3/6/2010 17:27 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306021a | 1202062449 | CWW     | 3/6/2010 17:36 | 961557 | 248683    | 50       | LANL   | USE      | S       |
| per0306022a | WCLCV      | CWW     | 3/6/2010 17:45 |        |           | 1        |        | USE      | C       |
| per0306023a | IPB005     | CWW     | 3/6/2010 17:54 |        |           | 1        |        | USE      | B       |
| per0306024a | WCLCRI     | CWW     | 3/6/2010 18:04 |        |           | 1        |        | USE      | C       |
| per0306025a | 1202049039 | CWW     | 3/6/2010 18:13 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306026a | 1202049040 | CWW     | 3/6/2010 18:22 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306027a | 1202049043 | CWW     | 3/6/2010 18:31 | 955709 | VARIOUS   | 1        | LANL   | USE      | S       |
| per0306028a | 247187001  | CWW     | 3/6/2010 18:40 | 955709 | 10-1867   | 1        | LANL   | USE      | S       |
| per0306029a | 247187002  | CWW     | 3/6/2010 18:49 | 955709 | 10-1867   | 1        | LANL   | USE      | S       |

|             |            |     |                |        |           |   |      |         |   |
|-------------|------------|-----|----------------|--------|-----------|---|------|---------|---|
| per0306030a | 247187003  | CWW | 3/6/2010 18:58 | 955709 | 10-1867   | 1 | LANL | USE     | S |
| per0306031a | 247188001  | CWW | 3/6/2010 19:07 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306032a | 1202049041 | CWW | 3/6/2010 19:16 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306033a | 1202049042 | CWW | 3/6/2010 19:25 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306034a | 247188002  | CWW | 3/6/2010 19:34 | 955709 | 10-1863   | 1 | LANL | USE     | S |
| per0306035a | WCLCCV     | CWW | 3/6/2010 19:43 |        |           | 1 |      | USE     | C |
| per0306036a | IPB006     | CWW | 3/6/2010 19:52 |        |           | 1 |      | USE     | B |
| per0306037a | WCLCRI     | CWW | 3/6/2010 20:01 |        |           | 1 |      | USE     | C |
| per0306038a | 247183001  | CWW | 3/6/2010 20:10 | 955727 | 10-1868   | 1 | LANL | USE     | S |
| per0306039a | 247192001  | CWW | 3/6/2010 20:20 | 955727 | 10-1863-1 | 1 | LANL | USE     | S |
| per0306040a | 247203001  | CWW | 3/6/2010 20:29 | 955727 | 10-1873-1 | 1 | LANL | USE     | S |
| per0306041a | 247250001  | CWW | 3/6/2010 20:38 | 955727 | 10-1877-1 | 1 | LANL | USE     | S |
| per0306042a | 247250002  | CWW | 3/6/2010 20:47 | 955727 | 10-1877-1 | 1 | LANL | USE     | S |
| per0306043a | 247256001  | CWW | 3/6/2010 20:56 | 955727 | 10-1879-1 | 1 | LANL | USE     | S |
| per0306044a | 247256002  | CWW | 3/6/2010 21:05 | 955727 | 10-1879-1 | 1 | LANL | USE     | S |
| per0306045a | 247322001  | CWW | 3/6/2010 21:14 | 955727 | 10-1893-1 | 1 | LANL | USE     | S |
| per0306046a | 247322002  | CWW | 3/6/2010 21:23 | 955727 | 10-1893-1 | 1 | LANL | USE     | S |
| per0306047a | 247335001  | CWW | 3/6/2010 21:32 | 955727 | 10-1906   | 1 | LANL | USE     | S |
| per0306048a | WCLCCV     | CWW | 3/6/2010 21:41 |        |           | 1 |      | USE     | C |
| per0306049a | IPB007     | CWW | 3/6/2010 21:50 |        |           | 1 |      | USE     | B |
| per0306050a | WCLCRI     | CWW | 3/6/2010 21:59 |        |           | 1 |      | USE     | C |
| per0306051a | 247339001  | CWW | 3/6/2010 22:08 | 955727 | 10-1909-1 | 1 | LANL | DUSE-RA | S |
| per0306052a | 247339002  | CWW | 3/6/2010 22:18 | 955727 | 10-1909-1 | 1 | LANL | DUSE-RA | S |
| per0306053a | 247350001  | CWW | 3/6/2010 22:27 | 955727 | 10-1912-1 | 1 | LANL | DUSE-RA | S |
| per0306054a | IPB008     | CWW | 3/6/2010 22:36 |        |           | 1 |      | DUSE    | B |
| per0306055a | 1202049027 | CWW | 3/6/2010 22:45 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306056a | 1202049028 | CWW | 3/6/2010 22:54 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306057a | 1202049031 | CWW | 3/6/2010 23:03 | 955703 | VARIOUS   | 1 | LANL | DUSE-RA | S |
| per0306058a | 247123001  | CWW | 3/6/2010 23:12 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306059a | 247123002  | CWW | 3/6/2010 23:21 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306060a | 247123003  | CWW | 3/6/2010 23:30 | 955703 | 10-1848   | 1 | LANL | DUSE-RA | S |
| per0306061a | WCLCCV     | CWW | 3/6/2010 23:39 |        |           | 1 |      | DUSE    | C |
| per0306062a | IPB009     | CWW | 3/6/2010 23:48 |        |           | 1 |      | DUSE    | B |
| per0306063a | WCLCRI     | CWW | 3/6/2010 23:57 |        |           | 1 |      | DUSE    | C |

**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

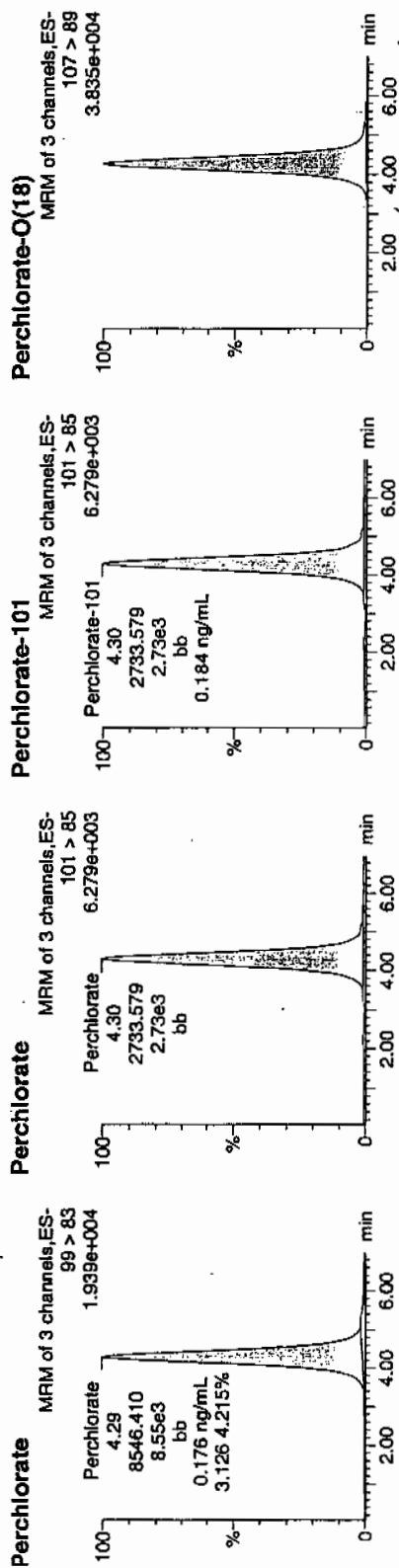
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time  
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305119a  
Date: 06-Mar-2010  
Time: 08:32:26  
ID: 1202049071  
Vial: 3:2.A

33  
03-06-10

1202049071 | 1202049071 | MS | 1.1



| ID         | Name              | Trace    | RT   | Area      | Response  | Flags | Mod.Date | Mod.Time | ng/mL  | %Rec  | %Dev   | SN        | Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|--------|-----------|-------|
| 1202049071 | Perchlorate       | 99 > 83  | 4.29 | 8546.410  | 8546.410  | bb    |          |          | 0.1763 | 88.13 | -11.87 | 2108.0... | 3.13  |
| 1202049071 | Perchlorate-101   | 101 > 85 | 4.30 | 2733.579  | 2733.579  | bb    |          |          | 0.1837 | 91.84 | -8.16  | 366.816   |       |
| 1202049071 | Perchlorate-O(18) | 107 > 89 | 4.28 | 17431.014 | 17431.014 | bb    |          |          | 0.4144 | 82.89 | -17.11 | 862.567   |       |

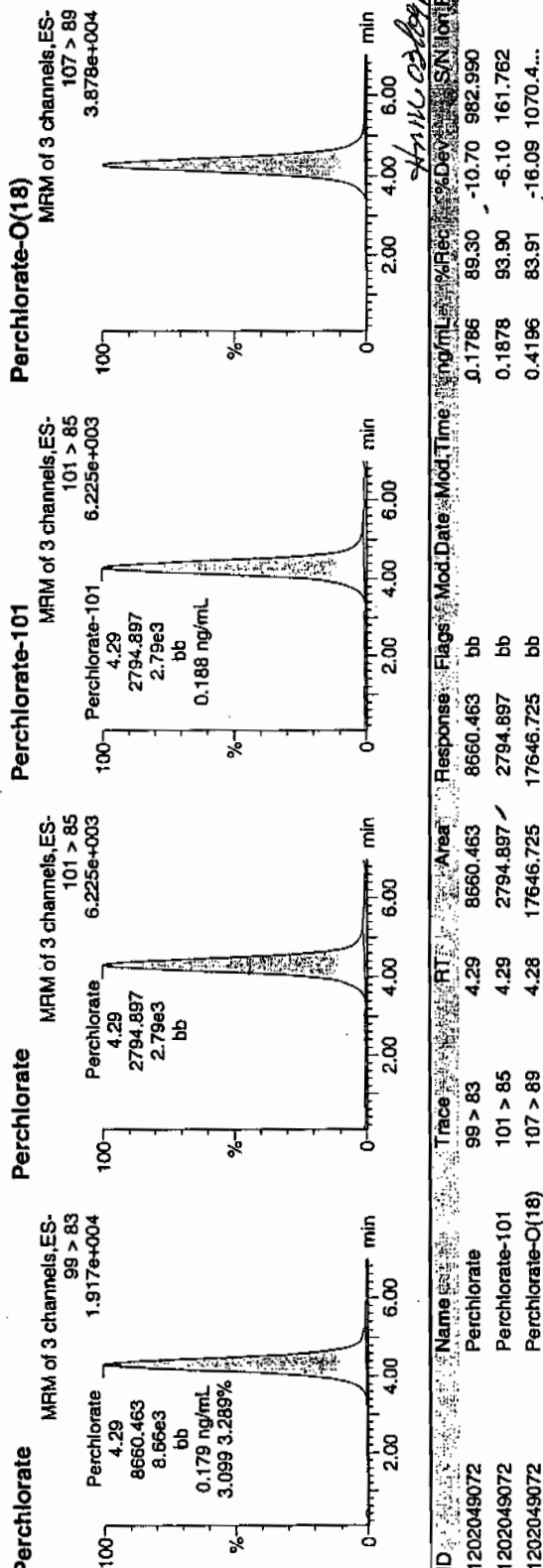
Sample Report MassLynx 4.0 SP4  
 Cup, LLC Analyst: Charles W. Wilson

C:\MassLynx\Perchlorate.PRO\per030510a.qtd

Alt: per0305120a  
 Date: 06-Mar-2010  
 Time: 08:42:37  
 D: 1202049072  
 Vial: 3:2,B

6225  
 08-06-10

1202049072 | 1202049072 | 11





## Isotope Ratio Criteria

### Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

## Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1863**

**Sample Analysis**

| <b>Sample ID</b> | <b>Client ID</b>                                       |
|------------------|--|
| 247188001        | RE15-10-8196   |
| 247188002        | RE15-10-8186   |
| 247188003        | RE15-10-8194   |
| 247188004        | RE15-10-8189   |
| 247188005        | RE15-10-8188   |
| 247188006        | RE15-10-8187   |
| 247188007        | RE15-10-8197   |
| 247188008        | RE15-10-8190   |
| 247188009        | RE15-10-8193   |
| 247188010        | RE15-10-8191   |
| 247188011        | RE15-10-8192   |
| 247188012        | RE15-10-8195   |
| 247188013        | RE15-10-8226   |
| 247188014        | RE15-10-8211   |
| 1202046587       | Method Blank (MB) ICP                                  |
| 1202046592       | Laboratory Control Sample (LCS)                        |
| 1202046589       | 247188001(RE15-10-8196L) Serial Dilution (SD)          |
| 1202046588       | 247188001(RE15-10-8196D) Sample Duplicate (DUP)        |
| 1202046590       | 247188001(RE15-10-8196S) Matrix Spike (MS)             |
| 1202046591       | 247188001(RE15-10-8196SD) Matrix Spike Duplicate (MSD) |
| 1202046593       | Method Blank (MB) ICP-MS                               |
| 1202046598       | Laboratory Control Sample (LCS)                        |
| 1202046595       | 247188001(RE15-10-8196L) Serial Dilution (SD)          |
| 1202046594       | 247188001(RE15-10-8196D) Sample Duplicate (DUP)        |
| 1202046596       | 247188001(RE15-10-8196S) Matrix Spike (MS)             |
| 1202046597       | 247188001(RE15-10-8196SD) Matrix Spike Duplicate (MSD) |
| 1202055902       | Method Blank (MB) CVAA                                 |
| 1202055903       | Laboratory Control Sample (LCS)                        |
| 1202055906       | 247188001(RE15-10-8196L) Serial Dilution (SD)          |

|            |  |
|------------|--|
| 1202055904 | 247188001(RE15-10-8196D) Sample Duplicate (DUP)        |
| 1202055905 | 247188001(RE15-10-8196S) Matrix Spike (MS)             |
| 1202055907 | 247188001(RE15-10-8196SD) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

### **Method/Analysis Information**

|                                       |   |
|---------------------------------------|---|
| <b>Analytical Batch:</b>              | 954676, 954678 and 958620   |
| <b>Prep Batch :</b>                   | 954675, 954677 and 958619   |
| <b>Standard Operating Procedures:</b> | GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23 |
| <b>Analytical Method:</b>             | SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A                                   |
| <b>Prep Method :</b>                  | SW846 3050B and SW846 7471A Prep  |

### **Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

### **System Configuration**

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction

through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

### **Calibration Information**

#### **Instrument Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

#### **ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

#### **Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

#### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

### **Quality Control (QC) Information**

#### **Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

#### **Laboratory Control Sample (LCS) Recovery**

The LCS analyzed with this SDG met the acceptance criteria of percent recovery with the exception of antimony. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.

#### **Quality Control (QC) Sample Statement**

The following sample was selected as the quality control (QC) sample for this SDG: 247188001 (RE15-10-8196)-ICP, ICP-MS and CVAA.

#### **Matrix Spike (MS) Recovery Statement**

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of chromium, potassium, sodium and aluminum as indicated by the "N" qualifiers.

#### **Matrix Spike Duplicate (MSD) Recovery Statement**

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the

recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of aluminum, chromium, potassium and sodium as indicated by the “N” qualifiers.

#### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

#### **Duplicate Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of aluminum, calcium, chromium and sodium as indicated by the “\*” qualifiers.

#### **Serial Dilution % Difference Statement**

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D) with the exceptions of barium, chromium and manganese as indicated by the “E” qualifiers.

### **Technical Information**

#### **Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

#### **Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instruments. Dilutions were required for this SDG in order to minimize antimony suppression due to matrix interferences in samples 247188006 (RE15-10-8187), 247188007 (RE15-10-8197), 247188008 (RE15-10-8190), 247188010 (RE15-10-8191), 247188011 (RE15-10-8192), 247188012 (RE15-10-8195), 247188013 (RE15-10-8226) and 247188014 (RE15-10-8211) on the ICP. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

#### **Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

## **Miscellaneous Information**

### **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

### **Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: DER ID 804403. A copy is included in the Miscellaneous Data section of this package.

### **Additional Comments**

Additional comments were not required for this SDG.

### **Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

### **Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nick. G. A. Elmer Date: 3.17.10



# **Sample Data Summary**

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188001

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8196

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 919000  | ug/kg | *N   | 6480 | 19100 | 19100 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 953     | ug/kg | U    | 314  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic   | 327     | ug/kg | J    | 197  | 986   | 986   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 13500   | ug/kg | E    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 462     | ug/kg |      | 19.7 | 98.6  | 98.6  | 2  | MS | BAJ     | 03/15/10 12:41 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 476     | ug/kg | U    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 597000  | ug/kg | *    | 7620 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 16100   | ug/kg | *EN  | 143  | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 450     | ug/kg | J    | 143  | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1640    | ug/kg |      | 286  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5930000 | ug/kg |      | 7620 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 4440    | ug/kg |      | 238  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 126000  | ug/kg |      | 8100 | 28600 | 28600 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 279000  | ug/kg | E    | 191  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 10.4    | ug/kg | U    | 3.55 | 10.4  | 10.4  | 1  | AV | JXL1    | 03/02/10 13:39 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 493     | ug/kg |      | 98.6 | 394   | 394   | 2  | MS | BAJ     | 03/15/10 12:41 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 507000  | ug/kg | N    | 6100 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 986     | ug/kg | U    | 493  | 986   | 986   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 476     | ug/kg | U    | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 365000  | ug/kg | *N   | 6670 | 23800 | 23800 | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 197     | ug/kg | U    | 59.2 | 197   | 197   | 2  | MS | BAJ     | 03/15/10 02:07 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1940    | ug/kg |      | 95.3 | 476   | 476   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 45300   | ug/kg |      | 314  | 953   | 953   | 1  | P  | HSC     | 03/11/10 11:57 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.531            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.513            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.581            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188002

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8186

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte   | Result  | Units | Qnal | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 1560000 | ug/kg | *N   | 6770 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 996     | ug/kg | U    | 329  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic   | 407     | ug/kg | J    | 202  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 22400   | ug/kg | E    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 212     | ug/kg |      | 20.2 | 101   | 101   | 2  | MS | BAJ     | 03/15/10 12:53 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 498     | ug/kg | U    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 471000  | ug/kg | *    | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 1660    | ug/kg | *EN  | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 601     | ug/kg |      | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1350    | ug/kg |      | 299  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6830000 | ug/kg |      | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3680    | ug/kg |      | 249  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 264000  | ug/kg |      | 8460 | 29900 | 29900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 247000  | ug/kg | E    | 199  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.7    | ug/kg | U    | 3.98 | 11.7  | 11.7  | 1  | AV | JXL1    | 03/02/10 13:49 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 1720    | ug/kg |      | 101  | 404   | 404   | 2  | MS | BAJ     | 03/15/10 12:53 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 368000  | ug/kg | N    | 6370 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 1010    | ug/kg | U    | 505  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 498     | ug/kg | U    | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 223000  | ug/kg | *N   | 6970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 202     | ug/kg | U    | 60.6 | 202   | 202   | 2  | MS | BAJ     | 03/15/10 02:32 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 2630    | ug/kg |      | 99.6 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 35600   | ug/kg |      | 329  | 996   | 996   | 1  | P  | HSC     | 03/11/10 12:23 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.508            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.501            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.518            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188003

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8194

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 848000  | ug/kg | *N   | 6750 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 993     | ug/kg | U    | 328  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic   | 741     | ug/kg | J    | 196  | 979   | 979   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 17200   | ug/kg | E    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 429     | ug/kg |      | 19.6 | 97.9  | 97.9  | 2  | MS | BAJ     | 03/15/10 12:55 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 496     | ug/kg | U    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 450000  | ug/kg | *    | 7940 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 2330    | ug/kg | *EN  | 149  | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 482     | ug/kg | J    | 149  | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1670    | ug/kg |      | 298  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6630000 | ug/kg |      | 7940 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 4050    | ug/kg |      | 248  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 148000  | ug/kg |      | 8440 | 29800 | 29800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 298000  | ug/kg | E    | 199  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11      | ug/kg | U    | 3.75 | 11    | 11    | 1  | AV | JXL1    | 03/02/10 13:51 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 536     | ug/kg |      | 97.9 | 392   | 392   | 2  | MS | BAJ     | 03/15/10 12:55 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 455000  | ug/kg | N    | 6350 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 979     | ug/kg | U    | 490  | 979   | 979   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 496     | ug/kg | U    | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 334000  | ug/kg | *N   | 6950 | 24800 | 24800 | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 196     | ug/kg | U    | 58.7 | 196   | 196   | 2  | MS | BAJ     | 03/15/10 02:36 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1880    | ug/kg |      | 99.3 | 496   | 496   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 44300   | ug/kg |      | 328  | 993   | 993   | 1  | P  | HSC     | 03/11/10 12:26 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt/vol. | Units | Final wt/vol. | Units | Date     | Analyst |
|------------------|------------|------------------|-----------------|-------|---------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.509           | g     | 50            | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.516           | g     | 50            | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.549           | g     | 30            | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188004

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8189

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 938000  | ug/kg | *N   | 6350 | 18700 | 18700 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4670    | ug/kg | U    | 1540 | 4670  | 4670  | 5  | P  | HSC     | 03/15/10 14:08 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 198     | ug/kg | J    | 188  | 939   | 939   | 2  | MS | BAJ     | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 16000   | ug/kg | E    | 93.4 | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 407     | ug/kg |      | 18.8 | 93.9  | 93.9  | 2  | MS | BAJ     | 03/15/10 12:57 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 467     | ug/kg | U    | 93.4 | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 321000  | ug/kg | *    | 7470 | 23300 | 23300 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 15400   | ug/kg | *EN  | 140  | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 600     | ug/kg |      | 140  | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1480    | ug/kg |      | 280  | 934   | 934   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 7550000 | ug/kg |      | 7470 | 23300 | 23300 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3700    | ug/kg |      | 233  | 934   | 934   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 213000  | ug/kg |      | 7940 | 28000 | 28000 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 262000  | ug/kg | E    | 187  | 934   | 934   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.8    | ug/kg | U    | 4    | 11.8  | 11.8  | 1  | AV | JXLJ    | 03/02/10 13:53 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 2260    | ug/kg |      | 93.9 | 376   | 376   | 2  | MS | BAJ     | 03/15/10 12:57 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 424000  | ug/kg | N    | 5980 | 23300 | 23300 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 939     | ug/kg | U    | 469  | 939   | 939   | 2  | MS | BAJ     | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 467     | ug/kg | U    | 93.4 | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 292000  | ug/kg | *N   | 6540 | 23300 | 23300 | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 188     | ug/kg | U    | 56.3 | 188   | 188   | 2  | MS | BAJ     | 03/15/10 02:40 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 2400    | ug/kg |      | 93.4 | 467   | 467   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 43100   | ug/kg |      | 308  | 934   | 934   | 1  | P  | HSC     | 03/11/10 12:30 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.541            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.515            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188005

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8188

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 759000  | ug/kg | *N   | 6780 | 19900 | 19900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 997     | ug/kg | U    | 329  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic   | 231     | ug/kg | J    | 192  | 961   | 961   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 12100   | ug/kg | E    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 268     | ug/kg |      | 19.2 | 96.1  | 96.1  | 2  | MS | BAJ     | 03/15/10 12:58 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 498     | ug/kg | U    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 273000  | ug/kg | *    | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 947     | ug/kg | *EN  | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 435     | ug/kg | J    | 149  | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1070    | ug/kg |      | 299  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5840000 | ug/kg |      | 7970 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3310    | ug/kg |      | 249  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 158000  | ug/kg |      | 8470 | 29900 | 29900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 236000  | ug/kg | E    | 199  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 12      | ug/kg | U    | 4.07 | 12    | 12    | 1  | AV | JXL1    | 03/02/10 13:59 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 524     | ug/kg |      | 96.1 | 384   | 384   | 2  | MS | BAJ     | 03/15/10 12:58 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 394000  | ug/kg | N    | 6380 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 961     | ug/kg | U    | 480  | 961   | 961   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 498     | ug/kg | U    | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 295000  | ug/kg | *N   | 6980 | 24900 | 24900 | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 192     | ug/kg | U    | 57.6 | 192   | 192   | 2  | MS | BAJ     | 03/15/10 02:43 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1910    | ug/kg |      | 99.7 | 498   | 498   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 35200   | ug/kg |      | 329  | 997   | 997   | 1  | P  | HSC     | 03/11/10 12:34 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.51             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.529            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.51             | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188006

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8187

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 97.5

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 788000  | ug/kg | *N   | 6970 | 20500 | 20500 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 5130    | ug/kg | U    | 1690 | 5130  | 5130  | 5  | P  | HSC     | 03/15/10 14:12 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 256     | ug/kg | J    | 200  | 998   | 998   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 12400   | ug/kg | E    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 314     | ug/kg |      | 20   | 99.8  | 99.8  | 2  | MS | BAJ     | 03/15/10 13:00 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 513     | ug/kg | U    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 245000  | ug/kg | *    | 8200 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 4790    | ug/kg | *EN  | 154  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 408     | ug/kg | J    | 154  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 960     | ug/kg | J    | 308  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5570000 | ug/kg |      | 8200 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 1890    | ug/kg |      | 256  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 157000  | ug/kg |      | 8720 | 30800 | 30800 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 183000  | ug/kg | E    | 205  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.1    | ug/kg | U    | 3.77 | 11.1  | 11.1  | 1  | AV | JXL1    | 03/02/10 14:01 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 870     | ug/kg |      | 99.8 | 399   | 399   | 2  | MS | BAJ     | 03/15/10 13:00 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 307000  | ug/kg | N    | 6560 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 998     | ug/kg | U    | 499  | 998   | 998   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 513     | ug/kg | U    | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 237000  | ug/kg | *N   | 7180 | 25600 | 25600 | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 200     | ug/kg | U    | 59.9 | 200   | 200   | 2  | MS | BAJ     | 03/15/10 02:47 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1770    | ug/kg |      | 103  | 513   | 513   | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 33800   | ug/kg |      | 338  | 1030  | 1030  | 1  | P  | HSC     | 03/11/10 12:38 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.5              | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.514            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.555            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188007

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8197

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 730000  | ug/kg | *N   | 6510 | 19100 | 19100 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4790    | ug/kg | U    | 1580 | 4790  | 4790  | 5  | P  | HSC     | 03/15/10 14:16 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 259     | ug/kg | J    | 197  | 987   | 987   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 11000   | ug/kg | E    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 462     | ug/kg |      | 19.7 | 98.7  | 98.7  | 2  | MS | BAJ     | 03/15/10 13:02 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 479     | ug/kg | U    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 579000  | ug/kg | *    | 7660 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 1710    | ug/kg | *EN  | 144  | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 324     | ug/kg | J    | 144  | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1420    | ug/kg |      | 287  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5970000 | ug/kg |      | 7660 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 4500    | ug/kg |      | 239  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 119000  | ug/kg |      | 8140 | 28700 | 28700 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 266000  | ug/kg | E    | 191  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.8    | ug/kg | U    | 4.03 | 11.8  | 11.8  | 1  | AV | JXL1    | 03/02/10 14:03 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 383     | ug/kg | J    | 98.7 | 395   | 395   | 2  | MS | BAJ     | 03/15/10 13:02 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 442000  | ug/kg | N    | 6130 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 987     | ug/kg | U    | 494  | 987   | 987   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 479     | ug/kg | U    | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 314000  | ug/kg | *N   | 6700 | 23900 | 23900 | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 197     | ug/kg | U    | 59.2 | 197   | 197   | 2  | MS | BAJ     | 03/15/10 02:51 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1760    | ug/kg |      | 95.7 | 479   | 479   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 46000   | ug/kg |      | 316  | 957   | 957   | 1  | P  | HSC     | 03/11/10 12:41 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.53             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.514            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.514            | g     | 30             | mL    | 03/01/10 | TXB3    |



**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188008

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8190

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99.07

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 690000  | ug/kg | *N   | 6400 | 18800 | 18800 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4710    | ug/kg | U    | 1550 | 4710  | 4710  | 5  | P  | HSC     | 03/15/10 14:19 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 965     | ug/kg | U    | 193  | 965   | 965   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 8210    | ug/kg | E    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 283     | ug/kg |      | 19.3 | 96.5  | 96.5  | 2  | MS | BAJ     | 03/15/10 13:04 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 471     | ug/kg | U    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 223000  | ug/kg | *    | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 2090    | ug/kg | *EN  | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 378     | ug/kg | J    | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1050    | ug/kg |      | 282  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5820000 | ug/kg |      | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3850    | ug/kg |      | 235  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 138000  | ug/kg |      | 8000 | 28200 | 28200 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 175000  | ug/kg | E    | 188  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.4    | ug/kg | U    | 3.86 | 11.4  | 11.4  | 1  | AV | JXL1    | 03/02/10 14:05 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 573     | ug/kg |      | 96.5 | 386   | 386   | 2  | MS | BAJ     | 03/15/10 13:04 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 391000  | ug/kg | N    | 6030 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 965     | ug/kg | U    | 482  | 965   | 965   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 471     | ug/kg | U    | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 258000  | ug/kg | *N   | 6590 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 193     | ug/kg | U    | 57.9 | 193   | 193   | 2  | MS | BAJ     | 03/15/10 02:54 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1500    | ug/kg |      | 94.2 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 34100   | ug/kg |      | 311  | 942   | 942   | 1  | P  | HSC     | 03/11/10 12:45 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.536            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.523            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.533            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188009

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8193

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 458000  | ug/kg | *N   | 6400 | 18800 | 18800 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 941     | ug/kg | U    | 311  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-38-2 | Arsenic   | 255     | ug/kg | J    | 199  | 997   | 997   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 7520    | ug/kg | E    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 314     | ug/kg |      | 19.9 | 99.7  | 99.7  | 2  | MS | BAJ     | 03/15/10 13:09 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 471     | ug/kg | U    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 207000  | ug/kg | *    | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 1200    | ug/kg | *EN  | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 414     | ug/kg | J    | 141  | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1000    | ug/kg |      | 282  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5810000 | ug/kg |      | 7530 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 2290    | ug/kg |      | 235  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 113000  | ug/kg |      | 8000 | 28200 | 28200 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 201000  | ug/kg | E    | 188  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 10.7    | ug/kg | U    | 3.64 | 10.7  | 10.7  | 1  | AV | JXL1    | 03/02/10 14:07 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 509     | ug/kg |      | 99.7 | 399   | 399   | 2  | MS | BAJ     | 03/15/10 13:09 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 215000  | ug/kg | N    | 6020 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 997     | ug/kg | U    | 498  | 997   | 997   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 471     | ug/kg | U    | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 138000  | ug/kg | *N   | 6590 | 23500 | 23500 | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 199     | ug/kg | U    | 59.8 | 199   | 199   | 2  | MS | BAJ     | 03/15/10 03:05 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1530    | ug/kg |      | 94.1 | 471   | 471   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 39800   | ug/kg |      | 311  | 941   | 941   | 1  | P  | HSC     | 03/11/10 12:56 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.508            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.568            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188010

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8191

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 99.33

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 616000  | ug/kg | *N   | 6170 | 18100 | 18100 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4530    | ug/kg | U    | 1500 | 4530  | 4530  | 5  | P  | HSC     | 03/15/10 14:23 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 1000    | ug/kg | U    | 200  | 1000  | 1000  | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 10200   | ug/kg | E    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 246     | ug/kg |      | 20   | 100   | 100   | 2  | MS | BAJ     | 03/15/10 13:11 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 453     | ug/kg | U    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 238000  | ug/kg | *    | 7260 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 2090    | ug/kg | *EN  | 136  | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 470     | ug/kg |      | 136  | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1230    | ug/kg |      | 272  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6370000 | ug/kg |      | 7260 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3000    | ug/kg |      | 227  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 133000  | ug/kg |      | 7710 | 27200 | 27200 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 203000  | ug/kg | E    | 181  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.5    | ug/kg | U    | 3.9  | 11.5  | 11.5  | 1  | AV | JXL1    | 03/02/10 14:09 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 421     | ug/kg |      | 100  | 400   | 400   | 2  | MS | BAJ     | 03/15/10 13:11 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 318000  | ug/kg | N    | 5800 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 1000    | ug/kg | U    | 500  | 1000  | 1000  | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 453     | ug/kg | U    | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 210000  | ug/kg | *N   | 6350 | 22700 | 22700 | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 200     | ug/kg | U    | 60   | 200   | 200   | 2  | MS | BAJ     | 03/15/10 03:09 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 2110    | ug/kg |      | 90.7 | 453   | 453   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 43200   | ug/kg |      | 299  | 907   | 907   | 1  | P  | HSC     | 03/11/10 13:00 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.555            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.503            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.527            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188011

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8192

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 577000  | ug/kg | *N   | 6630 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4880    | ug/kg | U    | 1610 | 4880  | 4880  | 5  | P  | HSC     | 03/15/10 14:26 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 955     | ug/kg | U    | 191  | 955   | 955   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 8710    | ug/kg | E    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 312     | ug/kg |      | 19.1 | 95.5  | 95.5  | 2  | MS | BAJ     | 03/15/10 13:12 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 488     | ug/kg | U    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 209000  | ug/kg | *    | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 2200    | ug/kg | *EN  | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 421     | ug/kg | J    | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1340    | ug/kg |      | 293  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6350000 | ug/kg |      | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 3330    | ug/kg |      | 244  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 119000  | ug/kg |      | 8290 | 29300 | 29300 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 206000  | ug/kg | E    | 195  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.4    | ug/kg | U    | 3.87 | 11.4  | 11.4  | 1  | AV | JXL1    | 03/02/10 14:11 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 460     | ug/kg |      | 95.5 | 382   | 382   | 2  | MS | BAJ     | 03/15/10 13:12 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 327000  | ug/kg | N    | 6240 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 955     | ug/kg | U    | 477  | 955   | 955   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 488     | ug/kg | U    | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 221000  | ug/kg | *N   | 6830 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 191     | ug/kg | U    | 57.3 | 191   | 191   | 2  | MS | BAJ     | 03/15/10 03:13 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1610    | ug/kg |      | 97.5 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 43000   | ug/kg |      | 322  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:03 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.519            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.53             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.534            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188012

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8195

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.5

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 870000  | ug/kg | *N   | 6630 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4870    | ug/kg | U    | 1610 | 4870  | 4870  | 5  | P  | HSC     | 03/15/10 14:30 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 415     | ug/kg | J    | 192  | 960   | 960   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 13400   | ug/kg | E    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 476     | ug/kg |      | 19.2 | 96    | 96    | 2  | MS | BAJ     | 03/15/10 13:14 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 487     | ug/kg | U    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 642000  | ug/kg | *    | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 4930    | ug/kg | *EN  | 146  | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 592     | ug/kg |      | 146  | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1120    | ug/kg |      | 292  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 5690000 | ug/kg |      | 7800 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 4340    | ug/kg |      | 244  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 113000  | ug/kg |      | 8290 | 29200 | 29200 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 272000  | ug/kg | E    | 195  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 10.4    | ug/kg | U    | 3.53 | 10.4  | 10.4  | 1  | AV | JXL1    | 03/02/10 14:13 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 417     | ug/kg |      | 96   | 384   | 384   | 2  | MS | BAJ     | 03/15/10 13:14 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 509000  | ug/kg | N    | 6240 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 960     | ug/kg | U    | 480  | 960   | 960   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 487     | ug/kg | U    | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 353000  | ug/kg | *N   | 6820 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 192     | ug/kg | U    | 57.6 | 192   | 192   | 2  | MS | BAJ     | 03/15/10 03:16 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1440    | ug/kg |      | 97.5 | 487   | 487   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 42700   | ug/kg |      | 322  | 975   | 975   | 1  | P  | HSC     | 03/11/10 13:07 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.521            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.529            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.587            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188013

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8226

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 97.6

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 844000  | ug/kg | *N   | 6640 | 19500 | 19500 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4880    | ug/kg | U    | 1610 | 4880  | 4880  | 5  | P  | HSC     | 03/15/10 14:33 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 211     | ug/kg | J    | 202  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 12000   | ug/kg | E    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 262     | ug/kg |      | 20.2 | 101   | 101   | 2  | MS | BAJ     | 03/15/10 13:16 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 488     | ug/kg | U    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 285000  | ug/kg | *    | 7810 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 5350    | ug/kg | *EN  | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 481     | ug/kg | J    | 146  | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1140    | ug/kg |      | 293  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6660000 | ug/kg |      | 7810 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 2580    | ug/kg |      | 244  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 165000  | ug/kg |      | 8300 | 29300 | 29300 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 220000  | ug/kg | E    | 195  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 11.9    | ug/kg | U    | 4.04 | 11.9  | 11.9  | 1  | AV | JXL1    | 03/02/10 14:15 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 804     | ug/kg |      | 101  | 404   | 404   | 2  | MS | BAJ     | 03/15/10 13:16 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 380000  | ug/kg | N    | 6250 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 1010    | ug/kg | U    | 505  | 1010  | 1010  | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 488     | ug/kg | U    | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 302000  | ug/kg | *N   | 6830 | 24400 | 24400 | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 202     | ug/kg | U    | 60.6 | 202   | 202   | 2  | MS | BAJ     | 03/15/10 03:20 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 1980    | ug/kg |      | 97.6 | 488   | 488   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 40800   | ug/kg |      | 322  | 976   | 976   | 1  | P  | HSC     | 03/11/10 13:11 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.525            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.507            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.517            | g     | 30             | mL    | 03/01/10 | TXB3    |

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247188014

BASIS: Dry Weight

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8211

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

| CAS No.   | Analyte   | Result  | Units | Qual | MDL  | PQL   | CRDL  | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 714000  | ug/kg | *N   | 6370 | 18700 | 18700 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-36-0 | Antimony  | 4690    | ug/kg | U    | 1550 | 4690  | 4690  | 5  | P  | HSC     | 03/15/10 14:37 | 031510A-2      | 954676           |
| 7440-38-2 | Arsenic   | 288     | ug/kg | J    | 188  | 941   | 941   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-39-3 | Barium    | 12100   | ug/kg | E    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-41-7 | Beryllium | 440     | ug/kg |      | 18.8 | 94.1  | 94.1  | 2  | MS | BAJ     | 03/15/10 13:18 | 100315-4       | 954678           |
| 7440-43-9 | Cadmium   | 469     | ug/kg | U    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-70-2 | Calcium   | 580000  | ug/kg | *    | 7500 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-47-3 | Chromium  | 1590    | ug/kg | *EN  | 141  | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-48-4 | Cobalt    | 418     | ug/kg | J    | 141  | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-50-8 | Copper    | 1580    | ug/kg |      | 281  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-89-6 | Iron      | 6270000 | ug/kg |      | 7500 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-92-1 | Lead      | 4910    | ug/kg |      | 234  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-95-4 | Magnesium | 163000  | ug/kg |      | 7970 | 28100 | 28100 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-96-5 | Manganese | 317000  | ug/kg | E    | 187  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7439-97-6 | Mercury   | 10.9    | ug/kg | U    | 3.72 | 10.9  | 10.9  | 1  | AV | JXL1    | 03/02/10 14:17 | 030210S1-5     | 958620           |
| 7440-02-0 | Nickel    | 375     | ug/kg | J    | 94.1 | 376   | 376   | 2  | MS | BAJ     | 03/15/10 13:18 | 100315-4       | 954678           |
| 7440-09-7 | Potassium | 437000  | ug/kg | N    | 6000 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7782-49-2 | Selenium  | 941     | ug/kg | U    | 470  | 941   | 941   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-22-4 | Silver    | 469     | ug/kg | U    | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-23-5 | Sodium    | 291000  | ug/kg | *N   | 6560 | 23400 | 23400 | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-28-0 | Thallium  | 188     | ug/kg | U    | 56.5 | 188   | 188   | 2  | MS | BAJ     | 03/15/10 03:24 | 100314-3       | 954678           |
| 7440-62-2 | Vanadium  | 2110    | ug/kg |      | 93.7 | 469   | 469   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |
| 7440-66-6 | Zinc      | 52400   | ug/kg |      | 309  | 937   | 937   | 1  | P  | HSC     | 03/11/10 13:14 | 031110-1       | 954676           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954676           | 954675     | SW846 3050B      | 0.54             | g     | 50             | mL    | 02/23/10 | AXG2    |
| 954678           | 954677     | SW846 3050B      | 0.538            | g     | 50             | mL    | 02/23/10 | AXG2    |
| 958620           | 958619     | SW846 7471A Prep | 0.555            | g     | 30             | mL    | 03/01/10 | TXB3    |

# **Quality Control Summary**



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| ICV01            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.16          | ug/L         | 5                 | ug/L         | 103.2             | 90.0 – 110.0                  | AV       | 02-MAR-10 08:46           | 030210S1-5        |
|                  | Aluminum       | 5060          | ug/L         | 5000              | ug/L         | 101.3             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Antimony       | 505           | ug/L         | 500               | ug/L         | 101.1             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Barium         | 514           | ug/L         | 500               | ug/L         | 102.9             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Cadmium        | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Calcium        | 5030          | ug/L         | 5000              | ug/L         | 100.6             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Chromium       | 498           | ug/L         | 500               | ug/L         | 99.6              | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Cobalt         | 514           | ug/L         | 500               | ug/L         | 102.9             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Copper         | 511           | ug/L         | 500               | ug/L         | 102.1             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Iron           | 5120          | ug/L         | 5000              | ug/L         | 102.3             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Lead           | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Magnesium      | 5210          | ug/L         | 5000              | ug/L         | 104.1             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Manganese      | 524           | ug/L         | 500               | ug/L         | 104.8             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Potassium      | 2430          | ug/L         | 2500              | ug/L         | 97.3              | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Silver         | 264           | ug/L         | 250               | ug/L         | 105.6             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Sodium         | 2480          | ug/L         | 2500              | ug/L         | 99.1              | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Vanadium       | 516           | ug/L         | 500               | ug/L         | 103.2             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Zinc           | 513           | ug/L         | 500               | ug/L         | 102.6             | 90.0 – 110.0                  | P        | 11-MAR-10 06:50           | 031110-1          |
|                  | Arsenic        | 50            | ug/L         | 50                | ug/L         | 100.1             | 90.0 – 110.0                  | MS       | 15-MAR-10 01:34           | 100314-3          |
|                  | Selenium       | 52.2          | ug/L         | 50                | ug/L         | 104.3             | 90.0 – 110.0                  | MS       | 15-MAR-10 01:34           | 100314-3          |
|                  | Thallium       | 54.8          | ug/L         | 50                | ug/L         | 109.5             | 90.0 – 110.0                  | MS       | 15-MAR-10 01:34           | 100314-3          |
|                  | Antimony       | 503           | ug/L         | 500               | ug/L         | 100.6             | 90.0 – 110.0                  | P        | 15-MAR-10 11:45           | 031510A-2         |
|                  | Beryllium      | 53.3          | ug/L         | 50                | ug/L         | 106.5             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:26           | 100315-4          |
|                  | Nickel         | 53.4          | ug/L         | 50                | ug/L         | 106.7             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:26           | 100315-4          |
| CCV01            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.01          | ug/L         | 5                 | ug/L         | 100.3             | 80.0 – 120.0                  | AV       | 02-MAR-10 08:52           | 030210S1-5        |
|                  | Aluminum       | 5100          | ug/L         | 5000              | ug/L         | 101.9             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Antimony       | 530           | ug/L         | 500               | ug/L         | 106.1             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Barium         | 526           | ug/L         | 500               | ug/L         | 105.2             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Cadmium        | 535           | ug/L         | 500               | ug/L         | 107               | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Calcium        | 5390          | ug/L         | 5000              | ug/L         | 107.8             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Chromium       | 523           | ug/L         | 500               | ug/L         | 104.7             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Cobalt         | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Copper         | 511           | ug/L         | 500               | ug/L         | 102.1             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Iron           | 5290          | ug/L         | 5000              | ug/L         | 105.8             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Lead           | 539           | ug/L         | 500               | ug/L         | 107.7             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Magnesium      | 5490          | ug/L         | 5000              | ug/L         | 109.9             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Manganese      | 520           | ug/L         | 500               | ug/L         | 103.9             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Potassium      | 5440          | ug/L         | 5000              | ug/L         | 108.8             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Silver         | 512           | ug/L         | 500               | ug/L         | 102.3             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Sodium         | 10200         | ug/L         | 10000             | ug/L         | 101.9             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Vanadium       | 520           | ug/L         | 500               | ug/L         | 104.1             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Zinc           | 521           | ug/L         | 500               | ug/L         | 104.3             | 90.0 – 110.0                  | P        | 11-MAR-10 07:13           | 031110-1          |
|                  | Arsenic        | 51.7          | ug/L         | 50                | ug/L         | 103.4             | 90.0 – 110.0                  | MS       | 15-MAR-10 01:52           | 100314-3          |
|                  | Selenium       | 53.3          | ug/L         | 50                | ug/L         | 106.5             | 90.0 – 110.0                  | MS       | 15-MAR-10 01:52           | 100314-3          |
|                  | Thallium       | 54.5          | ug/L         | 50                | ug/L         | 109               | 90.0 – 110.0                  | MS       | 15-MAR-10 01:52           | 100314-3          |
|                  | Antimony       | 507           | ug/L         | 500               | ug/L         | 101.5             | 90.0 – 110.0                  | P        | 15-MAR-10 12:07           | 031510A-2         |
|                  | Beryllium      | 54.9          | ug/L         | 50                | ug/L         | 109.9             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:34           | 100315-4          |
|                  | Nickel         | 53.1          | ug/L         | 50                | ug/L         | 106.2             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:34           | 100315-4          |
| CCV02            | Mercury        | 5.14          | ug/L         | 5                 | ug/L         | 102.8             | 80.0 – 120.0                  | AV       | 02-MAR-10 09:16           | 030210S1-5        |
|                  | Aluminum       | 5100          | ug/L         | 5000              | ug/L         | 102               | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Antimony       | 506           | ug/L         | 500               | ug/L         | 101.2             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Barium         | 518           | ug/L         | 500               | ug/L         | 103.6             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Cadmium        | 525           | ug/L         | 500               | ug/L         | 105               | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Calcium        | 5360          | ug/L         | 5000              | ug/L         | 107.1             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Chromium       | 514           | ug/L         | 500               | ug/L         | 102.7             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Cobalt         | 493           | ug/L         | 500               | ug/L         | 98.5              | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Copper         | 496           | ug/L         | 500               | ug/L         | 99.3              | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Iron           | 5310          | ug/L         | 5000              | ug/L         | 106.2             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Lead           | 527           | ug/L         | 500               | ug/L         | 105.3             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Magnesium      | 5470          | ug/L         | 5000              | ug/L         | 109.4             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Manganese      | 509           | ug/L         | 500               | ug/L         | 101.8             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Potassium      | 5050          | ug/L         | 5000              | ug/L         | 100.9             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Silver         | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Sodium         | 10200         | ug/L         | 10000             | ug/L         | 102.3             | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Vanadium       | 510           | ug/L         | 500               | ug/L         | 102               | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Zinc           | 510           | ug/L         | 500               | ug/L         | 102               | 90.0 – 110.0                  | P        | 11-MAR-10 07:28           | 031110-1          |
|                  | Arsenic        | 50.2          | ug/L         | 50                | ug/L         | 100.3             | 90.0 – 110.0                  | MS       | 15-MAR-10 02:25           | 100314-3          |
|                  | Selenium       | 52.5          | ug/L         | 50                | ug/L         | 104.9             | 90.0 – 110.0                  | MS       | 15-MAR-10 02:25           | 100314-3          |
|                  | Thallium       | 54.9          | ug/L         | 50                | ug/L         | 109.8             | 90.0 – 110.0                  | MS       | 15-MAR-10 02:25           | 100314-3          |
|                  | Antimony       | 496           | ug/L         | 500               | ug/L         | 99.1              | 90.0 – 110.0                  | P        | 15-MAR-10 12:26           | 031510A-2         |
|                  | Beryllium      | 51.6          | ug/L         | 50                | ug/L         | 103.2             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:50           | 100315-4          |
|                  | Nickel         | 51.4          | ug/L         | 50                | ug/L         | 102.7             | 90.0 – 110.0                  | MS       | 15-MAR-10 12:50           | 100315-4          |
| CCV03            | Mercury        | 5.21          | ug/L         | 5                 | ug/L         | 104.2             | 80.0 – 120.0                  | AV       | 02-MAR-10 09:40           | 030210S1-5        |
|                  | Aluminum       | 4960          | ug/L         | 5000              | ug/L         | 99.2              | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Antimony       | 503           | ug/L         | 500               | ug/L         | 100.7             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Barium         | 518           | ug/L         | 500               | ug/L         | 103.6             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Cadmium        | 522           | ug/L         | 500               | ug/L         | 104.4             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Calcium        | 5170          | ug/L         | 5000              | ug/L         | 103.4             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Chromium       | 515           | ug/L         | 500               | ug/L         | 103               | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Cobalt         | 519           | ug/L         | 500               | ug/L         | 103.8             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Copper         | 498           | ug/L         | 500               | ug/L         | 99.6              | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Iron           | 5130          | ug/L         | 5000              | ug/L         | 102.7             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Lead           | 521           | ug/L         | 500               | ug/L         | 104.2             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Magnesium      | 5250          | ug/L         | 5000              | ug/L         | 104.9             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Manganese      | 521           | ug/L         | 500               | ug/L         | 104.1             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Potassium      | 4920          | ug/L         | 5000              | ug/L         | 98.4              | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Silver         | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Sodium         | 9960          | ug/L         | 10000             | ug/L         | 99.6              | 90.0 - 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Vanadium       | 513           | ug/L         | 500               | ug/L         | 102.5             | 90.0 - 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Zinc           | 511           | ug/L         | 500               | ug/L         | 102.3             | 90.0 - 110.0                  | P        | 11-MAR-10 08:10           | 031110-1          |
|                  | Arsenic        | 51.2          | ug/L         | 50                | ug/L         | 102.4             | 90.0 - 110.0                  | MS       | 15-MAR-10 02:58           | 100314-3          |
|                  | Selenium       | 51.7          | ug/L         | 50                | ug/L         | 103.5             | 90.0 - 110.0                  | MS       | 15-MAR-10 02:58           | 100314-3          |
|                  | Thallium       | 53.9          | ug/L         | 50                | ug/L         | 107.7             | 90.0 - 110.0                  | MS       | 15-MAR-10 02:58           | 100314-3          |
|                  | Antimony       | 468           | ug/L         | 500               | ug/L         | 93.5              | 90.0 - 110.0                  | P        | 15-MAR-10 13:00           | 031510A-2         |
|                  | Beryllium      | 51.1          | ug/L         | 50                | ug/L         | 102.3             | 90.0 - 110.0                  | MS       | 15-MAR-10 13:05           | 100315-4          |
|                  | Nickel         | 50.1          | ug/L         | 50                | ug/L         | 100.1             | 90.0 - 110.0                  | MS       | 15-MAR-10 13:05           | 100315-4          |
| CCV04            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5             | ug/L         | 5                 | ug/L         | 100.1             | 80.0 - 120.0                  | AV       | 02-MAR-10 10:08           | 030210S1-5        |
|                  | Aluminum       | 5020          | ug/L         | 5000              | ug/L         | 100.4             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Antimony       | 491           | ug/L         | 500               | ug/L         | 98.3              | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Barium         | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Cadmium        | 512           | ug/L         | 500               | ug/L         | 102.4             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Calcium        | 5170          | ug/L         | 5000              | ug/L         | 103.4             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Chromium       | 504           | ug/L         | 500               | ug/L         | 100.7             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Cobalt         | 509           | ug/L         | 500               | ug/L         | 101.7             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Copper         | 489           | ug/L         | 500               | ug/L         | 97.8              | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Iron           | 5220          | ug/L         | 5000              | ug/L         | 104.3             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Lead           | 510           | ug/L         | 500               | ug/L         | 102.1             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Magnesium      | 5330          | ug/L         | 5000              | ug/L         | 106.6             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Manganese      | 512           | ug/L         | 500               | ug/L         | 102.4             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Potassium      | 4920          | ug/L         | 5000              | ug/L         | 98.5              | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Silver         | 496           | ug/L         | 500               | ug/L         | 99.1              | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Sodium         | 10000         | ug/L         | 10000             | ug/L         | 100.3             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Vanadium       | 503           | ug/L         | 500               | ug/L         | 100.5             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Zinc           | 503           | ug/L         | 500               | ug/L         | 100.5             | 90.0 - 110.0                  | P        | 11-MAR-10 08:44           | 031110-1          |
|                  | Arsenic        | 51.4          | ug/L         | 50                | ug/L         | 102.8             | 90.0 - 110.0                  | MS       | 15-MAR-10 03:27           | 100314-3          |
|                  | Selenium       | 52.5          | ug/L         | 50                | ug/L         | 105               | 90.0 - 110.0                  | MS       | 15-MAR-10 03:27           | 100314-3          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Thallium       | 54.2          | ug/L         | 50                | ug/L         | 108.3             | 90.0 - 110.0                  | MS       | 15-MAR-10 03:27           | 100314-3          |
|                  | Beryllium      | 51.5          | ug/L         | 50                | ug/L         | 103               | 90.0 - 110.0                  | MS       | 15-MAR-10 13:19           | 100315-4          |
|                  | Nickel         | 50.6          | ug/L         | 50                | ug/L         | 101.1             | 90.0 - 110.0                  | MS       | 15-MAR-10 13:19           | 100315-4          |
|                  | Antimony       | 476           | ug/L         | 500               | ug/L         | 95.2              | 90.0 - 110.0                  | P        | 15-MAR-10 13:44           | 031510A-2         |
| CCV05            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.08          | ug/L         | 5                 | ug/L         | 101.7             | 80.0 - 120.0                  | AV       | 02-MAR-10 10:32           | 030210S1-5        |
|                  | Aluminum       | 4970          | ug/L         | 5000              | ug/L         | 99.4              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Antimony       | 490           | ug/L         | 500               | ug/L         | 98                | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Barium         | 501           | ug/L         | 500               | ug/L         | 100.1             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Cadmium        | 505           | ug/L         | 500               | ug/L         | 101               | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Calcium        | 5100          | ug/L         | 5000              | ug/L         | 102.1             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Chromium       | 497           | ug/L         | 500               | ug/L         | 99.4              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Cobalt         | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Copper         | 483           | ug/L         | 500               | ug/L         | 96.6              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Iron           | 5030          | ug/L         | 5000              | ug/L         | 100.6             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Lead           | 505           | ug/L         | 500               | ug/L         | 101               | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Magnesium      | 5170          | ug/L         | 5000              | ug/L         | 103.5             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Manganese      | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Potassium      | 4940          | ug/L         | 5000              | ug/L         | 98.9              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Silver         | 491           | ug/L         | 500               | ug/L         | 98.3              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Sodium         | 9770          | ug/L         | 10000             | ug/L         | 97.7              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Vanadium       | 496           | ug/L         | 500               | ug/L         | 99.3              | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Zinc           | 495           | ug/L         | 500               | ug/L         | 99                | 90.0 - 110.0                  | P        | 11-MAR-10 09:17           | 031110-1          |
|                  | Antimony       | 495           | ug/L         | 500               | ug/L         | 99.1              | 90.0 - 110.0                  | P        | 15-MAR-10 13:58           | 031510A-2         |
| CCV06            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.22          | ug/L         | 5                 | ug/L         | 104.3             | 80.0 - 120.0                  | AV       | 02-MAR-10 10:56           | 030210S1-5        |
|                  | Aluminum       | 4810          | ug/L         | 5000              | ug/L         | 96.3              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Antimony       | 474           | ug/L         | 500               | ug/L         | 94.8              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Barium         | 482           | ug/L         | 500               | ug/L         | 96.5              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Cadmium        | 487           | ug/L         | 500               | ug/L         | 97.4              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Calcium        | 4990          | ug/L         | 5000              | ug/L         | 99.9              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Chromium       | 479           | ug/L         | 500               | ug/L         | 95.7              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Cobalt         | 483           | ug/L         | 500               | ug/L         | 96.6              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Copper         | 465           | ug/L         | 500               | ug/L         | 92.9              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Iron           | 4940          | ug/L         | 5000              | ug/L         | 98.9              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Lead           | 487           | ug/L         | 500               | ug/L         | 97.3              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Magnesium      | 5070          | ug/L         | 5000              | ug/L         | 101.3             | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Manganese      | 487           | ug/L         | 500               | ug/L         | 97.4              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Potassium      | 4820          | ug/L         | 5000              | ug/L         | 96.3              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Silver         | 474           | ug/L         | 500               | ug/L         | 94.8              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Sodium         | 9660          | ug/L         | 10000             | ug/L         | 96.6              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Vanadium       | 478           | ug/L         | 500               | ug/L         | 95.6              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Zinc           | 477           | ug/L         | 500               | ug/L         | 95.4              | 90.0 - 110.0                  | P        | 11-MAR-10 09:53           | 031110-1          |
|                  | Antimony       | 498           | ug/L         | 500               | ug/L         | 99.7              | 90.0 - 110.0                  | P        | 15-MAR-10 14:41           | 031510A-2         |
| CCV07            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.16          | ug/L         | 5                 | ug/L         | 103.2             | 80.0 - 120.0                  | AV       | 02-MAR-10 11:19           | 030210S1-5        |
|                  | Aluminum       | 5020          | ug/L         | 5000              | ug/L         | 100.5             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Antimony       | 490           | ug/L         | 500               | ug/L         | 98                | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Barium         | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Cadmium        | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Calcium        | 5140          | ug/L         | 5000              | ug/L         | 102.9             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Chromium       | 500           | ug/L         | 500               | ug/L         | 100               | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Cobalt         | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Copper         | 483           | ug/L         | 500               | ug/L         | 96.5              | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Iron           | 5040          | ug/L         | 5000              | ug/L         | 100.9             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Lead           | 502           | ug/L         | 500               | ug/L         | 100.5             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Magnesium      | 5230          | ug/L         | 5000              | ug/L         | 104.6             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Manganese      | 506           | ug/L         | 500               | ug/L         | 101.1             | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Potassium      | 4960          | ug/L         | 5000              | ug/L         | 99.1              | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Silver         | 489           | ug/L         | 500               | ug/L         | 97.8              | 90.0 - 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Sodium         | 9700          | ug/L         | 10000             | ug/L         | 97                | 90.0 – 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Vanadium       | 498           | ug/L         | 500               | ug/L         | 99.5              | 90.0 – 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
|                  | Zinc           | 496           | ug/L         | 500               | ug/L         | 99.1              | 90.0 – 110.0                  | P        | 11-MAR-10 10:22           | 031110-1          |
| CCV08            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.23          | ug/L         | 5                 | ug/L         | 104.6             | 80.0 – 120.0                  | AV       | 02-MAR-10 11:43           | 030210S1-5        |
|                  | Aluminum       | 5020          | ug/L         | 5000              | ug/L         | 100.3             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Antimony       | 500           | ug/L         | 500               | ug/L         | 100               | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Barium         | 512           | ug/L         | 500               | ug/L         | 102.4             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Cadmium        | 518           | ug/L         | 500               | ug/L         | 103.6             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Calcium        | 5190          | ug/L         | 5000              | ug/L         | 103.7             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Chromium       | 510           | ug/L         | 500               | ug/L         | 102               | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Cobalt         | 515           | ug/L         | 500               | ug/L         | 103               | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Copper         | 495           | ug/L         | 500               | ug/L         | 99.1              | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Iron           | 5130          | ug/L         | 5000              | ug/L         | 102.5             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Lead           | 520           | ug/L         | 500               | ug/L         | 104               | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Magnesium      | 5240          | ug/L         | 5000              | ug/L         | 104.7             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Manganese      | 519           | ug/L         | 500               | ug/L         | 103.9             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Potassium      | 4980          | ug/L         | 5000              | ug/L         | 99.6              | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Silver         | 501           | ug/L         | 500               | ug/L         | 100.1             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Sodium         | 10000         | ug/L         | 10000             | ug/L         | 100.1             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Vanadium       | 508           | ug/L         | 500               | ug/L         | 101.7             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
|                  | Zinc           | 507           | ug/L         | 500               | ug/L         | 101.5             | 90.0 – 110.0                  | P        | 11-MAR-10 10:55           | 031110-1          |
| CCV09            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 3.17          | ug/L         | 5                 | ug/L         | 63.3              | 80.0 – 120.0                  | AV       | 02-MAR-10 12:07           | 030210S1-5        |
|                  | Aluminum       | 4940          | ug/L         | 5000              | ug/L         | 98.9              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Antimony       | 487           | ug/L         | 500               | ug/L         | 97.4              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Barium         | 496           | ug/L         | 500               | ug/L         | 99.2              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Cadmium        | 499           | ug/L         | 500               | ug/L         | 99.8              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Calcium        | 5110          | ug/L         | 5000              | ug/L         | 102.3             | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Chromium       | 493           | ug/L         | 500               | ug/L         | 98.6              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Cobalt         | 496           | ug/L         | 500               | ug/L         | 99.2              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Copper         | 479           | ug/L         | 500               | ug/L         | 95.7              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Iron           | 5060          | ug/L         | 5000              | ug/L         | 101.3             | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Lead           | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Magnesium      | 5150          | ug/L         | 5000              | ug/L         | 102.9             | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Manganese      | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Potassium      | 4940          | ug/L         | 5000              | ug/L         | 98.8              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Silver         | 486           | ug/L         | 500               | ug/L         | 97.2              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Sodium         | 9890          | ug/L         | 10000             | ug/L         | 98.9              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Vanadium       | 491           | ug/L         | 500               | ug/L         | 98.2              | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
|                  | Zinc           | 490           | ug/L         | 500               | ug/L         | 98                | 90.0 – 110.0                  | P        | 11-MAR-10 11:14           | 031110-1          |
| CCV10            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 3.88          | ug/L         | 5                 | ug/L         | 77.6              | 80.0 – 120.0                  | AV       | 02-MAR-10 12:26           | 030210S1-5        |
|                  | Aluminum       | 4990          | ug/L         | 5000              | ug/L         | 99.7              | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Antimony       | 512           | ug/L         | 500               | ug/L         | 102.4             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Barium         | 525           | ug/L         | 500               | ug/L         | 105.1             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Cadmium        | 531           | ug/L         | 500               | ug/L         | 106.2             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Calcium        | 5140          | ug/L         | 5000              | ug/L         | 102.8             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Chromium       | 523           | ug/L         | 500               | ug/L         | 104.6             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Cobalt         | 528           | ug/L         | 500               | ug/L         | 105.5             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Copper         | 506           | ug/L         | 500               | ug/L         | 101.2             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Iron           | 5000          | ug/L         | 5000              | ug/L         | 100.1             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Lead           | 530           | ug/L         | 500               | ug/L         | 106               | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Magnesium      | 5210          | ug/L         | 5000              | ug/L         | 104.2             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Manganese      | 531           | ug/L         | 500               | ug/L         | 106.1             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Potassium      | 4930          | ug/L         | 5000              | ug/L         | 98.7              | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Silver         | 511           | ug/L         | 500               | ug/L         | 102.3             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Sodium         | 9720          | ug/L         | 10000             | ug/L         | 97.2              | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Vanadium       | 520           | ug/L         | 500               | ug/L         | 104               | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |
|                  | Zinc           | 520           | ug/L         | 500               | ug/L         | 104.1             | 90.0 – 110.0                  | P        | 11-MAR-10 11:43           | 031110-1          |



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| CCV11            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 4.28          | ug/L         | 5                 | ug/L         | 85.6              | 80.0 – 120.0                  | AV       | 02-MAR-10 12:33           | 030210S1-5        |
|                  | Aluminum       | 4520          | ug/L         | 5000              | ug/L         | 90.4              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Antimony       | 460           | ug/L         | 500               | ug/L         | 92.1              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Barium         | 475           | ug/L         | 500               | ug/L         | 95.1              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Cadmium        | 482           | ug/L         | 500               | ug/L         | 96.4              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Calcium        | 4750          | ug/L         | 5000              | ug/L         | 95                | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Chromium       | 473           | ug/L         | 500               | ug/L         | 94.6              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Cobalt         | 478           | ug/L         | 500               | ug/L         | 95.5              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Copper         | 452           | ug/L         | 500               | ug/L         | 90.3              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Iron           | 4700          | ug/L         | 5000              | ug/L         | 93.9              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Lead           | 484           | ug/L         | 500               | ug/L         | 96.7              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Magnesium      | 4850          | ug/L         | 5000              | ug/L         | 96.9              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Manganese      | 478           | ug/L         | 500               | ug/L         | 95.6              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Potassium      | 4500          | ug/L         | 5000              | ug/L         | 90                | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Silver         | 459           | ug/L         | 500               | ug/L         | 91.9              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Sodium         | 9040          | ug/L         | 10000             | ug/L         | 90.4              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Vanadium       | 469           | ug/L         | 500               | ug/L         | 93.8              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
|                  | Zinc           | 469           | ug/L         | 500               | ug/L         | 93.9              | 90.0 – 110.0                  | P        | 11-MAR-10 12:15           | 031110-1          |
| CCV12            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 4.59          | ug/L         | 5                 | ug/L         | 91.8              | 80.0 – 120.0                  | AV       | 02-MAR-10 12:57           | 030210S1-5        |
|                  | Aluminum       | 4980          | ug/L         | 5000              | ug/L         | 99.7              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Antimony       | 490           | ug/L         | 500               | ug/L         | 98                | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Barium         | 507           | ug/L         | 500               | ug/L         | 101.4             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Cadmium        | 520           | ug/L         | 500               | ug/L         | 104.1             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Calcium        | 5300          | ug/L         | 5000              | ug/L         | 106               | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Chromium       | 501           | ug/L         | 500               | ug/L         | 100.3             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Cobalt         | 485           | ug/L         | 500               | ug/L         | 96.9              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Copper         | 476           | ug/L         | 500               | ug/L         | 95.1              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Iron           | 5110          | ug/L         | 5000              | ug/L         | 102.2             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Lead           | 526           | ug/L         | 500               | ug/L         | 105.2             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Magnesium      | 5300          | ug/L         | 5000              | ug/L         | 106.1             | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Manganese      | 499           | ug/L         | 500               | ug/L         | 99.8              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Potassium      | 4960          | ug/L         | 5000              | ug/L         | 99.2              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Silver         | 488           | ug/L         | 500               | ug/L         | 97.5              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Sodium         | 9670          | ug/L         | 10000             | ug/L         | 96.7              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Vanadium       | 497           | ug/L         | 500               | ug/L         | 99.5              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
|                  | Zinc           | 499           | ug/L         | 500               | ug/L         | 99.7              | 90.0 – 110.0                  | P        | 11-MAR-10 12:49           | 031110-1          |
| CCV13            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 4.5           | ug/L         | 5                 | ug/L         | 90.1              | 80.0 – 120.0                  | AV       | 02-MAR-10 13:21           | 030210S1-5        |
|                  | Aluminum       | 4790          | ug/L         | 5000              | ug/L         | 95.7              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Antimony       | 496           | ug/L         | 500               | ug/L         | 99.3              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Barium         | 522           | ug/L         | 500               | ug/L         | 104.5             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Cadmium        | 542           | ug/L         | 500               | ug/L         | 108.4             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Calcium        | 5260          | ug/L         | 5000              | ug/L         | 105.1             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Chromium       | 516           | ug/L         | 500               | ug/L         | 103.2             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Cobalt         | 503           | ug/L         | 500               | ug/L         | 100.6             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Copper         | 471           | ug/L         | 500               | ug/L         | 94.2              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Iron           | 5070          | ug/L         | 5000              | ug/L         | 101.4             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Lead           | 548           | ug/L         | 500               | ug/L         | 109.6             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Magnesium      | 5390          | ug/L         | 5000              | ug/L         | 107.8             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Manganese      | 509           | ug/L         | 500               | ug/L         | 101.8             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Potassium      | 4820          | ug/L         | 5000              | ug/L         | 96.4              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Silver         | 488           | ug/L         | 500               | ug/L         | 97.6              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Sodium         | 9410          | ug/L         | 10000             | ug/L         | 94.1              | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Vanadium       | 506           | ug/L         | 500               | ug/L         | 101.3             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
|                  | Zinc           | 511           | ug/L         | 500               | ug/L         | 102.2             | 90.0 – 110.0                  | P        | 11-MAR-10 13:24           | 031110-1          |
| CCV14            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 4.74          | ug/L         | 5                 | ug/L         | 94.7              | 80.0 – 120.0                  | AV       | 02-MAR-10 13:28           | 030210S1-5        |
| CCV15            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.26          | ug/L         | 5                 | ug/L         | 105.3             | 80.0 – 120.0                  | AV       | 02-MAR-10 13:55           | 030210S1-5        |

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| CCV16            | Mercury        | 5.35          | ug/L         | 5                 | ug/L         | 107               | 80.0 – 120.0                  | AV       | 02-MAR-10 14:19           | 030210S1-5        |

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Advisory Limits (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-----------------------------|----------|---------------------------|-------------------|
| CRDL01           |                |               |              |                   |              |                   |                             |          |                           |                   |
|                  | Mercury        | .157          | ug/L         | .2                | ug/L         | 78.6              | 70.0 – 130.0                | AV       | 02-MAR-10 08:50           | 030210S1-5        |
|                  | Thallium       | 1.29          | ug/L         | 1                 | ug/L         | 129.2             | 70.0 – 130.0                | MS       | 15-MAR-10 01:41           | 100314-3          |
|                  | Arsenic        | 5.5           | ug/L         | 5                 | ug/L         | 110               | 70.0 – 130.0                | MS       | 15-MAR-10 01:41           | 100314-3          |
|                  | Selenium       | 5.64          | ug/L         | 5                 | ug/L         | 112.9             | 70.0 – 130.0                | MS       | 15-MAR-10 01:41           | 100314-3          |
|                  | Nickel         | 2.32          | ug/L         | 2                 | ug/L         | 116.2             | 70.0 – 130.0                | MS       | 15-MAR-10 12:29           | 100315-4          |
|                  | Beryllium      | .53           | ug/L         | .5                | ug/L         | 106               | 70.0 – 130.0                | MS       | 15-MAR-10 12:29           | 100315-4          |
| PQL01            |                |               |              |                   |              |                   |                             |          |                           |                   |
|                  | Aluminum       | 194           | ug/L         | 200               | ug/L         | 97.2              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Iron           | 95.4          | ug/L         | 100               | ug/L         | 95.4              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Lead           | 9.97          | ug/L         | 10                | ug/L         | 99.8              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Magnesium      | 327           | ug/L         | 300               | ug/L         | 108.9             | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Potassium      | 152           | ug/L         | 150               | ug/L         | 101               | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Sodium         | 290           | ug/L         | 300               | ug/L         | 96.8              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Barium         | 4.54          | ug/L         | 5                 | ug/L         | 90.8              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Chromium       | 5.03          | ug/L         | 5                 | ug/L         | 100.7             | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Copper         | 9.5           | ug/L         | 10                | ug/L         | 95                | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Calcium        | 194           | ug/L         | 200               | ug/L         | 97.2              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Zinc           | 9.76          | ug/L         | 10                | ug/L         | 97.6              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Vanadium       | 4.47          | ug/L         | 5                 | ug/L         | 89.4              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Cobalt         | 4.54          | ug/L         | 5                 | ug/L         | 90.9              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Cadmium        | 4.67          | ug/L         | 5                 | ug/L         | 93.3              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Antimony       | 6.95          | ug/L         | 10                | ug/L         | 69.5              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Silver         | 4.78          | ug/L         | 5                 | ug/L         | 95.6              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Manganese      | 9.44          | ug/L         | 10                | ug/L         | 94.4              | 70.0 – 130.0                | P        | 11-MAR-10 06:57           | 031110-1          |
|                  | Antimony       | 9.84          | ug/L         | 10                | ug/L         | 98.4              | 70.0 – 130.0                | P        | 15-MAR-10 11:52           | 031510A-2         |
| PQL02            |                |               |              |                   |              |                   |                             |          |                           |                   |
|                  | Antimony       | 12.6          | ug/L         | 10                | ug/L         | 125.8             | 70.0 – 130.0                | P        | 15-MAR-10 14:01           | 031510A-2         |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ng/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
| ICB01            | Mercury        | -0.112                 | +/-2              | J                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 08:48               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 06:53               | 031110-1   |
|                  | Arsenic        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | MS       | 15-MAR-10 01:38               | 100314-3   |
|                  | Selenium       | 2.5                    | +/-5              | U                    | 2.5        | 5.0        | SOL           | MS       | 15-MAR-10 01:38               | 100314-3   |
|                  | Thallium       | 0.3                    | +/-1              | U                    | 0.3        | 1.0        | SOL           | MS       | 15-MAR-10 01:38               | 100314-3   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 11:49               | 031510A-2  |
|                  | Beryllium      | 0.1                    | +/-5              | U                    | 0.1        | 0.5        | SOL           | MS       | 15-MAR-10 12:27               | 100315-4   |
|                  | Nickel         | 0.5                    | +/-2              | U                    | 0.5        | 2.0        | SOL           | MS       | 15-MAR-10 12:27               | 100315-4   |
| CCB01            | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 08:54               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Antimony       | 5.4                    | +/-10             | J                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ng/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Copper         | 3.86                   | +/-10             | J                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Potassium      | 133.01                 | +/-250            | J                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 07:16               | 031110-1   |
|                  | Arsenic        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | MS       | 15-MAR-10 01:56               | 100314-3   |
|                  | Selenium       | 2.5                    | +/-5              | U                    | 2.5        | 5.0        | SOL           | MS       | 15-MAR-10 01:56               | 100314-3   |
|                  | Thallium       | 0.3                    | +/-1              | U                    | 0.3        | 1.0        | SOL           | MS       | 15-MAR-10 01:56               | 100314-3   |
|                  | Antimony       | 7.46                   | +/-10             | J                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 12:11               | 031510A-2  |
|                  | Beryllium      | 0.1                    | +/-5              | U                    | 0.1        | 0.5        | SOL           | MS       | 15-MAR-10 12:36               | 100315-4   |
|                  | Nickel         | 0.5                    | +/-2              | U                    | 0.5        | 2.0        | SOL           | MS       | 15-MAR-10 12:36               | 100315-4   |
| <b>CCB02</b>     | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 09:18               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Lead           | 2.66                   | +/-10             | J                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 07:32               | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 07:32                     | 031110-1   |
|                  | Arsenic        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | MS       | 15-MAR-10 02:29                     | 100314-3   |
|                  | Selenium       | 2.5                          | +/-5              | U                          | 2.5        | 5.0        | SOL           | MS       | 15-MAR-10 02:29                     | 100314-3   |
|                  | Thallium       | 0.3                          | +/-1              | U                          | 0.3        | 1.0        | SOL           | MS       | 15-MAR-10 02:29                     | 100314-3   |
|                  | Antimony       | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 12:29                     | 031510A-2  |
|                  | Beryllium      | 0.1                          | +/-5              | U                          | 0.1        | 0.5        | SOL           | MS       | 15-MAR-10 12:52                     | 100315-4   |
|                  | Nickel         | 0.5                          | +/-2              | U                          | 0.5        | 2.0        | SOL           | MS       | 15-MAR-10 12:52                     | 100315-4   |
| <b>CCB03</b>     |                |                              |                   |                            |            |            |               |          |                                     |            |
|                  | Mercury        | 0.068                        | +/-2              | U                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 09:42                     | 030210S1-5 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Antimony       | 4.23                         | +/-10             | J                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Lead           | 2.94                         | +/-10             | J                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 08:14                     | 031110-1   |

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ug/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
|                  | Arsenic        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | MS       | 15-MAR-10 03:02               | 100314-3   |
|                  | Selenium       | 2.5                    | +/-5              | U                    | 2.5        | 5.0        | SOL           | MS       | 15-MAR-10 03:02               | 100314-3   |
|                  | Thallium       | 0.3                    | +/-1              | U                    | 0.3        | 1.0        | SOL           | MS       | 15-MAR-10 03:02               | 100314-3   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 13:04               | 031510A-2  |
|                  | Beryllium      | 0.1                    | +/-5              | U                    | 0.1        | 0.5        | SOL           | MS       | 15-MAR-10 13:07               | 100315-4   |
|                  | Nickel         | 0.5                    | +/-2              | U                    | 0.5        | 2.0        | SOL           | MS       | 15-MAR-10 13:07               | 100315-4   |
| <b>CCB04</b>     | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 10:10               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 08:47               | 031110-1   |
|                  | Arsenic        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | MS       | 15-MAR-10 03:31               | 100314-3   |
|                  | Selenium       | 2.5                    | +/-5              | U                    | 2.5        | 5.0        | SOL           | MS       | 15-MAR-10 03:31               | 100314-3   |
|                  | Thallium       | 0.3                    | +/-1              | U                    | 0.3        | 1.0        | SOL           | MS       | 15-MAR-10 03:31               | 100314-3   |
|                  | Beryllium      | 0.1                    | +/-5              | U                    | 0.1        | 0.5        | SOL           | MS       | 15-MAR-10 13:21               | 100315-4   |
|                  | Nickel         | 0.5                    | +/-2              | U                    | 0.5        | 2.0        | SOL           | MS       | 15-MAR-10 13:21               | 100315-4   |
|                  | Antimony       | 4.33                   | +/-10             | J                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 13:48               | 031510A-2  |

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**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ug/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
| CCB05            | Mercury        | -0.072                 | +/- .2            | J                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 10:34               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 09:21               | 031110-1   |
| CCB06            | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 14:05               | 031510A-2  |
|                  | Mercury        | -0.074                 | +/- .2            | J                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 10:58               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ng/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 09:57               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 15-MAR-10 14:44               | 031510A-2  |
| <b>CCB07</b>     | Mercury        | -0.093                 | +/-2              | J                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 11:22               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Lead           | 2.5                    | +/-10             | U                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 10:26               | 031110-1   |
| <b>CCB08</b>     | Mercury        | -0.114                 | +/-2              | J                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 11:45               | 030210S1-5 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 10:58               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 10:58               | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Lead           | 2.5                          | +/-10             | U                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 10:58                     | 031110-1   |
| <b>CCB09</b>     | Mercury        | -0.078                       | +/-2              | J                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 12:09                     | 030210S1-5 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Antimony       | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Lead           | 2.5                          | +/-10             | U                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 11:18                     | 031110-1   |
| CCB10            | Mercury        | 0.068                        | +/-2              | U                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 12:28                     | 030210S1-5 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Antimony       | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Lead           | 2.5                          | +/-10             | U                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 11:47                     | 031110-1   |
| CCB11            | Mercury        | 0.068                        | +/-2              | U                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 12:35                     | 030210S1-5 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Antimony       | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Lead           | 2.5                          | +/-10             | U                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 12:19                     | 031110-1   |
| <b>CCB12</b>     | Mercury        | 0.068                        | +/-2              | U                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 12:59                     | 030210S1-5 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Antimony       | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Cadmium        | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Calcium        | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Chromium       | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Cobalt         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Iron           | 80.0                         | +/-250            | U                          | 80.0       | 250        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Lead           | 2.5                          | +/-10             | U                          | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Manganese      | 2.0                          | +/-10             | U                          | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Potassium      | 64.0                         | +/-250            | U                          | 64.0       | 250        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Sodium         | 70.0                         | +/-250            | U                          | 70.0       | 250        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 12:52                     | 031110-1   |
| <b>CCB13</b>     | Mercury        | 0.068                        | +/-2              | U                          | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 13:23                     | 030210S1-5 |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ug/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Antimony       | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Cadmium        | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Calcium        | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Chromium       | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Cobalt         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Iron           | 80.0                   | +/-250            | U                    | 80.0       | 250        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Lead           | 2.97                   | +/-10             | J                    | 2.5        | 10.0       | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Manganese      | 2.0                    | +/-10             | U                    | 2.0        | 10.0       | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Potassium      | 64.0                   | +/-250            | U                    | 64.0       | 250        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Sodium         | 70.0                   | +/-250            | U                    | 70.0       | 250        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | SOL           | P        | 11-MAR-10 13:28               | 031110-1   |
| <b>CCB14</b>     | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 13:30               | 030210S1-5 |
| <b>CCB15</b>     | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 13:57               | 030210S1-5 |
| <b>CCB16</b>     | Mercury        | 0.068                  | +/-2              | U                    | 0.068      | 0.2        | SOL           | AV       | 02-MAR-10 14:21               | 030210S1-5 |

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1863  
**Contract:** LANL01004  
**Matrix:** SOIL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>Acceptance Window</u> | <u>Conc Qual</u> | <u>M</u> | <u>MDL</u> | <u>RDL</u> |
|------------------|----------------|---------------|--------------|--------------------------|------------------|----------|------------|------------|
| 1202046587       | Silver         | 99.6          | ug/kg        | +/-498                   | U                | P        | 99.6       | 498        |
|                  | Sodium         | 6970          | ug/kg        | +/-24900                 | U                | P        | 6970       | 24900      |
|                  | Vanadium       | 99.6          | ug/kg        | +/-498                   | U                | P        | 99.6       | 498        |
|                  | Antimony       | 329           | ug/kg        | +/-996                   | U                | P        | 329        | 996        |
|                  | Barium         | 99.6          | ug/kg        | +/-498                   | U                | P        | 99.6       | 498        |
|                  | Aluminum       | 6770          | ug/kg        | +/-19900                 | U                | P        | 6770       | 19900      |
|                  | Zinc           | 329           | ug/kg        | +/-996                   | U                | P        | 329        | 996        |
|                  | Cadmium        | 99.6          | ug/kg        | +/-498                   | U                | P        | 99.6       | 498        |
|                  | Chromium       | 149           | ug/kg        | +/-498                   | U                | P        | 149        | 498        |
|                  | Potassium      | 6370          | ug/kg        | +/-24900                 | U                | P        | 6370       | 24900      |
|                  | Manganese      | 199           | ug/kg        | +/-996                   | U                | P        | 199        | 996        |
|                  | Magnesium      | 8470          | ug/kg        | +/-29900                 | U                | P        | 8470       | 29900      |
|                  | Lead           | 249           | ug/kg        | +/-996                   | U                | P        | 249        | 996        |
|                  | Iron           | 9660          | ug/kg        | +/-24900                 | J                | P        | 7970       | 24900      |
|                  | Copper         | 299           | ug/kg        | +/-996                   | U                | P        | 299        | 996        |
|                  | Cobalt         | 149           | ug/kg        | +/-498                   | U                | P        | 149        | 498        |
|                  | Calcium        | 8010          | ug/kg        | +/-24900                 | J                | P        | 7970       | 24900      |
| 1202046593       | Arsenic        | 199           | ug/kg        | +/-994                   | U                | MS       | 199        | 994        |
|                  | Beryllium      | 19.9          | ug/kg        | +/-99.4                  | U                | MS       | 19.9       | 99.4       |
|                  | Nickel         | 99.4          | ug/kg        | +/-398                   | U                | MS       | 99.4       | 398        |
|                  | Selenium       | 497           | ug/kg        | +/-994                   | U                | MS       | 497        | 994        |
|                  | Thallium       | 59.6          | ug/kg        | +/-199                   | U                | MS       | 59.6       | 199        |
| 1202055902       | Mercury        | -11.1         | ug/kg        | +/-12                    | J                | AV       | 4.08       | 12         |

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| <b>ICSA01</b>    |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Aluminum       | 511000        | ug/L         | 500000            | ug/L         | 102               | 80.0 – 120.0                  | 11-MAR-10 07:01           | 031110-1          |
|                  | Antimony       | -16.1         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Barium         | 7.43          | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Cadmium        | 3.53          | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Calcium        | 479000        | ug/L         | 500000            | ug/L         | 95.8              | 80.0 – 120.0                  | 11-MAR-10 07:01           | 031110-1          |
|                  | Chromium       | -1.5          | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Cobalt         | 3.04          | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Copper         | -3.35         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Iron           | 185000        | ug/L         | 200000            | ug/L         | 92.4              | 80.0 – 120.0                  | 11-MAR-10 07:01           | 031110-1          |
|                  | Lead           | 0.946         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Magnesium      | 485000        | ug/L         | 500000            | ug/L         | 97                | 80.0 – 120.0                  | 11-MAR-10 07:01           | 031110-1          |
|                  | Manganese      | 0.223         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Potassium      | -82.0         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Silver         | -1.53         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Sodium         | -26.8         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Vanadium       | -8.56         | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
|                  | Zinc           | 1.39          | ug/L         |                   |              |                   |                               | 11-MAR-10 07:01           | 031110-1          |
| <b>ICSAB01</b>   |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Aluminum       | 526000        | ug/L         | 500000            | ug/L         | 105               | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Antimony       | 537           | ug/L         | 500               | ug/L         | 107               | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Barium         | 513           | ug/L         | 500               | ug/L         | 103               | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Cadmium        | 473           | ug/L         | 500               | ug/L         | 94.6              | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Calcium        | 490000        | ug/L         | 500000            | ug/L         | 98.1              | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Chromium       | 494           | ug/L         | 500               | ug/L         | 98.7              | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Cobalt         | 460           | ug/L         | 500               | ug/L         | 92                | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Copper         | 572           | ug/L         | 500               | ug/L         | 114               | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Iron           | 189000        | ug/L         | 200000            | ug/L         | 94.6              | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Lead           | 500           | ug/L         | 500               | ug/L         | 100               | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Magnesium      | 497000        | ug/L         | 500000            | ug/L         | 99.4              | 80.0 – 120.0                  | 11-MAR-10 07:03           | 031110-1          |



METALS  
-4-  
Interference Check Sample

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

ICS:

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
|                  | Manganese      | 499           | ug/L         | 500               | ug/L         | 99.7              | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Potassium      | 5190          | ug/L         | 5000              | ug/L         | 104               | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Silver         | 268           | ug/L         | 250               | ug/L         | 107               | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Sodium         | 5200          | ug/L         | 5000              | ug/L         | 104               | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Vanadium       | 525           | ug/L         | 500               | ug/L         | 105               | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |
|                  | Zinc           | 488           | ug/L         | 500               | ug/L         | 97.6              | 80.0 - 120.0                  | 11-MAR-10 07:03           | 031110-1          |

METALS  
-4-  
Interference Check Sample

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01           | Antimony       | -5.19         | ug/L         |                   |              |                   |                               | 15-MAR-10 11:56           | 031510A-2         |
| ICSAB01          | Antimony       | 532           | ug/L         | 500               | ug/L         | 106               | 80.0 - 120.0                  | 15-MAR-10 11:59           | 031510A-2         |

METALS  
-4-  
Interference Check Sample

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01           |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Arsenic        | -0.32         | ug/L         |                   |              |                   |                               | 15-MAR-10 01:45           | 100314-3          |
|                  | Selenium       | -1.31         | ug/L         |                   |              |                   |                               | 15-MAR-10 01:45           | 100314-3          |
|                  | Thallium       | -0.004        | ug/L         |                   |              |                   |                               | 15-MAR-10 01:45           | 100314-3          |
| ICSAB01          |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Arsenic        | 22.8          | ug/L         | 20                | ug/L         | 114               | 80.0 - 120.0                  | 15-MAR-10 01:49           | 100314-3          |
|                  | Selenium       | 21.0          | ug/L         | 20                | ug/L         | 105               | 80.0 - 120.0                  | 15-MAR-10 01:49           | 100314-3          |
|                  | Thallium       | 23.1          | ug/L         | 20                | ug/L         | 115               | 80.0 - 120.0                  | 15-MAR-10 01:49           | 100314-3          |

METALS  
-4-  
Interference Check Sample

SDG No: 10-1863

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01           | Beryllium      | 0.11          | ug/L         |                   |              |                   |                               | 15-MAR-10 12:31           | 100315-4          |
|                  | Nickel         | 3.34          | ug/L         |                   |              |                   |                               | 15-MAR-10 12:31           | 100315-4          |
| ICSAB01          | Beryllium      | 21.9          | ug/L         | 20                | ug/L         | 109               | 80.0 - 120.0                  | 15-MAR-10 12:32           | 100315-4          |
|                  | Nickel         | 24.3          | ug/L         | 23.31             | ug/L         | 104               | 80.0 - 120.0                  | 15-MAR-10 12:32           | 100315-4          |

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1863 Client ID RE15-10-8196S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 98.8

Sample ID: 247188001 Spike ID: 1202046590

| Analyte   | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|------------------|---------------|---|---------------|---|-------------|------------|------|---|
| Antimony  | ug/kg | 75-125           | 45900         |   | 314           | U | 50600       | 90.8       |      | P |
| Barium    | ug/kg | 75-125           | 64800         |   | 13500         |   | 50600       | 101        |      | P |
| Cadmium   | ug/kg | 75-125           | 49900         |   | 95.3          | U | 50600       | 98.5       |      | P |
| Calcium   | ug/kg | 75-125           | 1100000       |   | 597000        |   | 506000      | 98.7       |      | P |
| Chromium  | ug/kg | 75-125           | 50300         |   | 16100         |   | 50600       | 67.6       | N    | P |
| Cobalt    | ug/kg | 75-125           | 47100         |   | 450           | J | 50600       | 92.1       |      | P |
| Copper    | ug/kg | 75-125           | 50600         |   | 1640          |   | 50600       | 96.8       |      | P |
| Iron      | ug/kg |                  | 6370000       |   | 5930000       |   | 506000      | 86.6       | N/A  | P |
| Lead      | ug/kg | 75-125           | 56300         |   | 4440          |   | 50600       | 102        |      | P |
| Magnesium | ug/kg | 75-125           | 654000        |   | 126000        |   | 506000      | 104        |      | P |
| Manganese | ug/kg |                  | 349000        |   | 279000        |   | 50600       | 139        | N/A  | P |
| Potassium | ug/kg | 75-125           | 1350000       |   | 507000        |   | 506000      | 167        | N    | P |
| Silver    | ug/kg | 75-125           | 47500         |   | 95.3          | U | 50600       | 93.9       |      | P |
| Sodium    | ug/kg | 75-125           | 1110000       |   | 365000        |   | 506000      | 147        | N    | P |
| Vanadium  | ug/kg | 75-125           | 49000         |   | 1940          |   | 50600       | 93         |      | P |
| Zinc      | ug/kg | 75-125           | 93300         |   | 45300         |   | 50600       | 94.8       |      | P |
| Aluminum  | ug/kg | 75-125           | 2000000       |   | 919000        |   | 506000      | 214        | N    | P |

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1863 Client ID RE15-10-8196SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 98.8

Sample ID: 247188001 Spike ID: 1202046591

| Analyte   | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|------------------|---------------|---|---------------|---|-------------|------------|------|---|
| Aluminum  | ug/kg | 75-125           | 2100000       |   | 919000        |   | 488000      | 241        | N    | P |
| Antimony  | ug/kg | 75-125           | 46000         |   | 314           | U | 48800       | 94.2       |      | P |
| Barium    | ug/kg | 75-125           | 63100         |   | 13500         |   | 48800       | 102        |      | P |
| Cadmium   | ug/kg | 75-125           | 49300         |   | 95.3          | U | 48800       | 101        |      | P |
| Calcium   | ug/kg | 75-125           | 1140000       |   | 597000        |   | 488000      | 112        |      | P |
| Chromium  | ug/kg | 75-125           | 52700         |   | 16100         |   | 48800       | 74.9       | N    | P |
| Cobalt    | ug/kg | 75-125           | 46900         |   | 450           | J | 48800       | 95.2       |      | P |
| Copper    | ug/kg | 75-125           | 50200         |   | 1640          |   | 48800       | 99.4       |      | P |
| Iron      | ug/kg |                  | 6370000       |   | 5930000       |   | 488000      | 91.1       | N/A  | P |
| Lead      | ug/kg | 75-125           | 56100         |   | 4440          |   | 48800       | 106        |      | P |
| Magnesium | ug/kg | 75-125           | 648000        |   | 126000        |   | 488000      | 107        |      | P |
| Manganese | ug/kg |                  | 334000        |   | 279000        |   | 48800       | 112        | N/A  | P |
| Potassium | ug/kg | 75-125           | 1420000       |   | 507000        |   | 488000      | 186        | N    | P |
| Silver    | ug/kg | 75-125           | 46800         |   | 95.3          | U | 48800       | 95.8       |      | P |
| Sodium    | ug/kg | 75-125           | 1110000       |   | 365000        |   | 488000      | 153        | N    | P |
| Vanadium  | ug/kg | 75-125           | 48500         |   | 1940          |   | 48800       | 95.4       |      | P |
| Zinc      | ug/kg | 75-125           | 92800         |   | 45300         |   | 48800       | 97.1       |      | P |

## METALS

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## Matrix Spike Summary

SDG NO. 10-1863 Client ID: RE15-10-8196S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 98.8

Sample ID: 247188001 Spike ID: 1202046596

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Arsenic        | ug/kg        | 75-125                      | 8460                     |          | 327                      | J        | 8090                   | 101                   |             | MS       |
| Beryllium      | ug/kg        | 75-125                      | 5360                     |          | 462                      |          | 5060                   | 96.8                  |             | MS       |
| Nickel         | ug/kg        | 75-125                      | 5430                     |          | 493                      |          | 5060                   | 97.6                  |             | MS       |
| Selenium       | ug/kg        | 75-125                      | 2040                     |          | 493                      | U        | 2020                   | 94.7                  |             | MS       |
| Thallium       | ug/kg        | 75-125                      | 10800                    |          | 59.2                     | U        | 10100                  | 107                   |             | MS       |

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1863 Client ID RE15-10-8196SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 98.8

Sample ID: 247188001 Spike ID: 1202046597

| Analyte   | Units | Acceptance<br>Limit | Spiked<br>Result | C | Sample<br>Result | C | Spike<br>Added | %<br>Recovery | Qual | M  |
|-----------|-------|---------------------|------------------|---|------------------|---|----------------|---------------|------|----|
| Arsenic   | ug/kg | 75-125              | 8250             |   | 327              | J | 7780           | 102           |      | MS |
| Beryllium | ug/kg | 75-125              | 5340             |   | 462              |   | 4860           | 100           |      | MS |
| Nickel    | ug/kg | 75-125              | 5320             |   | 493              |   | 4860           | 99.2          |      | MS |
| Selenium  | ug/kg | 75-125              | 1970             |   | 493              | U | 1950           | 95.1          |      | MS |
| Thallium  | ug/kg | 75-125              | 10500            |   | 59.2             | U | 9730           | 108           |      | MS |



## METALS

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## Matrix Spike Summary

**SDG NO.** 10-1863 **Client ID** RE15-10-8196S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 98.8**Sample ID:** 247188001 **Spike ID:** 1202055905

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Mercury        | ug/kg        | 75-125                      | 105                      |          | 3.55                     | U        | 103                    | 101                   |             | AV       |

## METALS

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## Matrix Spike Duplicate Summary

**SDG NO.** 10-1863 **Client ID** RE15-10-8196SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 98.8**Sample ID:** 247188001 **Spike ID:** 1202055907

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Mercury        | ug/kg        | 75-125                      | 114                      |          | 3.55                     | U        | 118                    | 96.5                  |             | AV       |

Metals  
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Duplicate Sample Summary

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196D

Sample ID: 247188001

Duplicate ID: 1202046588

Percent Solids for Dup: 98.8

| Analyte   | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD  | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|---|
| Aluminum  | ug/kg | +/-20%           | 919000        |   | 750000           |   | 20.3 | *    | P |
| Antimony  | ug/kg |                  | 314 U         |   | 324 U            |   |      |      | P |
| Barium    | ug/kg | +/-20%           | 13500         |   | 11600            |   | 15.1 |      | P |
| Cadmium   | ug/kg |                  | 95.3 U        |   | 98.2 U           |   |      |      | P |
| Calcium   | ug/kg | +/-20%           | 597000        |   | 488000           |   | 20.1 | *    | P |
| Chromium  | ug/kg | +/-20%           | 16100         |   | 3070             |   | 136  | *    | P |
| Cobalt    | ug/kg | +/-491           | 450 J         |   | 371 J            |   | 19.1 |      | P |
| Copper    | ug/kg | +/-982           | 1640          |   | 1210             |   | 30.4 |      | P |
| Iron      | ug/kg | +/-20%           | 5930000       |   | 5230000          |   | 12.5 |      | P |
| Lead      | ug/kg | +/-982           | 4440          |   | 4050             |   | 9.23 |      | P |
| Magnesium | ug/kg | +/-29500         | 126000        |   | 102000           |   | 20.5 |      | P |
| Manganese | ug/kg | +/-20%           | 279000        |   | 251000           |   | 10.5 |      | P |
| Potassium | ug/kg | +/-20%           | 507000        |   | 417000           |   | 19.4 |      | P |
| Silver    | ug/kg |                  | 95.3 U        |   | 98.2 U           |   |      |      | P |
| Sodium    | ug/kg | +/-20%           | 365000        |   | 292000           |   | 22.1 | *    | P |
| Vanadium  | ug/kg | +/-491           | 1940          |   | 1600             |   | 19.1 |      | P |
| Zinc      | ug/kg | +/-20%           | 45300         |   | 39600            |   | 13.4 |      | P |

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196SD

Sample ID: 1202046590

Duplicate ID: 1202046591

Percent Solids for Dup: 98.8

| Analyte   | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD  | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|---|
| Aluminum  | ug/kg | +/-20            | 2000000       |   | 2100000          |   | 4.74 |      | P |
| Antimony  | ug/kg | +/-20            | 45900         |   | 46000            |   | .245 |      | P |
| Barium    | ug/kg | +/-20            | 64800         |   | 63100            |   | 2.59 |      | P |
| Cadmium   | ug/kg | +/-20            | 49900         |   | 49300            |   | 1.16 |      | P |
| Calcium   | ug/kg | +/-20            | 1100000       |   | 1140000          |   | 4.19 |      | P |
| Chromium  | ug/kg | +/-20            | 50300         |   | 52700            |   | 4.66 |      | P |
| Cobalt    | ug/kg | +/-20            | 47100         |   | 46900            |   | .277 |      | P |
| Copper    | ug/kg | +/-20            | 50600         |   | 50200            |   | .903 |      | P |
| Iron      | ug/kg | +/-20            | 6370000       |   | 6370000          |   | .104 |      | P |
| Lead      | ug/kg | +/-20            | 56300         |   | 56100            |   | .385 |      | P |
| Magnesium | ug/kg | +/-20            | 654000        |   | 648000           |   | .911 |      | P |
| Manganese | ug/kg | +/-20            | 349000        |   | 334000           |   | 4.55 |      | P |
| Potassium | ug/kg | +/-20            | 1350000       |   | 1420000          |   | 4.74 |      | P |
| Silver    | ug/kg | +/-20            | 47500         |   | 46800            |   | 1.61 |      | P |
| Sodium    | ug/kg | +/-20            | 1110000       |   | 1110000          |   | .456 |      | P |
| Vanadium  | ug/kg | +/-20            | 49000         |   | 48500            |   | .918 |      | P |
| Zinc      | ug/kg | +/-20            | 93300         |   | 92800            |   | .601 |      | P |

## Metals

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## Duplicate Sample Summary

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196D

Sample ID: 247188001

Duplicate ID: 1202046594

Percent Solids for Dup: 98.8

| Analyte   | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD   | Qual | M  |
|-----------|-------|---------------------|------------------|---|---------------------|---|-------|------|----|
| Arsenic   | ug/kg | +/-1000             | 327 J            |   | 336 J               |   | 2.85  |      | MS |
| Beryllium | ug/kg | +/-100              | 462              |   | 462                 |   | .0815 |      | MS |
| Nickel    | ug/kg | +/-402              | 493              |   | 413                 |   | 17.6  |      | MS |
| Selenium  | ug/kg |                     | 493 U            |   | 502 U               |   |       |      | MS |
| Thallium  | ug/kg |                     | 59.2 U           |   | 60.2 U              |   |       |      | MS |

## Metals

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## Duplicate Sample Summary

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196SD

Sample ID: 1202046596

Duplicate ID: 1202046597

Percent Solids for Dup: 98.8

| Analyte   | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD  | Qual | M  |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|----|
| Arsenic   | ug/kg | +/-20            | 8460          |   | 8250             |   | 2.58 |      | MS |
| Beryllium | ug/kg | +/-20            | 5360          |   | 5340             |   | .422 |      | MS |
| Nickel    | ug/kg | +/-20            | 5430          |   | 5320             |   | 2.13 |      | MS |
| Selenium  | ug/kg | +/-20            | 2040          |   | 1970             |   | 3.24 |      | MS |
| Thallium  | ug/kg | +/-20            | 10800         |   | 10500            |   | 2.93 |      | MS |

## Metals

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## Duplicate Sample Summary

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196D

Sample ID: 247188001

Duplicate ID: 1202055904

Percent Solids for Dup: 98.8

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M  |
|---------|-------|---------------------|------------------|---|---------------------|---|-----|------|----|
| Mercury | ug/kg |                     | 3.55 U           |   | 3.74 U              |   |     |      | AV |

## Metals

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## Duplicate Sample Summary

SDG No.: 10-1863

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8196SD

Sample ID: 1202055905

Duplicate ID: 1202055907

Percent Solids for Dup: 98.8

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD  | Qual | M  |
|---------|-------|---------------------|------------------|---|---------------------|---|------|------|----|
| Mercury | ug/kg | +/-20               | 105              |   | 114                 |   | 8.34 |      | AV |



## METALS

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## Laboratory Control Sample Summary

SDG NO. 10-1863

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202046592       |                |              |                   |               |          |                   |                         |          |
|                  | Aluminum       | ug/kg        | 10500000          | 9000000       |          | 85.8              | 56-144                  | P        |
|                  | Antimony       | ug/kg        | 173000            | 120000        |          | 69.6              | 71-130                  | P        |
|                  | Barium         | ug/kg        | 198000            | 194000        |          | 98.2              | 80-120                  | P        |
|                  | Cadmium        | ug/kg        | 60700             | 58600         |          | 96.5              | 81-120                  | P        |
|                  | Calcium        | ug/kg        | 9870000           | 9450000       |          | 95.8              | 83-117                  | P        |
|                  | Chromium       | ug/kg        | 236000            | 239000        |          | 101               | 80-120                  | P        |
|                  | Cobalt         | ug/kg        | 91200             | 91200         |          | 100               | 81-120                  | P        |
|                  | Copper         | ug/kg        | 174000            | 180000        |          | 104               | 81-118                  | P        |
|                  | Iron           | ug/kg        | 18000000          | 17800000      |          | 98.8              | 51-149                  | P        |
|                  | Lead           | ug/kg        | 86000             | 85200         |          | 99.1              | 79-121                  | P        |
|                  | Magnesium      | ug/kg        | 4000000           | 3700000       |          | 92.4              | 79-122                  | P        |
|                  | Manganese      | ug/kg        | 558000            | 531000        |          | 95.2              | 81-119                  | P        |
|                  | Potassium      | ug/kg        | 4300000           | 3880000       |          | 90.3              | 74-127                  | P        |
|                  | Silver         | ug/kg        | 30100             | 29700         |          | 98.8              | 66-134                  | P        |
|                  | Sodium         | ug/kg        | 1020000           | 924000        |          | 90.6              | 74-127                  | P        |
|                  | Vanadium       | ug/kg        | 115000            | 121000        |          | 105               | 79-121                  | P        |
|                  | Zinc           | ug/kg        | 594000            | 572000        |          | 96.2              | 80-121                  | P        |

## METALS

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## Laboratory Control Sample Summary

SDG NO. 10-1863

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202046598       |                |              |                   |               |          |                   |                         |          |
|                  | Arsenic        | ug/kg        | 104000            | 109000        |          | 105               | 78-123                  | MS       |
|                  | Beryllium      | ug/kg        | 77600             | 84700         |          | 109               | 84-116                  | MS       |
|                  | Nickel         | ug/kg        | 134000            | 151000        |          | 113               | 78-123                  | MS       |
|                  | Selenium       | ug/kg        | 286000            | 300000        |          | 105               | 77-123                  | MS       |
|                  | Thallium       | ug/kg        | 121000            | 145000        |          | 120               | 78-122                  | MS       |

## METALS

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## Laboratory Control Sample Summary

SDG NO. 10-1863

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202055903       | Mercury        | ug/kg        | 5150              | 5020          |          | 97.5              | 71.6-128.3              | AV       |

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1863

Client ID RE15-10-8196L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 247188001

Serial Dilution ID: 1202046589

| Analyte   | Initial<br>Value<br>ug/L | C | Serial<br>Value<br>ug/L | C | %<br>Difference | Qual | Acceptance<br>Limit | M |
|-----------|--------------------------|---|-------------------------|---|-----------------|------|---------------------|---|
| Aluminum  | 9650                     |   | 8800                    |   | 8.81            |      | 10                  | P |
| Antimony  | 3.3                      | U | 16.5                    | U |                 |      |                     | P |
| Barium    | 142                      |   | 122                     |   | 14.1            | E    | 10                  | P |
| Cadmium   | 1                        | U | 5                       | U |                 |      |                     | P |
| Calcium   | 6260                     |   | 6300                    |   | .639            |      | 10                  | P |
| Chromium  | 169                      |   | 145                     |   | 14.2            | E    | 10                  | P |
| Cobalt    | 4.72                     | J | 7.5                     | U | 100             |      |                     | P |
| Copper    | 17.2                     |   | 15                      | U | 100             |      |                     | P |
| Iron      | 62200                    |   | 58500                   |   | 5.95            |      | 10                  | P |
| Lead      | 46.6                     |   | 55                      |   | 18              |      |                     | P |
| Magnesium | 1320                     |   | 1280                    | J | 3.41            |      |                     | P |
| Manganese | 2930                     |   | 2630                    |   | 10.4            | E    | 10                  | P |
| Potassium | 5320                     |   | 4820                    |   | 9.49            |      | 10                  | P |
| Silver    | 1                        | U | 5                       | U |                 |      |                     | P |
| Sodium    | 3830                     |   | 3610                    |   | 5.87            |      | 10                  | P |
| Vanadium  | 20.4                     |   | 18.4                    | J | 9.8             |      |                     | P |
| Zinc      | 476                      |   | 459                     |   | 3.68            |      | 10                  | P |

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1863 Client ID: RE15-10-8196L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247188001 Serial Dilution ID: 1202046595

| Analyte   | Initial<br>Value<br>ug/L | C | Serial<br>Value<br>ug/L | C | %<br>Difference | Qual | Acceptance<br>Limit | M  |
|-----------|--------------------------|---|-------------------------|---|-----------------|------|---------------------|----|
| Arsenic   | 1.66                     | J | 5                       | U | 100             |      |                     | MS |
| Beryllium | 2.34                     |   | 2.41                    | J | 2.99            |      |                     | MS |
| Nickel    | 2.5                      |   | 2.69                    | J | 7.4             |      |                     | MS |
| Selenium  | 2.5                      | U | 12.5                    | U |                 |      |                     | MS |
| Thallium  | .3                       | U | 1.5                     | U |                 |      |                     | MS |

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1863 Client ID RE15-10-8196L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247188001 Serial Dilution ID: 1202055906

| <u>Analyte</u> | <u>Initial<br/>Value<br/>ug/L</u> | <u>C</u> | <u>Serial<br/>Value<br/>ug/L</u> | <u>C</u> | <u>%<br/>Difference</u> | <u>Qual</u> | <u>Acceptance<br/>Limit</u> | <u>M</u> |
|----------------|-----------------------------------|----------|----------------------------------|----------|-------------------------|-------------|-----------------------------|----------|
| Mercury        | .068                              | U        | .34                              | U        |                         |             |                             | AV       |

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1863

Method Type: P

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 954675               |                    |               |                  |                            |                            |                       |
| 1202046587       | MB for batch 954675  | MB                 | S             | 23-FEB-10        | .502g                      | 50mL                       |                       |
| 1202046592       | LCS for batch 954675 | LCS                | S             | 23-FEB-10        | .513g                      | 50mL                       |                       |
| 1202046590       | RE15-10-8196S        | MS                 | S             | 23-FEB-10        | .5g                        | 50mL                       |                       |
| 1202046591       | RE15-10-8196SD       | MSD                | S             | 23-FEB-10        | .518g                      | 50mL                       |                       |
| 1202046588       | RE15-10-8196D        | DUP                | S             | 23-FEB-10        | .515g                      | 50mL                       |                       |
| 247188001        | RE15-10-8196         | SAMPLE             | S             | 23-FEB-10        | .531g                      | 50mL                       |                       |
| 247188002        | RE15-10-8186         | SAMPLE             | S             | 23-FEB-10        | .508g                      | 50mL                       |                       |
| 247188003        | RE15-10-8194         | SAMPLE             | S             | 23-FEB-10        | .509g                      | 50mL                       |                       |
| 247188004        | RE15-10-8189         | SAMPLE             | S             | 23-FEB-10        | .541g                      | 50mL                       |                       |
| 247188005        | RE15-10-8188         | SAMPLE             | S             | 23-FEB-10        | .51g                       | 50mL                       |                       |
| 247188006        | RE15-10-8187         | SAMPLE             | S             | 23-FEB-10        | .5g                        | 50mL                       |                       |
| 247188007        | RE15-10-8197         | SAMPLE             | S             | 23-FEB-10        | .53g                       | 50mL                       |                       |
| 247188008        | RE15-10-8190         | SAMPLE             | S             | 23-FEB-10        | .536g                      | 50mL                       |                       |
| 247188009        | RE15-10-8193         | SAMPLE             | S             | 23-FEB-10        | .538g                      | 50mL                       |                       |
| 247188010        | RE15-10-8191         | SAMPLE             | S             | 23-FEB-10        | .555g                      | 50mL                       |                       |
| 247188011        | RE15-10-8192         | SAMPLE             | S             | 23-FEB-10        | .519g                      | 50mL                       |                       |
| 247188012        | RE15-10-8195         | SAMPLE             | S             | 23-FEB-10        | .521g                      | 50mL                       |                       |
| 247188013        | RE15-10-8226         | SAMPLE             | S             | 23-FEB-10        | .525g                      | 50mL                       |                       |
| 247188014        | RE15-10-8211         | SAMPLE             | S             | 23-FEB-10        | .54g                       | 50mL                       |                       |

SW846

**METALS**  
**--13--**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1863

Method Type: MS

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 954677               |                    |               |                  |                            |                            |                       |
| 1202046593       | MB for batch 954677  | MB                 | S             | 23-FEB-10        | .503g                      | 50mL                       |                       |
| 1202046598       | LCS for batch 954677 | LCS                | S             | 23-FEB-10        | .507g                      | 50mL                       |                       |
| 1202046596       | RE15-10-8196S        | MS                 | S             | 23-FEB-10        | .5g                        | 50mL                       |                       |
| 1202046597       | RE15-10-8196SD       | MSD                | S             | 23-FEB-10        | .52g                       | 50mL                       |                       |
| 1202046594       | RE15-10-8196D        | DUP                | S             | 23-FEB-10        | .504g                      | 50mL                       |                       |
| 247188001        | RE15-10-8196         | SAMPLE             | S             | 23-FEB-10        | .513g                      | 50mL                       |                       |
| 247188002        | RE15-10-8186         | SAMPLE             | S             | 23-FEB-10        | .501g                      | 50mL                       |                       |
| 247188003        | RE15-10-8194         | SAMPLE             | S             | 23-FEB-10        | .516g                      | 50mL                       |                       |
| 247188004        | RE15-10-8189         | SAMPLE             | S             | 23-FEB-10        | .538g                      | 50mL                       |                       |
| 247188005        | RE15-10-8188         | SAMPLE             | S             | 23-FEB-10        | .529g                      | 50mL                       |                       |
| 247188006        | RE15-10-8187         | SAMPLE             | S             | 23-FEB-10        | .514g                      | 50mL                       |                       |
| 247188007        | RE15-10-8197         | SAMPLE             | S             | 23-FEB-10        | .514g                      | 50mL                       |                       |
| 247188008        | RE15-10-8190         | SAMPLE             | S             | 23-FEB-10        | .523g                      | 50mL                       |                       |
| 247188009        | RE15-10-8193         | SAMPLE             | S             | 23-FEB-10        | .508g                      | 50mL                       |                       |
| 247188010        | RE15-10-8191         | SAMPLE             | S             | 23-FEB-10        | .503g                      | 50mL                       |                       |
| 247188011        | RE15-10-8192         | SAMPLE             | S             | 23-FEB-10        | .53g                       | 50mL                       |                       |
| 247188012        | RE15-10-8195         | SAMPLE             | S             | 23-FEB-10        | .529g                      | 50mL                       |                       |
| 247188013        | RE15-10-8226         | SAMPLE             | S             | 23-FEB-10        | .507g                      | 50mL                       |                       |
| 247188014        | RE15-10-8211         | SAMPLE             | S             | 23-FEB-10        | .538g                      | 50mL                       |                       |

SW846



**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1863

Method Type: AV

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 958619               |                    |               |                  |                            |                            |                       |
| 1202055902       | MB for batch 958619  | MB                 | S             | 01-MAR-10        | .5g                        | 30mL                       |                       |
| 1202055903       | LCS for batch 958619 | LCS                | S             | 01-MAR-10        | .205g                      | 30mL                       |                       |
| 1202055905       | RE15-10-8196S        | MS                 | S             | 01-MAR-10        | .587g                      | 30mL                       |                       |
| 1202055907       | RE15-10-8196SD       | MSD                | S             | 01-MAR-10        | .515g                      | 30mL                       |                       |
| 1202055904       | RE15-10-8196D        | DUP                | S             | 01-MAR-10        | .552g                      | 30mL                       |                       |
| 247188001        | RE15-10-8196         | SAMPLE             | S             | 01-MAR-10        | .581g                      | 30mL                       |                       |
| 247188002        | RE15-10-8186         | SAMPLE             | S             | 01-MAR-10        | .518g                      | 30mL                       |                       |
| 247188003        | RE15-10-8194         | SAMPLE             | S             | 01-MAR-10        | .549g                      | 30mL                       |                       |
| 247188004        | RE15-10-8189         | SAMPLE             | S             | 01-MAR-10        | .515g                      | 30mL                       |                       |
| 247188005        | RE15-10-8188         | SAMPLE             | S             | 01-MAR-10        | .51g                       | 30mL                       |                       |
| 247188006        | RE15-10-8187         | SAMPLE             | S             | 01-MAR-10        | .555g                      | 30mL                       |                       |
| 247188007        | RE15-10-8197         | SAMPLE             | S             | 01-MAR-10        | .514g                      | 30mL                       |                       |
| 247188008        | RE15-10-8190         | SAMPLE             | S             | 01-MAR-10        | .533g                      | 30mL                       |                       |
| 247188009        | RE15-10-8193         | SAMPLE             | S             | 01-MAR-10        | .568g                      | 30mL                       |                       |
| 247188010        | RE15-10-8191         | SAMPLE             | S             | 01-MAR-10        | .527g                      | 30mL                       |                       |
| 247188011        | RE15-10-8192         | SAMPLE             | S             | 01-MAR-10        | .534g                      | 30mL                       |                       |
| 247188012        | RE15-10-8195         | SAMPLE             | S             | 01-MAR-10        | .587g                      | 30mL                       |                       |
| 247188013        | RE15-10-8226         | SAMPLE             | S             | 01-MAR-10        | .517g                      | 30mL                       |                       |
| 247188014        | RE15-10-8211         | SAMPLE             | S             | 01-MAR-10        | .555g                      | 30mL                       |                       |

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 15-MAR-10

End Date: 15-MAR-10

Client Sdg: 10-1863

Method: MS

Data File: 100314-3

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0       | 1   | 01:23    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| S10        | 1   | 01:27    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| S100       | 1   | 01:31    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| ICV01      | 1   | 01:34    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| ICB01      | 1   | 01:38    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CRDL01     | 1   | 01:41    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| ICSA01     | 1   | 01:45    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| ICSAB01    | 1   | 01:49    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCV01      | 1   | 01:52    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCB01      | 1   | 01:56    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046593 | 2   | 02:00    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046598 | 40  | 02:03    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188001  | 2   | 02:07    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046594 | 2   | 02:11    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046596 | 2   | 02:14    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046597 | 2   | 02:18    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 1202046595 | 10  | 02:21    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCV02      | 1   | 02:25    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCB02      | 1   | 02:29    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188002  | 2   | 02:32    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188003  | 2   | 02:36    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188004  | 2   | 02:40    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188005  | 2   | 02:43    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188006  | 2   | 02:47    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188007  | 2   | 02:51    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188008  | 2   | 02:54    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCV03      | 1   | 02:58    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCB03      | 1   | 03:02    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188009  | 2   | 03:05    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188010  | 2   | 03:09    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188011  | 2   | 03:13    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188012  | 2   | 03:16    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188013  | 2   | 03:20    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| 247188014  | 2   | 03:24    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCV04      | 1   | 03:27    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |
| CCB04      | 1   | 03:31    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |   | X  |    |    | X  |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 15-MAR-10

End Date: 15-MAR-10

Client Sdg: 10-1863

Method: MS

Data File: 100315-4

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0       | 1   | 12:21    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| S10        | 1   | 12:22    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| S100       | 1   | 12:24    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| ICV01      | 1   | 12:26    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| ICB01      | 1   | 12:27    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CRDL01     | 1   | 12:29    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| ICSA01     | 1   | 12:31    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| ICSAB01    | 1   | 12:32    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCV01      | 1   | 12:34    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCB01      | 1   | 12:36    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046593 | 2   | 12:38    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046598 | 40  | 12:39    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188001  | 2   | 12:41    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046594 | 2   | 12:43    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046596 | 2   | 12:45    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046597 | 2   | 12:46    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 1202046595 | 10  | 12:48    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCV02      | 1   | 12:50    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCB02      | 1   | 12:52    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188002  | 2   | 12:53    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188003  | 2   | 12:55    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188004  | 2   | 12:57    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188005  | 2   | 12:58    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188006  | 2   | 13:00    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188007  | 2   | 13:02    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188008  | 2   | 13:04    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCV03      | 1   | 13:05    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCB03      | 1   | 13:07    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188009  | 2   | 13:09    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188010  | 2   | 13:11    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188011  | 2   | 13:12    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188012  | 2   | 13:14    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188013  | 2   | 13:16    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| 247188014  | 2   | 13:18    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCV04      | 1   | 13:19    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |
| CCB04      | 1   | 13:21    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    | X  |   |    |    |    |    |   |    |

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 02-MAR-10

End Date: 02-MAR-10

Client Sdg: 10-1863

Method: AV

Data File: 030210S1-5

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0     | 1   | 08:34    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S0.2     | 1   | 08:36    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S0.5     | 1   | 08:38    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S2.0     | 1   | 08:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S5.0     | 1   | 08:42    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S10      | 1   | 08:44    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ICV01    | 1   | 08:46    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ICB01    | 1   | 08:48    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CRDL01   | 1   | 08:50    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCV01    | 1   | 08:52    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB01    | 1   | 08:54    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:56    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 08:58    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:00    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:02    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:04    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:06    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 09:08    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:10    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:12    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:14    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV02    | 1   | 09:16    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB02    | 1   | 09:18    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:20    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:22    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:24    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:26    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:28    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:30    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:32    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:34    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:36    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:38    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV03    | 1   | 09:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB03    | 1   | 09:42    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:49    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:51    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:52    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 09:54    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 09:56    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No. | D/F | Run Time |
|----------|-----|----------|
| ZZZZZZ   | 1   | 09:58    |
| ZZZZZZ   | 1   | 10:00    |
| ZZZZZZ   | 1   | 10:02    |
| ZZZZZZ   | 1   | 10:04    |
| ZZZZZZ   | 5   | 10:06    |
| CCV04    | 1   | 10:08    |
| CCB04    | 1   | 10:10    |
| ZZZZZZ   | 1   | 10:12    |
| ZZZZZZ   | 1   | 10:14    |
| ZZZZZZ   | 1   | 10:16    |
| ZZZZZZ   | 1   | 10:18    |
| ZZZZZZ   | 1   | 10:20    |
| ZZZZZZ   | 1   | 10:22    |
| ZZZZZZ   | 1   | 10:24    |
| ZZZZZZ   | 1   | 10:26    |
| ZZZZZZ   | 1   | 10:28    |
| ZZZZZZ   | 1   | 10:30    |
| CCV05    | 1   | 10:32    |
| CCB05    | 1   | 10:34    |
| ZZZZZZ   | 1   | 10:36    |
| ZZZZZZ   | 1   | 10:38    |
| ZZZZZZ   | 1   | 10:40    |
| ZZZZZZ   | 1   | 10:42    |
| ZZZZZZ   | 1   | 10:44    |
| ZZZZZZ   | 1   | 10:46    |
| ZZZZZZ   | 10  | 10:48    |
| ZZZZZZ   | 1   | 10:50    |
| ZZZZZZ   | 1   | 10:52    |
| ZZZZZZ   | 1   | 10:54    |
| CCV06    | 1   | 10:56    |
| CCB06    | 1   | 10:58    |
| ZZZZZZ   | 1   | 11:00    |
| ZZZZZZ   | 1   | 11:02    |
| ZZZZZZ   | 5   | 11:04    |
| ZZZZZZ   | 1   | 11:06    |
| ZZZZZZ   | 1   | 11:08    |
| ZZZZZZ   | 1   | 11:10    |
| ZZZZZZ   | 1   | 11:12    |
| ZZZZZZ   | 1   | 11:14    |
| ZZZZZZ   | 1   | 11:15    |

Metals  
-14-  
Analysis Run Log

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| ZZZZZZ   | 1   | 11:17    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV07    | 1   | 11:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB07    | 1   | 11:22    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:24    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:25    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:27    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:29    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:31    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:34    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:35    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 11:39    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:41    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV08    | 1   | 11:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB08    | 1   | 11:45    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:47    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:49    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:51    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 11:53    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:55    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:57    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:59    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:01    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:03    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:05    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV09    | 1   | 12:07    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB09    | 1   | 12:09    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:11    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:13    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:17    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV10    | 1   | 12:26    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB10    | 1   | 12:28    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCV11    | 1   | 12:33    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB11    | 1   | 12:35    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 20  | 12:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:39    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:41    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 12:45    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No.   | D/F | Run Time |
|------------|-----|----------|
| ZZZZZZ     | 1   | 12:47    |
| ZZZZZZ     | 1   | 12:49    |
| ZZZZZZ     | 1   | 12:51    |
| ZZZZZZ     | 1   | 12:53    |
| ZZZZZZ     | 10  | 12:55    |
| CCV12      | 1   | 12:57    |
| CCB12      | 1   | 12:59    |
| ZZZZZZ     | 1   | 13:01    |
| ZZZZZZ     | 10  | 13:03    |
| ZZZZZZ     | 1   | 13:05    |
| ZZZZZZ     | 20  | 13:07    |
| ZZZZZZ     | 1   | 13:09    |
| ZZZZZZ     | 1   | 13:11    |
| ZZZZZZ     | 1   | 13:13    |
| ZZZZZZ     | 1   | 13:15    |
| ZZZZZZ     | 1   | 13:17    |
| ZZZZZZ     | 1   | 13:19    |
| CCV13      | 1   | 13:21    |
| CCB13      | 1   | 13:23    |
| ZZZZZZ     | 100 | 13:26    |
| CCV14      | 1   | 13:28    |
| CCB14      | 1   | 13:30    |
| 1202055902 | 1   | 13:35    |
| 1202055903 | 10  | 13:37    |
| 247188001  | 1   | 13:39    |
| 1202055904 | 1   | 13:41    |
| 1202055905 | 1   | 13:43    |
| 1202055907 | 1   | 13:45    |
| 1202055906 | 5   | 13:47    |
| 247188002  | 1   | 13:49    |
| 247188003  | 1   | 13:51    |
| 247188004  | 1   | 13:53    |
| CCV15      | 1   | 13:55    |
| CCB15      | 1   | 13:57    |
| 247188005  | 1   | 13:59    |
| 247188006  | 1   | 14:01    |
| 247188007  | 1   | 14:03    |
| 247188008  | 1   | 14:05    |
| 247188009  | 1   | 14:07    |
| 247188010  | 1   | 14:09    |

**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No.  | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|-----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| 247188011 | 1   | 14:11    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| 247188012 | 1   | 14:13    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| 247188013 | 1   | 14:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| 247188014 | 1   | 14:17    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCV16     | 1   | 14:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB16     | 1   | 14:21    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |



**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 11-MAR-10

End Date: 11-MAR-10

Client Sdg: 10-1863

Method: P

Data File: 031110-1

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0     | 1   | 06:34    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| S0.1     | 1   | 06:37    |    | X  |    | X  |    | X  |    | X  | X  | X  |    | X  |    | X  |    |    | X |    | X  |    |    | X | X  |
| S0.5     | 1   | 06:40    | X  | X  |    | X  |    | X  | X  | X  | X  | X  |    | X  | X  | X  |    |    | X |    | X  |    |    | X | X  |
| SCAL     | 1   | 06:44    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| S10      | 1   | 06:47    | X  |    |    |    |    | X  |    |    |    |    | X  |    | X  |    |    |    |   |    |    | X  |    |   |    |
| ICV01    | 1   | 06:50    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ICB01    | 1   | 06:53    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| PQL01    | 1   | 06:57    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ICSA01   | 1   | 07:01    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ICSAB01  | 1   | 07:03    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| LR01     | 1   | 07:06    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| LR02     | 1   | 07:09    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCV01    | 1   | 07:13    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB01    | 1   | 07:16    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| LR03     | 1   | 07:24    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCV02    | 1   | 07:28    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB02    | 1   | 07:32    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ZZZZZZ   | 1   | 07:35    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 07:39    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 07:42    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 07:46    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 07:49    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 07:53    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 07:57    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:00    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:04    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV03    | 1   | 08:10    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB03    | 1   | 08:14    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ZZZZZZ   | 1   | 08:18    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:21    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:25    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:29    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:32    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:36    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV04    | 1   | 08:44    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB04    | 1   | 08:47    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ZZZZZZ   | 1   | 08:51    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:55    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 08:58    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |



**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| ZZZZZZ     | 5   | 11:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV10      | 1   | 11:43    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB10      | 1   | 11:47    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046587 | 1   | 11:51    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046592 | 1   | 11:54    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188001  | 1   | 11:57    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046588 | 1   | 12:01    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046590 | 1   | 12:04    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046591 | 1   | 12:08    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 1202046589 | 5   | 12:12    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCV11      | 1   | 12:15    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB11      | 1   | 12:19    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188002  | 1   | 12:23    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188003  | 1   | 12:26    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188004  | 1   | 12:30    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188005  | 1   | 12:34    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188006  | 1   | 12:38    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188007  | 1   | 12:41    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188008  | 1   | 12:45    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCV12      | 1   | 12:49    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB12      | 1   | 12:52    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188009  | 1   | 12:56    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188010  | 1   | 13:00    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188011  | 1   | 13:03    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188012  | 1   | 13:07    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188013  | 1   | 13:11    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| 247188014  | 1   | 13:14    | X  |    |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| ZZZZZZ     | 1   | 13:18    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV13      | 1   | 13:24    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |
| CCB13      | 1   | 13:28    | X  | X  |    | X  |    | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    | X |    | X  | X  |    | X | X  |

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 15-MAR-10

End Date: 15-MAR-10

Client Sdg: 10-1863

Method: P

Data File: 031510A-2

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0     | 1   | 11:29    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| S0.1     | 1   | 11:33    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| S0.5     | 1   | 11:36    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| SCAL     | 1   | 11:39    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| S10      | 1   | 11:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ICV01    | 1   | 11:45    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ICB01    | 1   | 11:49    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| PQL01    | 1   | 11:52    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ICSA01   | 1   | 11:56    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ICSAB01  | 1   | 11:59    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| LR01     | 1   | 12:01    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| LR02     | 1   | 12:04    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV01    | 1   | 12:07    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCB01    | 1   | 12:11    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| LR03     | 1   | 12:22    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV02    | 1   | 12:26    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCB02    | 1   | 12:29    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:33    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:45    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:49    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:53    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 12:57    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV03    | 1   | 13:00    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCB03    | 1   | 13:04    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 13:08    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:12    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 13:22    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 13:26    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:30    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:33    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:40    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV04    | 1   | 13:44    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCB04    | 1   | 13:48    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 10  | 13:54    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV05    | 1   | 13:58    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |

| Samp No.  | D/F | Run Time |
|-----------|-----|----------|
| PQL02     | 1   | 14:01    |
| CCB05     | 1   | 14:05    |
| 247188004 | 5   | 14:08    |
| 247188006 | 5   | 14:12    |
| 247188007 | 5   | 14:16    |
| 247188008 | 5   | 14:19    |
| 247188010 | 5   | 14:23    |
| 247188011 | 5   | 14:26    |
| 247188012 | 5   | 14:30    |
| 247188013 | 5   | 14:33    |
| 247188014 | 5   | 14:37    |
| CCV06     | 1   | 14:41    |
| CCB06     | 1   | 14:44    |

# Standards

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1863

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

| ICP/MS | <u>Analyte</u> | <u>Wavelength</u><br><u>(nm)</u> | <u>MDL</u>  | <u>RDL</u>  |
|--------|----------------|----------------------------------|-------------|-------------|
|        |                |                                  | <u>ug/L</u> | <u>ug/L</u> |
| SOLID  | Aluminum       |                                  | 15.0        | 50          |
|        | Antimony       |                                  | 0.5         | 3           |
|        | Arsenic        |                                  | 1.0         | 5           |
|        | Barium         |                                  | 0.5         | 2           |
|        | Beryllium      |                                  | 0.1         | .5          |
|        | Cadmium        |                                  | 0.1         | 1           |
|        | Calcium        |                                  | 33.0        | 100         |
|        | Chromium       |                                  | 1.0         | 3           |
|        | Cobalt         |                                  | 0.3         | 1           |
|        | Copper         |                                  | 0.33        | 1           |
|        | Iron           |                                  | 25.0        | 100         |
|        | Lead           |                                  | 0.5         | 2           |
|        | Magnesium      |                                  | 7.5         | 25          |
|        | Manganese      |                                  | 1.0         | 5           |
|        | Nickel         |                                  | 0.5         | 2           |
|        | Potassium      |                                  | 80.0        | 300         |
|        | Selenium       |                                  | 2.5         | 5           |
|        | Silver         |                                  | 0.2         | 1           |
|        | Sodium         |                                  | 80.0        | 250         |
|        | Thallium       |                                  | 0.3         | 1           |
|        | Vanadium       |                                  | 2.0         | 10          |
|        | Zinc           |                                  | 2.0         | 10          |

METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1863

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

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|         |                | <u>Wavelength</u><br><u>(nm)</u> | <u>MDL</u><br><u>ug/L</u> | <u>RDL</u><br><u>ug/L</u> |
|---------|----------------|----------------------------------|---------------------------|---------------------------|
| MERCURY | <u>Analyte</u> |                                  |                           |                           |
| SOLID   | Mercury        |                                  | 0.068                     | .2                        |



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**METALS**  
**-10-**  
**Instrument Detection Limits**

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**SDG NO.** 10-1863

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

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| ICP | <u>Analyte</u> | <u>Wavelength</u> | <u>MDL</u>  | <u>RDL</u>  |
|-----|----------------|-------------------|-------------|-------------|
|     |                | <u>(nm)</u>       | <u>ug/L</u> | <u>ug/L</u> |
| /   | Aluminum       | 396.153           | 68.0        | 200         |
|     | Antimony       | 206.836           | 3.3         | 10          |
|     | Arsenic        | 188.979           | 5.0         | 30          |
|     | Barium         | 233.527           | 1.0         | 5           |
|     | Beryllium      | 313.107           | 1.0         | 5           |
|     | Cadmium        | 226.502           | 1.0         | 5           |
|     | Calcium        | 317.933           | 80.0        | 250         |
|     | Chromium       | 267.716           | 1.5         | 5           |
|     | Cobalt         | 228.616           | 1.5         | 5           |
|     | Copper         | 324.752           | 3.0         | 10          |
|     | Iron           | 238.204           | 80.0        | 250         |
|     | Lead           | 220.353           | 2.5         | 10          |
|     | Magnesium      | 279.077           | 85.0        | 300         |
|     | Manganese      | 257.61            | 2.0         | 10          |
|     | Nickel         | 231.604           | 1.5         | 5           |
|     | Potassium      | 766.49            | 64.0        | 250         |
|     | Selenium       | 196.026           | 5.0         | 30          |
|     | Silver         | 328.068           | 1.0         | 5           |
|     | Sodium         | 589.592           | 70.0        | 250         |
|     | Thallium       | 190.801           | 5.0         | 20          |
|     | Vanadium       | 292.402           | 1.0         | 5           |
|     | Zinc           | 213.857           | 3.3         | 10          |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Aluminum | Antimony | Arsenic | Barium  | Beryllium |
|-------------|------------|----------|----------|---------|---------|-----------|
| Aluminum    | 396.153    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Antimony    | 206.836    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Arsenic     | 188.979    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Barium      | 233.527    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Beryllium   | 313.107    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Boron       | 249.677    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Cadmium     | 226.502    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Chromium    | 267.716    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Cobalt      | 228.616    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Copper      | 324.752    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Iron        | 238.204    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Lead        | 220.353    | -0.05500 | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Magnesium   | 279.077    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Manganese   | 257.61     | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Molybdenum  | 202.031    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Nickel      | 231.604    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Phosphorous | 214.914    | -0.28800 | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Selenium    | 196.026    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Silicon     | 251.611    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Silver      | 328.068    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Sulfur      | 181.975    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Thallium    | 190.801    | -0.04600 | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Tin         | 189.927    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Titanium    | 334.94     | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Uranium     | 409.014    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Vanadium    | 292.402    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |
| Zinc        | 213.857    | 0.00000  | 0.00000  | 0.00000 | 0.00000 | 0.00000   |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1863

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Boron   | Cadmium | Chromium | Cobalt   | Copper  |
|-------------|------------|---------|---------|----------|----------|---------|
| Aluminum    | 396.153    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Antimony    | 206.836    | 0.00000 | 0.00000 | 11.3250  | 0.00000  | 0.00000 |
| Arsenic     | 188.979    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Barium      | 233.527    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Beryllium   | 313.107    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Boron       | 249.677    | 0.00000 | 0.00000 | -1.59900 | 0.00000  | 0.00000 |
| Cadmium     | 226.502    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Chromium    | 267.716    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Cobalt      | 228.616    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Copper      | 324.752    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Iron        | 238.204    | 0.00000 | 0.00000 | 0.00000  | -21.2250 | 0.00000 |
| Lead        | 220.353    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 1.68400 |
| Magnesium   | 279.077    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Manganese   | 257.61     | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Molybdenum  | 202.031    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Nickel      | 231.604    | 0.00000 | 0.00000 | 0.00000  | 1.19100  | 0.00000 |
| Phosphorous | 214.914    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 105.59  |
| Selenium    | 196.026    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Silicon     | 251.611    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Silver      | 328.068    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Sulfur      | 181.975    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Thallium    | 190.801    | 0.00000 | 0.00000 | 0.00000  | 3.36300  | 0.00000 |
| Tin         | 189.927    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Titanium    | 334.94     | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Uranium     | 409.014    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Vanadium    | 292.402    | 0.00000 | 0.00000 | -2.30400 | 0.00000  | 0.00000 |
| Zinc        | 213.857    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 1.61100 |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Iron     | Lead     | Magnesium | Manganese | Molybdenum |
|-------------|------------|----------|----------|-----------|-----------|------------|
| Aluminum    | 396.153    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 20.5430    |
| Antimony    | 206.836    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | -16.3320   |
| Arsenic     | 188.979    | -0.05800 | 0.00000  | 0.00000   | 0.00000   | 1.97700    |
| Barium      | 233.527    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Beryllium   | 313.107    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Boron       | 249.677    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Cadmium     | 226.502    | 0.13300  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Chromium    | 267.716    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Cobalt      | 228.616    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | -0.90500   |
| Copper      | 324.752    | -0.13900 | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Iron        | 238.204    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Lead        | 220.353    | 0.03800  | -2.87600 | 0.00000   | 0.00000   | 0.00000    |
| Magnesium   | 279.077    | 1.07300  | 0.00000  | 0.00000   | 0.00000   | -16.8110   |
| Manganese   | 257.61     | -0.13900 | 0.00000  | 0.04000   | 0.00000   | 0.00000    |
| Molybdenum  | 202.031    | -0.03800 | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Nickel      | 231.604    | -0.01300 | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Phosphorous | 214.914    | 0.81200  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Selenium    | 196.026    | -0.88200 | 0.00000  | 0.28200   | 0.00000   | 0.00000    |
| Silicon     | 251.611    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Silver      | 328.068    | -0.06300 | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Sulfur      | 181.975    | 0.00000  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Thallium    | 190.801    | -0.03900 | 0.00000  | 0.00000   | -4.11700  | 0.00000    |
| Tin         | 189.927    | -0.09200 | 0.00000  | -0.19600  | 0.00000   | 0.00000    |
| Titanium    | 334.94     | 0.00000  | 0.00000  | 0.07900   | 0.00000   | 0.00000    |
| Uranium     | 409.014    | 0.13900  | 0.00000  | 0.00000   | 0.00000   | 0.00000    |
| Vanadium    | 292.402    | -0.05300 | 0.00000  | 0.00000   | 0.00000   | -7.71400   |
| Zinc        | 213.857    | 0.14460  | 0.00000  | 0.02030   | 0.00000   | 0.00000    |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Nickel   | Phosphorous | Selenium | Silicon | Silver  |
|-------------|------------|----------|-------------|----------|---------|---------|
| Aluminum    | 396.153    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Antimony    | 206.836    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Arsenic     | 188.979    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Barium      | 233.527    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Beryllium   | 313.107    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Boron       | 249.677    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Cadmium     | 226.502    | -0.99900 | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Chromium    | 267.716    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Cobalt      | 228.616    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Copper      | 324.752    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Iron        | 238.204    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Lead        | 220.353    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Magnesium   | 279.077    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Manganese   | 257.61     | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Molybdenum  | 202.031    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Nickel      | 231.604    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Phosphorous | 214.914    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Selenium    | 196.026    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Silicon     | 251.611    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Silver      | 328.068    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Sulfur      | 181.975    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Thallium    | 190.801    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Tin         | 189.927    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Titanium    | 334.94     | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Uranium     | 409.014    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Vanadium    | 292.402    | 0.00000  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |
| Zinc        | 213.857    | 4.41600  | 0.00000     | 0.00000  | 0.00000 | 0.00000 |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Sulfur  | Thallium | Tin      | Titanium | Uranium  |
|-------------|------------|---------|----------|----------|----------|----------|
| Aluminum    | 396.153    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Antimony    | 206.836    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Arsenic     | 188.979    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Barium      | 233.527    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Beryllium   | 313.107    | 0.00000 | 0.00000  | 0.00000  | 0.38100  | 0.00000  |
| Boron       | 249.677    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Cadmium     | 226.502    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Chromium    | 267.716    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Cobalt      | 228.616    | 0.00000 | 0.00000  | 0.00000  | 2.08700  | 0.00000  |
| Copper      | 324.752    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Iron        | 238.204    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Lead        | 220.353    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 1.04000  |
| Magnesium   | 279.077    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Manganese   | 257.61     | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Molybdenum  | 202.031    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Nickel      | 231.604    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Phosphorous | 214.914    | 0.00000 | 0.00000  | -14.8110 | 0.00000  | 0.00000  |
| Selenium    | 196.026    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Silicon     | 251.611    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Silver      | 328.068    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Sulfur      | 181.975    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Thallium    | 190.801    | 0.00000 | 0.00000  | 0.00000  | -8.68900 | -1.22400 |
| Tin         | 189.927    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Titanium    | 334.94     | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Uranium     | 409.014    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |
| Vanadium    | 292.402    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | -1.03900 |
| Zinc        | 213.857    | 0.00000 | 0.00000  | 0.00000  | 0.00000  | 0.00000  |

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**METALS**  
**-11-**  
**Interelement Correction Factors**

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Lab Code: GEL

GEL Job No: 10-1863

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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|                 |                   | Vanadium | Zinc    |
|-----------------|-------------------|----------|---------|
| <b>Parmname</b> | <b>Wavelength</b> |          |         |
| Aluminum        | 396.153           | 0.00000  | 0.00000 |
| Antimony        | 206.836           | 0.00000  | 0.00000 |
| Arsenic         | 188.979           | 0.00000  | 0.00000 |
| Barium          | 233.527           | -1.80500 | 0.00000 |
| Beryllium       | 313.107           | 0.00000  | 0.00000 |
| Boron           | 249.677           | 0.00000  | 0.00000 |
| Cadmium         | 226.502           | 0.00000  | 0.00000 |
| Chromium        | 267.716           | -0.63000 | 0.00000 |
| Cobalt          | 228.616           | 0.00000  | 0.00000 |
| Copper          | 324.752           | 0.00000  | 0.00000 |
| Iron            | 238.204           | 0.00000  | 0.00000 |
| Lead            | 220.353           | 0.00000  | 0.00000 |
| Magnesium       | 279.077           | 0.00000  | 0.00000 |
| Manganese       | 257.61            | 0.00000  | 0.00000 |
| Molybdenum      | 202.031           | 0.00000  | 0.00000 |
| Nickel          | 231.604           | 0.00000  | 0.00000 |
| Phosphorous     | 214.914           | 0.00000  | 0.00000 |
| Selenium        | 196.026           | 0.00000  | 0.00000 |
| Silicon         | 251.611           | 0.00000  | 0.00000 |
| Silver          | 328.068           | -6.59800 | 0.00000 |
| Sulfur          | 181.975           | 0.00000  | 0.00000 |
| Thallium        | 190.801           | 0.00000  | 0.00000 |
| Tin             | 189.927           | 0.00000  | 0.00000 |
| Titanium        | 334.94            | 0.00000  | 0.00000 |
| Uranium         | 409.014           | 0.00000  | 0.00000 |
| Vanadium        | 292.402           | 0.00000  | 0.00000 |
| Zinc            | 213.857           | 0.00000  | 0.00000 |

METALS  
-12-  
Linear Ranges

SDG NO. 10-1863

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS5

| <u>Analyte</u> | <u>Integration<br/>Time<br/>(msec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective<br/>Date</u> |
|----------------|--|------------|--------------|---------------------------|
| Arsenic        | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Barium         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Beryllium      | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Cadmium        | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Calcium        | 500                                    | 50000      | ug/L         | 01-FEB-10                 |
| Chromium       | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Cobalt         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Copper         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Iron           | 500                                    | 50000      | ug/L         | 01-FEB-10                 |
| Lead           | 1000                                   | 5000       | ug/L         | 01-FEB-10                 |
| Magnesium      | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Manganese      | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Nickel         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Potassium      | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Selenium       | 1000                                   | 500        | ug/L         | 01-FEB-10                 |
| Silver         | 1000                                   | 250        | ug/L         | 01-FEB-10                 |
| Sodium         | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Thallium       | 1000                                   | 500        | ug/L         | 01-FEB-10                 |
| Vanadium       | 1000                                   | 100        | ug/L         | 01-FEB-10                 |
| Zinc           | 1000                                   | 2500       | ug/L         | 01-FEB-10                 |
| Aluminum       | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Antimony       | 1000                                   | 250        | ug/L         | 01-FEB-10                 |



**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1863

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA1

| <u>Analyte</u> | <u>Integration<br/>Time<br/>(sec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective<br/>Date</u> |
|----------------|---------------------------------------|------------|--------------|---------------------------|
| Aluminum       | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Antimony       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Arsenic        | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Barium         | 20                                    | 15000      | ug/L         | 01-FEB-10                 |
| Beryllium      | 20                                    | 3000       | ug/L         | 01-FEB-10                 |
| Cadmium        | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Calcium        | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Chromium       | 20                                    | 25000      | ug/L         | 01-FEB-10                 |
| Cobalt         | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Copper         | 20                                    | 20000      | ug/L         | 01-FEB-10                 |
| Iron           | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Lead           | 20                                    | 25000      | ug/L         | 01-FEB-10                 |
| Magnesium      | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Manganese      | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Nickel         | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Potassium      | 20                                    | 300000     | ug/L         | 01-FEB-10                 |
| Selenium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Silver         | 20                                    | 1000       | ug/L         | 01-FEB-10                 |
| Sodium         | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Thallium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Vanadium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Zinc           | 20                                    | 15000      | ug/L         | 01-FEB-10                 |

# Raw Data

=====  
Analysis Begun

Start Time: 3/11/2010 06:34:16

Plasma On Time: 3/6/2010 19:06:21

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima\Sample Information\031110A.sif

Batch ID:

Results Data Set: 031110

Results Library: c:\pe\optima\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/11/2010 06:34:16

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

-----  
Replicate Data: S0

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86043.2          | 86043.2                | 100 %                 | 06:34:51         |
| 1     | Al 396.153Radial†  | -216.2           | -215.6                 | [0.00] µg/L           | 06:34:51         |
| 1     | Ca 317.933Radial†  | 327.1            | 326.2                  | [0.00] µg/L           | 06:35:11         |
| 1     | Fe 238.204 Radial† | 14.7             | 14.7                   | [0.00] µg/L           | 06:35:11         |
| 1     | K 766.490 Radial†  | 460.1            | 458.8                  | [0.00] µg/L           | 06:34:51         |
| 1     | Mg 279.077 IEC†    | 4.0              | 4.0                    | [0.00] µg/L           | 06:35:11         |
| 1     | Na 589.592 Radial† | 243.7            | 243.1                  | [0.00] µg/L           | 06:34:51         |
| 1     | Sr 421.552†        | 133.2            | 132.8                  | [0.00] µg/L           | 06:34:51         |
| 1     | Sc 361.383         | 1814239.4        | 1814239.4              | 99.621 %              | 06:36:13         |
| 1     | Y 371.029          | 1253913.6        | 1253913.6              | 99.585 %              | 06:36:13         |
| 1     | Ag 328.068†        | -516.1           | -518.1                 | [0.00] µg/L           | 06:36:19         |
| 1     | As 188.979†        | -1.6             | -1.6                   | [0.00] µg/L           | 06:36:39         |
| 1     | B 249.677†         | 317.8            | 319.1                  | [0.00] µg/L           | 06:36:19         |
| 1     | Ba 233.527†        | -20.8            | -20.8                  | [0.00] µg/L           | 06:36:39         |
| 1     | Be 313.107†        | -1502.0          | -1507.7                | [0.00] µg/L           | 06:36:19         |
| 1     | Cd 226.502†        | -172.7           | -173.4                 | [0.00] µg/L           | 06:36:39         |
| 1     | Co 228.616†        | 22.4             | 22.5                   | [0.00] µg/L           | 06:36:39         |
| 1     | Cr 267.716†        | 77.9             | 78.2                   | [0.00] µg/L           | 06:36:19         |
| 1     | Cu 324.752†        | 4289.1           | 4305.5                 | [0.00] µg/L           | 06:36:19         |
| 1     | Mn 257.610†        | -754.3           | -757.1                 | [0.00] µg/L           | 06:36:39         |
| 1     | Mo 202.031†        | 7.8              | 7.8                    | [0.00] µg/L           | 06:36:39         |
| 1     | Ni 231.604†        | 355.4            | 356.7                  | [0.00] µg/L           | 06:36:39         |
| 1     | P 214.914†         | 285.5            | 286.6                  | [0.00] µg/L           | 06:36:39         |
| 1     | Pb 220.353†        | 43.9             | 44.1                   | [0.00] µg/L           | 06:36:39         |
| 1     | S 181.975 Axial†   | 23.5             | 23.6                   | [0.00] µg/L           | 06:36:39         |
| 1     | Sb 206.836†        | 23.0             | 23.1                   | [0.00] µg/L           | 06:36:39         |
| 1     | Se 196.026†        | 25.6             | 25.7                   | [0.00] µg/L           | 06:36:39         |
| 1     | SiO2†              | 2841.5           | 2852.3                 | [0.00] µg/L           | 06:36:19         |
| 1     | Si 251.611†        | 416.7            | 418.3                  | [0.00] µg/L           | 06:36:39         |
| 1     | Sn 189.927†        | -2.9             | -2.9                   | [0.00] µg/L           | 06:36:39         |
| 1     | Ti 334.940†        | -717.4           | -720.1                 | [0.00] µg/L           | 06:36:19         |
| 1     | Tl 190.801†        | -37.3            | -37.5                  | [0.00] µg/L           | 06:36:39         |
| 1     | U 409.014†         | -58.7            | -58.9                  | [0.00] µg/L           | 06:36:19         |
| 1     | V 292.402†         | 129.8            | 130.3                  | [0.00] µg/L           | 06:36:19         |
| 1     | Zn 213.857†        | 611.9            | 614.2                  | [0.00] µg/L           | 06:36:39         |
| 2     | Sc RADIAL          | 85586.5          | 85586.5                | 99.7 %                | 06:35:17         |
| 2     | Al 396.153Radial†  | -279.8           | -280.6                 | [0.00] µg/L           | 06:35:17         |
| 2     | Ca 317.933Radial†  | 327.2            | 328.0                  | [0.00] µg/L           | 06:35:37         |
| 2     | Fe 238.204 Radial† | 15.2             | 15.2                   | [0.00] µg/L           | 06:35:37         |
| 2     | K 766.490 Radial†  | 370.7            | 371.7                  | [0.00] µg/L           | 06:35:17         |
| 2     | Mg 279.077 IEC†    | 7.4              | 7.4                    | [0.00] µg/L           | 06:35:37         |
| 2     | Na 589.592 Radial† | 196.9            | 197.4                  | [0.00] µg/L           | 06:35:17         |
| 2     | Sr 421.552†        | 99.6             | 99.8                   | [0.00] µg/L           | 06:35:17         |
| 2     | Sc 361.383         | 1811856.3        | 1811856.3              | 99.490 %              | 06:36:45         |
| 2     | Y 371.029          | 1252506.0        | 1252506.0              | 99.473 %              | 06:36:45         |
| 2     | Ag 328.068†        | -548.9           | -551.7                 | [0.00] µg/L           | 06:36:51         |
| 2     | As 188.979†        | -3.1             | -3.2                   | [0.00] µg/L           | 06:37:12         |

|   |                    |           |           |        |      |          |
|---|--------------------|-----------|-----------|--------|------|----------|
| 2 | B 249.677†         | 301.2     | 302.7     | [0.00] | µg/L | 06:36:51 |
| 2 | Ba 233.527†        | -20.4     | -20.5     | [0.00] | µg/L | 06:37:12 |
| 2 | Be 313.107†        | -1605.9   | -1614.1   | [0.00] | µg/L | 06:36:51 |
| 2 | Cd 226.502†        | -161.6    | -162.5    | [0.00] | µg/L | 06:37:12 |
| 2 | Co 228.616†        | 23.3      | 23.5      | [0.00] | µg/L | 06:37:12 |
| 2 | Cr 267.716†        | 46.3      | 46.5      | [0.00] | µg/L | 06:36:51 |
| 2 | Cu 324.752†        | 4261.1    | 4282.9    | [0.00] | µg/L | 06:36:51 |
| 2 | Mn 257.610†        | -751.2    | -755.0    | [0.00] | µg/L | 06:37:12 |
| 2 | Mo 202.031†        | 8.4       | 8.4       | [0.00] | µg/L | 06:37:12 |
| 2 | Ni 231.604†        | 350.8     | 352.6     | [0.00] | µg/L | 06:37:12 |
| 2 | P 214.914†         | 289.5     | 291.0     | [0.00] | µg/L | 06:37:12 |
| 2 | Pb 220.353†        | 39.2      | 39.4      | [0.00] | µg/L | 06:37:12 |
| 2 | S 181.975 Axial†   | 21.8      | 21.9      | [0.00] | µg/L | 06:37:12 |
| 2 | Sb 206.836†        | 27.8      | 27.9      | [0.00] | µg/L | 06:37:12 |
| 2 | Se 196.026†        | 32.1      | 32.3      | [0.00] | µg/L | 06:37:12 |
| 2 | SiO2†              | 2840.4    | 2854.9    | [0.00] | µg/L | 06:36:51 |
| 2 | Si 251.611†        | 408.3     | 410.4     | [0.00] | µg/L | 06:37:12 |
| 2 | Sn 189.927†        | -4.0      | -4.0      | [0.00] | µg/L | 06:37:12 |
| 2 | Ti 334.940†        | -727.1    | -730.8    | [0.00] | µg/L | 06:36:51 |
| 2 | Tl 190.801†        | -37.6     | -37.8     | [0.00] | µg/L | 06:37:12 |
| 2 | U 409.014†         | -51.6     | -51.9     | [0.00] | µg/L | 06:36:51 |
| 2 | V 292.402†         | 99.3      | 99.8      | [0.00] | µg/L | 06:36:51 |
| 2 | Zn 213.857†        | 623.8     | 627.0     | [0.00] | µg/L | 06:37:12 |
| 3 | Sc RADIAL          | 85790.7   | 85790.7   | 100.0  | %    | 06:35:43 |
| 3 | Al 396.153Radial†  | -275.3    | -275.4    | [0.00] | µg/L | 06:35:43 |
| 3 | Ca 317.933Radial†  | 321.2     | 321.2     | [0.00] | µg/L | 06:36:03 |
| 3 | Fe 238.204 Radial† | 15.0      | 15.0      | [0.00] | µg/L | 06:36:03 |
| 3 | K 766.490 Radial†  | 290.6     | 290.7     | [0.00] | µg/L | 06:35:43 |
| 3 | Mg 279.077 IEC†    | 6.4       | 6.4       | [0.00] | µg/L | 06:36:03 |
| 3 | Na 589.592 Radial† | 196.6     | 196.7     | [0.00] | µg/L | 06:35:43 |
| 3 | Sr 421.552†        | 122.7     | 122.8     | [0.00] | µg/L | 06:35:43 |
| 3 | Sc 361.383         | 1837320.2 | 1837320.2 | 100.89 | %    | 06:37:18 |
| 3 | Y 371.029          | 1271015.4 | 1271015.4 | 100.94 | %    | 06:37:18 |
| 3 | Ag 328.068†        | -547.4    | -542.6    | [0.00] | µg/L | 06:37:23 |
| 3 | As 188.979†        | -3.0      | -3.0      | [0.00] | µg/L | 06:37:44 |
| 3 | B 249.677†         | 308.1     | 305.4     | [0.00] | µg/L | 06:37:23 |
| 3 | Ba 233.527†        | -16.7     | -16.5     | [0.00] | µg/L | 06:37:44 |
| 3 | Be 313.107†        | -1498.1   | -1484.9   | [0.00] | µg/L | 06:37:23 |
| 3 | Cd 226.502†        | -164.1    | -162.7    | [0.00] | µg/L | 06:37:44 |
| 3 | Co 228.616†        | 28.7      | 28.5      | [0.00] | µg/L | 06:37:44 |
| 3 | Cr 267.716†        | 55.9      | 55.4      | [0.00] | µg/L | 06:37:23 |
| 3 | Cu 324.752†        | 4255.1    | 4217.6    | [0.00] | µg/L | 06:37:23 |
| 3 | Mn 257.610†        | -740.3    | -733.8    | [0.00] | µg/L | 06:37:44 |
| 3 | Mo 202.031†        | 13.4      | 13.3      | [0.00] | µg/L | 06:37:44 |
| 3 | Ni 231.604†        | 355.1     | 352.0     | [0.00] | µg/L | 06:37:44 |
| 3 | P 214.914†         | 285.9     | 283.4     | [0.00] | µg/L | 06:37:44 |
| 3 | Pb 220.353†        | 46.9      | 46.5      | [0.00] | µg/L | 06:37:44 |
| 3 | S 181.975 Axial†   | 20.6      | 20.5      | [0.00] | µg/L | 06:37:44 |
| 3 | Sb 206.836†        | 30.2      | 30.0      | [0.00] | µg/L | 06:37:44 |
| 3 | Se 196.026†        | 22.4      | 22.2      | [0.00] | µg/L | 06:37:44 |
| 3 | SiO2†              | 2862.0    | 2836.8    | [0.00] | µg/L | 06:37:23 |
| 3 | Si 251.611†        | 439.6     | 435.8     | [0.00] | µg/L | 06:37:44 |
| 3 | Sn 189.927†        | 1.6       | 1.6       | [0.00] | µg/L | 06:37:44 |
| 3 | Ti 334.940†        | -677.3    | -671.3    | [0.00] | µg/L | 06:37:23 |
| 3 | Tl 190.801†        | -36.1     | -35.8     | [0.00] | µg/L | 06:37:44 |
| 3 | U 409.014†         | -63.3     | -62.7     | [0.00] | µg/L | 06:37:23 |
| 3 | V 292.402†         | 128.0     | 126.9     | [0.00] | µg/L | 06:37:23 |
| 3 | Zn 213.857†        | 661.9     | 656.0     | [0.00] | µg/L | 06:37:44 |

## Mean Data: S0

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD    | Conc.  | Calib Units |
|-------------------|--------------------------|----------|--------|--------|-------------|
| Sc 361.383        | 1821138.6                | 14064.18 | 0.77%  | 100.00 | %           |
| Sc RADIAL         | 85806.8                  | 228.75   | 0.27%  | 100    | %           |
| Y 371.029         | 1259145.0                | 10304.13 | 0.82%  | 100.00 | %           |
| Ag 328.068†       | -537.5                   | 17.40    | 3.24%  | [0.00] | µg/L        |
| Al 396.153Radial† | -257.2                   | 36.13    | 14.05% | [0.00] | µg/L        |
| As 188.979†       | -2.6                     | 0.85     | 33.10% | [0.00] | µg/L        |
| B 249.677†        | 309.1                    | 8.76     | 2.83%  | [0.00] | µg/L        |
| Ba 233.527†       | -19.3                    | 2.40     | 12.46% | [0.00] | µg/L        |

|                    |         |       |         |        |      |
|--------------------|---------|-------|---------|--------|------|
| Be 313.107†        | -1535.6 | 68.95 | 4.49%   | [0.00] | µg/L |
| Ca 317.933Radial†  | 325.2   | 3.53  | 1.09%   | [0.00] | µg/L |
| Cd 226.502†        | -166.2  | 6.24  | 3.76%   | [0.00] | µg/L |
| Co 228.616†        | 24.8    | 3.22  | 12.97%  | [0.00] | µg/L |
| Cr 267.716†        | 60.0    | 16.33 | 27.21%  | [0.00] | µg/L |
| Cu 324.752†        | 4268.7  | 45.62 | 1.07%   | [0.00] | µg/L |
| Fe 238.204 Radial† | 15.0    | 0.27  | 1.79%   | [0.00] | µg/L |
| K 766.490 Radial†  | 373.7   | 84.09 | 22.50%  | [0.00] | µg/L |
| Mg 279.077 IEC†    | 5.9     | 1.74  | 29.27%  | [0.00] | µg/L |
| Mn 257.610†        | -748.6  | 12.91 | 1.72%   | [0.00] | µg/L |
| Mo 202.031†        | 9.8     | 2.99  | 30.46%  | [0.00] | µg/L |
| Na 589.592 Radial† | 212.4   | 26.56 | 12.50%  | [0.00] | µg/L |
| Ni 231.604†        | 353.8   | 2.58  | 0.73%   | [0.00] | µg/L |
| P 214.914†         | 287.0   | 3.80  | 1.32%   | [0.00] | µg/L |
| Pb 220.353†        | 43.4    | 3.61  | 8.31%   | [0.00] | µg/L |
| S 181.975 Axial†   | 22.0    | 1.56  | 7.07%   | [0.00] | µg/L |
| Sb 206.836†        | 27.0    | 3.51  | 13.00%  | [0.00] | µg/L |
| Se 196.026†        | 26.7    | 5.09  | 19.05%  | [0.00] | µg/L |
| SiO2†              | 2848.0  | 9.79  | 0.34%   | [0.00] | µg/L |
| Si 251.611†        | 421.5   | 12.99 | 3.08%   | [0.00] | µg/L |
| Sn 189.927†        | -1.8    | 2.96  | 165.00% | [0.00] | µg/L |
| Sr 421.552†        | 118.5   | 16.90 | 14.27%  | [0.00] | µg/L |
| Ti 334.940†        | -707.4  | 31.72 | 4.48%   | [0.00] | µg/L |
| Tl 190.801†        | -37.0   | 1.08  | 2.91%   | [0.00] | µg/L |
| U 409.014†         | -57.9   | 5.51  | 9.53%   | [0.00] | µg/L |
| V 292.402†         | 119.0   | 16.68 | 14.02%  | [0.00] | µg/L |
| Zn 213.857†        | 632.4   | 21.45 | 3.39%   | [0.00] | µg/L |

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/11/2010 06:37:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

| Repl# | Analyte           | Net Intensity | Corrected Intensity | Conc. Units   | Calib. | Analysis Time |
|-------|-------------------|---------------|---------------------|---------------|--------|---------------|
| 1     | Sc RADIAL         | 86812.5       | 86812.5             | 101 %         |        | 06:38:28      |
| 1     | K 766.490 Radial† | 2388.9        | 1987.5              | [1000] µg/L   |        | 06:38:28      |
| 1     | Sr 421.552†       | 17113.4       | 16796.7             | [100] µg/L    |        | 06:38:28      |
| 1     | Sc 361.383        | 1783466.1     | 1783466.1           | 97.931 %      |        | 06:38:50      |
| 1     | Y 371.029         | 1229980.0     | 1229980.0           | 97.684 %      |        | 06:38:50      |
| 1     | Ag 328.068†       | 11540.9       | 12322.1             | [100] µg/L    |        | 06:38:56      |
| 1     | As 188.979†       | 67.9          | 71.9                | [100] µg/L    |        | 06:39:16      |
| 1     | B 249.677†        | 2409.0        | 2150.9              | [100] µg/L    |        | 06:38:56      |
| 1     | Ba 233.527†       | 4433.5        | 4546.4              | [100] µg/L    |        | 06:39:16      |
| 1     | Be 313.107†       | 165204.6      | 170229.8            | [100] µg/L    |        | 06:38:50      |
| 1     | Cd 226.502†       | 3970.0        | 4220.1              | [100] µg/L    |        | 06:39:16      |
| 1     | Co 228.616†       | 2324.9        | 2349.2              | [100] µg/L    |        | 06:39:16      |
| 1     | Cr 267.716†       | 4689.3        | 4728.4              | [100] µg/L    |        | 06:38:56      |
| 1     | Cu 324.752†       | 19501.4       | 15644.7             | [100] µg/L    |        | 06:38:56      |
| 1     | Mn 257.610†       | 31825.1       | 33246.0             | [100] µg/L    |        | 06:38:56      |
| 1     | Mo 202.031†       | 1062.5        | 1075.1              | [100] µg/L    |        | 06:39:16      |
| 1     | Ni 231.604†       | 2132.5        | 1823.8              | [100] µg/L    |        | 06:39:16      |
| 1     | P 214.914†        | 604.1         | 329.9               | [500] µg/L    |        | 06:39:16      |
| 1     | Pb 220.353†       | 436.1         | 402.0               | [100] µg/L    |        | 06:39:16      |
| 1     | S 181.975 Axial†  | 84.2          | 63.9                | [200] µg/L    |        | 06:39:16      |
| 1     | Sb 206.836†       | 138.9         | 114.9               | [100] µg/L    |        | 06:39:16      |
| 1     | Se 196.026†       | 128.4         | 104.4               | [100] µg/L    |        | 06:39:16      |
| 1     | SiO2†             | 8659.9        | 5994.8              | [1069.5] µg/L |        | 06:38:56      |
| 1     | Si 251.611†       | 7709.2        | 7450.5              | [500] µg/L    |        | 06:38:56      |
| 1     | Sn 189.927†       | 256.6         | 263.8               | [100] µg/L    |        | 06:39:16      |
| 1     | Ti 334.940†       | 40506.6       | 42069.6             | [100] µg/L    |        | 06:38:56      |
| 1     | Tl 190.801†       | 71.4          | 109.9               | [100] µg/L    |        | 06:39:16      |
| 1     | U 409.014†        | 1133.7        | 1215.5              | [100] µg/L    |        | 06:38:56      |
| 1     | V 292.402†        | 8417.9        | 8476.7              | [100] µg/L    |        | 06:38:56      |
| 1     | Zn 213.857†       | 4974.7        | 4447.4              | [100] µg/L    |        | 06:39:16      |
| 2     | Sc RADIAL         | 86033.5       | 86033.5             | 100 %         |        | 06:38:34      |
| 2     | K 766.490 Radial† | 2373.9        | 1994.0              | [1000] µg/L   |        | 06:38:34      |
| 2     | Sr 421.552†       | 17045.9       | 16882.5             | [100] µg/L    |        | 06:38:34      |
| 2     | Sc 361.383        | 1785071.7     | 1785071.7           | 98.020 %      |        | 06:39:23      |
| 2     | Y 371.029         | 1231881.1     | 1231881.1           | 97.835 %      |        | 06:39:23      |
| 2     | Ag 328.068†       | 11631.2       | 12403.7             | [100] µg/L    |        | 06:39:28      |
| 2     | As 188.979†       | 71.6          | 75.6                | [100] µg/L    |        | 06:39:49      |
| 2     | B 249.677†        | 2401.7        | 2141.2              | [100] µg/L    |        | 06:39:28      |
| 2     | Ba 233.527†       | 4434.9        | 4543.7              | [100] µg/L    |        | 06:39:49      |
| 2     | Be 313.107†       | 165148.6      | 170021.0            | [100] µg/L    |        | 06:39:23      |
| 2     | Cd 226.502†       | 3971.0        | 4217.4              | [100] µg/L    |        | 06:39:49      |
| 2     | Co 228.616†       | 2323.7        | 2345.9              | [100] µg/L    |        | 06:39:49      |
| 2     | Cr 267.716†       | 4739.8        | 4775.6              | [100] µg/L    |        | 06:39:28      |
| 2     | Cu 324.752†       | 19509.8       | 15635.3             | [100] µg/L    |        | 06:39:28      |
| 2     | Mn 257.610†       | 31920.9       | 33314.5             | [100] µg/L    |        | 06:39:28      |
| 2     | Mo 202.031†       | 1066.2        | 1078.0              | [100] µg/L    |        | 06:39:49      |
| 2     | Ni 231.604†       | 2145.9        | 1835.5              | [100] µg/L    |        | 06:39:49      |
| 2     | P 214.914†        | 607.3         | 332.6               | [500] µg/L    |        | 06:39:49      |
| 2     | Pb 220.353†       | 425.9         | 391.2               | [100] µg/L    |        | 06:39:49      |
| 2     | S 181.975 Axial†  | 84.0          | 63.8                | [200] µg/L    |        | 06:39:49      |
| 2     | Sb 206.836†       | 138.3         | 114.1               | [100] µg/L    |        | 06:39:49      |
| 2     | Se 196.026†       | 127.9         | 103.8               | [100] µg/L    |        | 06:39:49      |
| 2     | SiO2†             | 8709.1        | 6037.0              | [1069.5] µg/L |        | 06:39:28      |
| 2     | Si 251.611†       | 7722.4        | 7457.0              | [500] µg/L    |        | 06:39:28      |
| 2     | Sn 189.927†       | 252.6         | 259.5               | [100] µg/L    |        | 06:39:49      |
| 2     | Ti 334.940†       | 40708.3       | 42238.2             | [100] µg/L    |        | 06:39:28      |
| 2     | Tl 190.801†       | 69.7          | 108.2               | [100] µg/L    |        | 06:39:49      |
| 2     | U 409.014†        | 1090.3        | 1170.2              | [100] µg/L    |        | 06:39:28      |
| 2     | V 292.402†        | 8441.8        | 8493.4              | [100] µg/L    |        | 06:39:28      |

|   |                   |           |           |               |          |
|---|-------------------|-----------|-----------|---------------|----------|
| 2 | Zn 213.857†       | 4976.9    | 4445.1    | [100] µg/L    | 06:39:49 |
| 3 | Sc RADIAL         | 85928.3   | 85928.3   | 100 %         | 06:38:40 |
| 3 | K 766.490 Radial† | 2340.6    | 1963.6    | [1000] µg/L   | 06:38:40 |
| 3 | Sr 421.552†       | 16986.5   | 16844.0   | [100] µg/L    | 06:38:40 |
| 3 | Sc 361.383        | 1784977.9 | 1784977.9 | 98.014 %      | 06:39:55 |
| 3 | Y 371.029         | 1231354.5 | 1231354.5 | 97.793 %      | 06:39:55 |
| 3 | Ag 328.068†       | 11491.0   | 12261.3   | [100] µg/L    | 06:40:01 |
| 3 | As 188.979†       | 66.5      | 70.4      | [100] µg/L    | 06:40:21 |
| 3 | B 249.677†        | 2360.1    | 2098.8    | [100] µg/L    | 06:40:01 |
| 3 | Ba 233.527†       | 4424.7    | 4533.7    | [100] µg/L    | 06:40:21 |
| 3 | Be 313.107†       | 164685.2  | 169557.0  | [100] µg/L    | 06:39:55 |
| 3 | Cd 226.502†       | 3971.9    | 4218.5    | [100] µg/L    | 06:40:21 |
| 3 | Co 228.616†       | 2327.3    | 2349.7    | [100] µg/L    | 06:40:21 |
| 3 | Cr 267.716†       | 4653.0    | 4687.2    | [100] µg/L    | 06:40:01 |
| 3 | Cu 324.752†       | 19366.1   | 15489.7   | [100] µg/L    | 06:40:01 |
| 3 | Mn 257.610†       | 31515.8   | 32902.9   | [100] µg/L    | 06:40:01 |
| 3 | Mo 202.031†       | 1067.3    | 1079.1    | [100] µg/L    | 06:40:21 |
| 3 | Ni 231.604†       | 2143.8    | 1833.4    | [100] µg/L    | 06:40:21 |
| 3 | P 214.914†        | 609.2     | 334.5     | [500] µg/L    | 06:40:21 |
| 3 | Pb 220.353†       | 436.2     | 401.7     | [100] µg/L    | 06:40:21 |
| 3 | S 181.975 Axial†  | 84.3      | 64.0      | [200] µg/L    | 06:40:21 |
| 3 | Sb 206.836†       | 143.7     | 119.6     | [100] µg/L    | 06:40:21 |
| 3 | Se 196.026†       | 134.7     | 110.7     | [100] µg/L    | 06:40:21 |
| 3 | SiO2†             | 8663.8    | 5991.4    | [1069.5] µg/L | 06:40:01 |
| 3 | Si 251.611†       | 7668.1    | 7402.0    | [500] µg/L    | 06:40:01 |
| 3 | Sn 189.927†       | 259.0     | 266.0     | [100] µg/L    | 06:40:21 |
| 3 | Ti 334.940†       | 40271.0   | 41794.2   | [100] µg/L    | 06:40:01 |
| 3 | Tl 190.801†       | 59.0      | 97.2      | [100] µg/L    | 06:40:21 |
| 3 | U 409.014†        | 1103.1    | 1183.3    | [100] µg/L    | 06:40:01 |
| 3 | V 292.402†        | 8410.8    | 8462.2    | [100] µg/L    | 06:40:01 |
| 3 | Zn 213.857†       | 4984.5    | 4453.1    | [100] µg/L    | 06:40:21 |

## Mean Data: S0.1

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD   | Calib Conc. | Units |
|-------------------|--------------------------|----------|-------|-------------|-------|
| Sc 361.383        | 1784505.2                | 901.14   | 0.05% | 97.988      | %     |
| Sc RADIAL         | 86258.1                  | 483.00   | 0.56% | 101         | %     |
| Y 371.029         | 1231071.9                | 981.55   | 0.08% | 97.770      | %     |
| Ag 328.068†       | 12329.0                  | 71.47    | 0.58% | [100]       | µg/L  |
| As 188.979†       | 72.7                     | 2.67     | 3.67% | [100]       | µg/L  |
| B 249.677†        | 2130.3                   | 27.68    | 1.30% | [100]       | µg/L  |
| Ba 233.527†       | 4541.3                   | 6.73     | 0.15% | [100]       | µg/L  |
| Be 313.107†       | 169935.9                 | 344.36   | 0.20% | [100]       | µg/L  |
| Cd 226.502†       | 4218.7                   | 1.33     | 0.03% | [100]       | µg/L  |
| Co 228.616†       | 2348.3                   | 2.09     | 0.09% | [100]       | µg/L  |
| Cr 267.716†       | 4730.4                   | 44.23    | 0.93% | [100]       | µg/L  |
| Cu 324.752†       | 15589.9                  | 86.90    | 0.56% | [100]       | µg/L  |
| K 766.490 Radial† | 1981.7                   | 16.02    | 0.81% | [1000]      | µg/L  |
| Mn 257.610†       | 33154.5                  | 220.52   | 0.67% | [100]       | µg/L  |
| Mo 202.031†       | 1077.4                   | 2.04     | 0.19% | [100]       | µg/L  |
| Ni 231.604†       | 1830.9                   | 6.25     | 0.34% | [100]       | µg/L  |
| P 214.914†        | 332.3                    | 2.33     | 0.70% | [500]       | µg/L  |
| Pb 220.353†       | 398.3                    | 6.16     | 1.55% | [100]       | µg/L  |
| S 181.975 Axial†  | 63.9                     | 0.14     | 0.22% | [200]       | µg/L  |
| Sb 206.836†       | 116.2                    | 2.98     | 2.57% | [100]       | µg/L  |
| Se 196.026†       | 106.3                    | 3.82     | 3.60% | [100]       | µg/L  |
| SiO2†             | 6007.7                   | 25.44    | 0.42% | [1069.5]    | µg/L  |
| Si 251.611†       | 7436.5                   | 30.05    | 0.40% | [500]       | µg/L  |
| Sn 189.927†       | 263.1                    | 3.29     | 1.25% | [100]       | µg/L  |
| Sr 421.552†       | 16841.1                  | 43.00    | 0.26% | [100]       | µg/L  |
| Ti 334.940†       | 42034.0                  | 224.12   | 0.53% | [100]       | µg/L  |
| Tl 190.801†       | 105.1                    | 6.91     | 6.57% | [100]       | µg/L  |
| U 409.014†        | 1189.7                   | 23.33    | 1.96% | [100]       | µg/L  |
| V 292.402†        | 8477.4                   | 15.59    | 0.18% | [100]       | µg/L  |
| Zn 213.857†       | 4448.5                   | 4.16     | 0.09% | [100]       | µg/L  |

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 3/11/2010 06:40:31  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

| Repl# | Analyte           | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib. | Analysis<br>Time |
|-------|-------------------|------------------|------------------------|----------------|--------|------------------|
| 1     | Sc RADIAL         | 87590.0          | 87590.0                | 102 %          |        | 06:41:03         |
| 1     | Al 396.153Radial† | 9718.5           | 9777.9                 | [5000] µg/L    |        | 06:41:03         |
| 1     | Ca 317.933Radial† | 14162.6          | 13549.1                | [5000] µg/L    |        | 06:41:24         |
| 1     | K 766.490 Radial† | 10494.3          | 9906.9                 | [5000] µg/L    |        | 06:41:03         |
| 1     | Mg 279.077 IEC†   | 422.4            | 407.9                  | [5000] µg/L    |        | 06:41:24         |
| 1     | Sr 421.552†       | 85029.6          | 83180.1                | [500] µg/L     |        | 06:41:03         |
| 1     | Sc 361.383        | 1809646.0        | 1809646.0              | 99.369 %       |        | 06:42:27         |
| 1     | Y 371.029         | 1243707.2        | 1243707.2              | 98.774 %       |        | 06:42:27         |
| 1     | Ag 328.068†       | 59161.0          | 60074.2                | [500] µg/L     |        | 06:42:33         |
| 1     | As 188.979†       | 341.9            | 346.7                  | [500] µg/L     |        | 06:42:54         |
| 1     | B 249.677†        | 10793.3          | 10552.8                | [500] µg/L     |        | 06:42:33         |
| 1     | Ba 233.527†       | 22164.7          | 22324.7                | [500] µg/L     |        | 06:42:33         |
| 1     | Be 313.107†       | 826010.7         | 832792.1               | [500] µg/L     |        | 06:42:27         |
| 1     | Cd 226.502†       | 20302.9          | 20598.0                | [500] µg/L     |        | 06:42:33         |
| 1     | Co 228.616†       | 11504.1          | 11552.4                | [500] µg/L     |        | 06:42:33         |
| 1     | Cr 267.716†       | 22867.7          | 22952.9                | [500] µg/L     |        | 06:42:33         |
| 1     | Cu 324.752†       | 78559.6          | 74789.8                | [500] µg/L     |        | 06:42:33         |
| 1     | Mn 257.610†       | 159353.0         | 161113.7               | [500] µg/L     |        | 06:42:27         |
| 1     | Mo 202.031†       | 5178.2           | 5201.2                 | [500] µg/L     |        | 06:42:54         |
| 1     | Ni 231.604†       | 9189.4           | 8894.0                 | [500] µg/L     |        | 06:42:33         |
| 1     | P 214.914†        | 1861.5           | 1586.4                 | [2500] µg/L    |        | 06:42:54         |
| 1     | Pb 220.353†       | 1942.3           | 1911.3                 | [500] µg/L     |        | 06:42:54         |
| 1     | S 181.975 Axial†  | 339.0            | 319.2                  | [1000] µg/L    |        | 06:42:54         |
| 1     | Sb 206.836†       | 594.8            | 571.6                  | [500] µg/L     |        | 06:42:54         |
| 1     | Se 196.026†       | 555.7            | 532.5                  | [500] µg/L     |        | 06:42:54         |
| 1     | SiO2†             | 31941.1          | 29295.9                | [5347.5] µg/L  |        | 06:42:33         |
| 1     | Si 251.611†       | 36503.7          | 36314.0                | [2500] µg/L    |        | 06:42:33         |
| 1     | Sn 189.927†       | 1293.3           | 1303.3                 | [500] µg/L     |        | 06:42:54         |
| 1     | Ti 334.940†       | 206684.9         | 208704.9               | [500] µg/L     |        | 06:42:27         |
| 1     | Tl 190.801†       | 463.0            | 502.9                  | [500] µg/L     |        | 06:42:54         |
| 1     | U 409.014†        | 5451.9           | 5544.4                 | [500] µg/L     |        | 06:42:33         |
| 1     | V 292.402†        | 41237.0          | 41379.9                | [500] µg/L     |        | 06:42:33         |
| 1     | Zn 213.857†       | 22313.9          | 21823.2                | [500] µg/L     |        | 06:42:33         |
| 2     | Sc RADIAL         | 86793.8          | 86793.8                | 101 %          |        | 06:41:29         |
| 2     | Al 396.153Radial† | 9670.5           | 9817.7                 | [5000] µg/L    |        | 06:41:29         |
| 2     | Ca 317.933Radial† | 14099.3          | 13613.8                | [5000] µg/L    |        | 06:41:50         |
| 2     | K 766.490 Radial† | 10517.8          | 10024.5                | [5000] µg/L    |        | 06:41:29         |
| 2     | Mg 279.077 IEC†   | 423.2            | 412.4                  | [5000] µg/L    |        | 06:41:50         |
| 2     | Sr 421.552†       | 84024.9          | 82950.9                | [500] µg/L     |        | 06:41:29         |
| 2     | Sc 361.383        | 1809626.7        | 1809626.7              | 99.368 %       |        | 06:43:01         |
| 2     | Y 371.029         | 1246468.8        | 1246468.8              | 98.993 %       |        | 06:43:01         |
| 2     | Ag 328.068†       | 58487.6          | 59397.2                | [500] µg/L     |        | 06:43:06         |
| 2     | As 188.979†       | 332.3            | 336.9                  | [500] µg/L     |        | 06:43:27         |
| 2     | B 249.677†        | 10646.4          | 10405.1                | [500] µg/L     |        | 06:43:06         |
| 2     | Ba 233.527†       | 22017.8          | 22177.1                | [500] µg/L     |        | 06:43:06         |
| 2     | Be 313.107†       | 821693.8         | 828456.5               | [500] µg/L     |        | 06:43:01         |
| 2     | Cd 226.502†       | 20105.9          | 20399.9                | [500] µg/L     |        | 06:43:06         |
| 2     | Co 228.616†       | 11397.7          | 11445.4                | [500] µg/L     |        | 06:43:06         |
| 2     | Cr 267.716†       | 22613.2          | 22697.0                | [500] µg/L     |        | 06:43:06         |
| 2     | Cu 324.752†       | 77757.9          | 73983.9                | [500] µg/L     |        | 06:43:06         |
| 2     | Mn 257.610†       | 158364.3         | 160120.4               | [500] µg/L     |        | 06:43:01         |
| 2     | Mo 202.031†       | 4935.3           | 4956.8                 | [500] µg/L     |        | 06:43:27         |
| 2     | Ni 231.604†       | 9149.0           | 8853.4                 | [500] µg/L     |        | 06:43:06         |
| 2     | P 214.914†        | 1794.9           | 1519.3                 | [2500] µg/L    |        | 06:43:27         |
| 2     | Pb 220.353†       | 1873.6           | 1842.2                 | [500] µg/L     |        | 06:43:27         |
| 2     | S 181.975 Axial†  | 335.2            | 315.3                  | [1000] µg/L    |        | 06:43:27         |
| 2     | Sb 206.836†       | 569.7            | 546.3                  | [500] µg/L     |        | 06:43:27         |
| 2     | Se 196.026†       | 544.4            | 521.1                  | [500] µg/L     |        | 06:43:27         |
| 2     | SiO2†             | 31719.5          | 29073.2                | [5347.5] µg/L  |        | 06:43:06         |



|   |                   |           |           |          |      |          |
|---|-------------------|-----------|-----------|----------|------|----------|
| 2 | Si 251.611†       | 36329.7   | 36139.3   | [2500]   | µg/L | 06:43:06 |
| 2 | Sn 189.927†       | 1216.3    | 1225.9    | [500]    | µg/L | 06:43:27 |
| 2 | Ti 334.940†       | 205318.7  | 207332.2  | [500]    | µg/L | 06:43:01 |
| 2 | Tl 190.801†       | 455.8     | 495.7     | [500]    | µg/L | 06:43:27 |
| 2 | U 409.014†        | 5324.1    | 5415.8    | [500]    | µg/L | 06:43:06 |
| 2 | V 292.402†        | 40843.6   | 40984.5   | [500]    | µg/L | 06:43:06 |
| 2 | Zn 213.857†       | 22066.9   | 21574.9   | [500]    | µg/L | 06:43:06 |
| 3 | Sc RADIAL         | 86693.6   | 86693.6   | 101      | %    | 06:41:55 |
| 3 | Al 396.153Radial† | 9602.0    | 9761.0    | [5000]   | µg/L | 06:41:55 |
| 3 | Ca 317.933Radial† | 14055.0   | 13586.1   | [5000]   | µg/L | 06:42:15 |
| 3 | K 766.490 Radial† | 10321.4   | 9842.1    | [5000]   | µg/L | 06:41:55 |
| 3 | Mg 279.077 IEC†   | 423.3     | 413.0     | [5000]   | µg/L | 06:42:15 |
| 3 | Sr 421.552†       | 83651.4   | 82677.3   | [500]    | µg/L | 06:41:55 |
| 3 | Sc 361.383        | 1820181.5 | 1820181.5 | 99.947   | %    | 06:43:34 |
| 3 | Y 371.029         | 1252691.5 | 1252691.5 | 99.487   | %    | 06:43:34 |
| 3 | Ag 328.068†       | 52782.4   | 53347.6   | [500]    | µg/L | 06:43:39 |
| 3 | As 188.979†       | 271.9     | 274.7     | [500]    | µg/L | 06:44:00 |
| 3 | B 249.677†        | 9521.0    | 9217.0    | [500]    | µg/L | 06:43:39 |
| 3 | Ba 233.527†       | 19006.2   | 19035.5   | [500]    | µg/L | 06:43:39 |
| 3 | Be 313.107†       | 719805.7  | 721719.8  | [500]    | µg/L | 06:43:34 |
| 3 | Cd 226.502†       | 17311.3   | 17486.6   | [500]    | µg/L | 06:43:39 |
| 3 | Co 228.616†       | 9659.9    | 9640.2    | [500]    | µg/L | 06:43:39 |
| 3 | Cr 267.716†       | 18459.2   | 18408.9   | [500]    | µg/L | 06:43:39 |
| 3 | Cu 324.752†       | 66977.8   | 62744.4   | [500]    | µg/L | 06:43:39 |
| 3 | Mn 257.610†       | 139665.2  | 140487.3  | [500]    | µg/L | 06:43:34 |
| 3 | Mo 202.031†       | 3985.2    | 3977.5    | [500]    | µg/L | 06:44:00 |
| 3 | Ni 231.604†       | 7827.9    | 7478.3    | [500]    | µg/L | 06:43:39 |
| 3 | P 214.914†        | 1528.9    | 1242.7    | [2500]   | µg/L | 06:44:00 |
| 3 | Pb 220.353†       | 1579.7    | 1537.2    | [500]    | µg/L | 06:44:00 |
| 3 | S 181.975 Axial†  | 282.3     | 260.5     | [1000]   | µg/L | 06:44:00 |
| 3 | Sb 206.836†       | 484.2     | 457.4     | [500]    | µg/L | 06:44:00 |
| 3 | Se 196.026†       | 459.9     | 433.4     | [500]    | µg/L | 06:44:00 |
| 3 | SiO2†             | 28197.7   | 25364.6   | [5347.5] | µg/L | 06:43:39 |
| 3 | Si 251.611†       | 31916.4   | 31511.7   | [2500]   | µg/L | 06:43:39 |
| 3 | Sn 189.927†       | 963.8     | 966.1     | [500]    | µg/L | 06:44:00 |
| 3 | Ti 334.940†       | 178385.3  | 179186.5  | [500]    | µg/L | 06:43:34 |
| 3 | Tl 190.801†       | 393.4     | 430.6     | [500]    | µg/L | 06:44:00 |
| 3 | U 409.014†        | 4458.0    | 4518.2    | [500]    | µg/L | 06:43:39 |
| 3 | V 292.402†        | 34422.6   | 34321.7   | [500]    | µg/L | 06:43:39 |
| 3 | Zn 213.857†       | 18952.7   | 18330.2   | [500]    | µg/L | 06:43:39 |

## Mean Data: S0.5

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD    | Conc.    | Calib Units |
|-------------------|--------------------------|----------|--------|----------|-------------|
| Sc 361.383        | 1813151.4                | 6088.28  | 0.34%  | 99.561   | %           |
| Sc RADIAL         | 87025.8                  | 491.15   | 0.56%  | 101      | %           |
| Y 371.029         | 1247622.5                | 4601.93  | 0.37%  | 99.085   | %           |
| Ag 328.068†       | 57606.3                  | 3703.63  | 6.43%  | [500]    | µg/L        |
| Al 396.153Radial† | 9785.5                   | 29.12    | 0.30%  | [5000]   | µg/L        |
| As 188.979†       | 319.4                    | 39.08    | 12.23% | [500]    | µg/L        |
| B 249.677†        | 10058.3                  | 732.34   | 7.28%  | [500]    | µg/L        |
| Ba 233.527†       | 21179.1                  | 1857.89  | 8.77%  | [500]    | µg/L        |
| Be 313.107†       | 794322.8                 | 62913.40 | 7.92%  | [500]    | µg/L        |
| Ca 317.933Radial† | 13583.0                  | 32.47    | 0.24%  | [5000]   | µg/L        |
| Cd 226.502†       | 19494.9                  | 1742.03  | 8.94%  | [500]    | µg/L        |
| Co 228.616†       | 10879.3                  | 1074.48  | 9.88%  | [500]    | µg/L        |
| Cr 267.716†       | 21352.9                  | 2552.82  | 11.96% | [500]    | µg/L        |
| Cu 324.752†       | 70506.0                  | 6733.85  | 9.55%  | [500]    | µg/L        |
| K 766.490 Radial† | 9924.5                   | 92.47    | 0.93%  | [5000]   | µg/L        |
| Mg 279.077 IEC†   | 411.1                    | 2.81     | 0.68%  | [5000]   | µg/L        |
| Mn 257.610†       | 153907.1                 | 11632.54 | 7.56%  | [500]    | µg/L        |
| Mo 202.031†       | 4711.9                   | 647.62   | 13.74% | [500]    | µg/L        |
| Ni 231.604†       | 8408.5                   | 805.92   | 9.58%  | [500]    | µg/L        |
| P 214.914†        | 1449.5                   | 182.13   | 12.57% | [2500]   | µg/L        |
| Pb 220.353†       | 1763.5                   | 199.08   | 11.29% | [500]    | µg/L        |
| S 181.975 Axial†  | 298.3                    | 32.83    | 11.00% | [1000]   | µg/L        |
| Sb 206.836†       | 525.1                    | 59.95    | 11.42% | [500]    | µg/L        |
| Se 196.026†       | 495.7                    | 54.26    | 10.95% | [500]    | µg/L        |
| SiO2†             | 27911.2                  | 2208.31  | 7.91%  | [5347.5] | µg/L        |
| Si 251.611†       | 34655.0                  | 2723.59  | 7.86%  | [2500]   | µg/L        |

|             |          |          |        |       |      |
|-------------|----------|----------|--------|-------|------|
| Sn 189.927† | 1165.1   | 176.65   | 15.16% | [500] | µg/L |
| Sr 421.552† | 82936.1  | 251.74   | 0.30%  | [500] | µg/L |
| Ti 334.940† | 198407.9 | 16660.35 | 8.40%  | [500] | µg/L |
| Tl 190.801† | 476.4    | 39.85    | 8.37%  | [500] | µg/L |
| U 409.014†  | 5159.5   | 559.07   | 10.84% | [500] | µg/L |
| V 292.402†  | 38895.4  | 3965.84  | 10.20% | [500] | µg/L |
| Zn 213.857† | 20576.1  | 1948.92  | 9.47%  | [500] | µg/L |

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/11/2010 06:44:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

| Rep# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib.<br>Units | Analysis<br>Time |
|------|--------------------|------------------|------------------------|----------------|-----------------|------------------|
| 1    | Sc RADIAL          | 88123.1          | 88123.1                | 103 %          |                 | 06:44:42         |
| 1    | Al 396.153Radial†  | 19684.8          | 19424.6                | [10000] µg/L   |                 | 06:44:42         |
| 1    | Ca 317.933Radial†  | 28493.4          | 27419.3                | [10000] µg/L   |                 | 06:44:42         |
| 1    | Fe 238.204 Radial† | 929.2            | 889.8                  | [10000] µg/L   |                 | 06:45:03         |
| 1    | K 766.490 Radial†  | 20555.9          | 19641.8                | [10000] µg/L   |                 | 06:44:42         |
| 1    | Mg 279.077 IEC†    | 831.9            | 804.1                  | [10000] µg/L   |                 | 06:45:03         |
| 1    | Na 589.592 Radial† | 21955.0          | 21165.6                | [10000] µg/L   |                 | 06:44:42         |
| 1    | Sr 421.552†        | 167979.1         | 163445.4               | [1000] µg/L    |                 | 06:44:42         |
| 1    | Sc 361.383         | 1803015.4        | 1803015.4              | 99.005 %       |                 | 06:46:06         |
| 1    | Y 371.029          | 1241308.1        | 1241308.1              | 98.583 %       |                 | 06:46:06         |
| 1    | Ag 328.068†        | 118800.3         | 120531.9               | [1000] µg/L    |                 | 06:46:12         |
| 1    | As 188.979†        | 699.1            | 708.8                  | [1000] µg/L    |                 | 06:46:33         |
| 1    | B 249.677†         | 21355.3          | 21260.9                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Ba 233.527†        | 44281.6          | 44746.0                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Be 313.107†        | 1635349.5        | 1653323.0              | [1000] µg/L    |                 | 06:46:06         |
| 1    | Cd 226.502†        | 40659.4          | 41234.3                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Co 228.616†        | 22741.8          | 22945.5                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Cr 267.716†        | 45623.8          | 46022.3                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Cu 324.752†        | 152751.1         | 150017.8               | [1000] µg/L    |                 | 06:46:12         |
| 1    | Mn 257.610†        | 314909.8         | 318823.8               | [1000] µg/L    |                 | 06:46:12         |
| 1    | Mo 202.031†        | 10438.2          | 10533.3                | [1000] µg/L    |                 | 06:46:33         |
| 1    | Ni 231.604†        | 17906.8          | 17733.0                | [1000] µg/L    |                 | 06:46:12         |
| 1    | P 214.914†         | 3462.0           | 3209.8                 | [5000] µg/L    |                 | 06:46:33         |
| 1    | Pb 220.353†        | 3879.1           | 3874.8                 | [1000] µg/L    |                 | 06:46:33         |
| 1    | S 181.975 Axial†   | 674.4            | 659.2                  | [2000] µg/L    |                 | 06:46:33         |
| 1    | Sb 206.836†        | 1172.9           | 1157.7                 | [1000] µg/L    |                 | 06:46:33         |
| 1    | Se 196.026†        | 1110.0           | 1094.4                 | [1000] µg/L    |                 | 06:46:33         |
| 1    | SiO2†              | 61145.4          | 58912.0                | [10695] µg/L   |                 | 06:46:12         |
| 1    | Si 251.611†        | 72959.1          | 73271.0                | [5000] µg/L    |                 | 06:46:12         |
| 1    | Sn 189.927†        | 2614.1           | 2642.2                 | [1000] µg/L    |                 | 06:46:33         |
| 1    | Ti 334.940†        | 409730.4         | 414556.3               | [1000] µg/L    |                 | 06:46:06         |
| 1    | Tl 190.801†        | 957.9            | 1004.6                 | [1000] µg/L    |                 | 06:46:33         |
| 1    | U 409.014†         | 10953.9          | 11121.9                | [1000] µg/L    |                 | 06:46:12         |
| 1    | V 292.402†         | 82645.4          | 83357.2                | [1000] µg/L    |                 | 06:46:12         |
| 1    | Zn 213.857†        | 43533.9          | 43339.0                | [1000] µg/L    |                 | 06:46:12         |
| 2    | Sc RADIAL          | 87186.7          | 87186.7                | 102 %          |                 | 06:45:08         |
| 2    | Al 396.153Radial†  | 19519.4          | 19467.6                | [10000] µg/L   |                 | 06:45:08         |
| 2    | Ca 317.933Radial†  | 28232.7          | 27460.7                | [10000] µg/L   |                 | 06:45:08         |
| 2    | Fe 238.204 Radial† | 927.1            | 897.5                  | [10000] µg/L   |                 | 06:45:29         |
| 2    | K 766.490 Radial†  | 20495.5          | 19797.4                | [10000] µg/L   |                 | 06:45:08         |
| 2    | Mg 279.077 IEC†    | 828.9            | 809.9                  | [10000] µg/L   |                 | 06:45:29         |
| 2    | Na 589.592 Radial† | 21773.8          | 21216.8                | [10000] µg/L   |                 | 06:45:08         |
| 2    | Sr 421.552†        | 166931.1         | 164170.7               | [1000] µg/L    |                 | 06:45:08         |
| 2    | Sc 361.383         | 1824226.7        | 1824226.7              | 100.17 %       |                 | 06:46:40         |
| 2    | Y 371.029          | 1255320.8        | 1255320.8              | 99.696 %       |                 | 06:46:40         |
| 2    | Ag 328.068†        | 119208.6         | 119544.3               | [1000] µg/L    |                 | 06:46:45         |
| 2    | As 188.979†        | 684.6            | 686.1                  | [1000] µg/L    |                 | 06:47:06         |
| 2    | B 249.677†         | 21481.3          | 21135.8                | [1000] µg/L    |                 | 06:46:45         |
| 2    | Ba 233.527†        | 44537.0          | 44480.9                | [1000] µg/L    |                 | 06:46:45         |
| 2    | Be 313.107†        | 1646858.0        | 1645605.8              | [1000] µg/L    |                 | 06:46:40         |
| 2    | Cd 226.502†        | 40837.2          | 40934.2                | [1000] µg/L    |                 | 06:46:45         |
| 2    | Co 228.616†        | 22916.9          | 22853.3                | [1000] µg/L    |                 | 06:46:45         |
| 2    | Cr 267.716†        | 45755.8          | 45618.4                | [1000] µg/L    |                 | 06:46:45         |
| 2    | Cu 324.752†        | 153423.9         | 148895.5               | [1000] µg/L    |                 | 06:46:45         |
| 2    | Mn 257.610†        | 316897.0         | 317109.2               | [1000] µg/L    |                 | 06:46:45         |
| 2    | Mo 202.031†        | 10007.8          | 9981.1                 | [1000] µg/L    |                 | 06:47:06         |
| 2    | Ni 231.604†        | 18076.5          | 17692.1                | [1000] µg/L    |                 | 06:46:45         |
| 2    | P 214.914†         | 3361.1           | 3068.4                 | [5000] µg/L    |                 | 06:47:06         |
| 2    | Pb 220.353†        | 3764.3           | 3714.6                 | [1000] µg/L    |                 | 06:47:06         |

|   |                    |           |           |         |      |          |
|---|--------------------|-----------|-----------|---------|------|----------|
| 2 | S 181.975 Axial†   | 651.8     | 628.7     | [2000]  | µg/L | 06:47:06 |
| 2 | Sb 206.836†        | 1140.2    | 1111.3    | [1000]  | µg/L | 06:47:06 |
| 2 | Se 196.026†        | 1085.7    | 1057.1    | [1000]  | µg/L | 06:47:06 |
| 2 | SiO2†              | 61704.1   | 58751.6   | [10695] | µg/L | 06:46:45 |
| 2 | Si 251.611†        | 73405.5   | 72859.7   | [5000]  | µg/L | 06:46:45 |
| 2 | Sn 189.927†        | 2508.3    | 2505.9    | [1000]  | µg/L | 06:47:06 |
| 2 | Ti 334.940†        | 412492.4  | 412501.6  | [1000]  | µg/L | 06:46:40 |
| 2 | Tl 190.801†        | 953.0     | 988.4     | [1000]  | µg/L | 06:47:06 |
| 2 | U 409.014†         | 10929.9   | 10969.2   | [1000]  | µg/L | 06:46:45 |
| 2 | V 292.402†         | 83107.6   | 82848.0   | [1000]  | µg/L | 06:46:45 |
| 2 | Zn 213.857†        | 43780.3   | 43073.7   | [1000]  | µg/L | 06:46:45 |
| 3 | Sc RADIAL          | 87538.2   | 87538.2   | 102     | %    | 06:45:34 |
| 3 | Al 396.153Radial†  | 19566.2   | 19436.4   | [10000] | µg/L | 06:45:34 |
| 3 | Ca 317.933Radial†  | 28439.2   | 27551.6   | [10000] | µg/L | 06:45:34 |
| 3 | Fe 238.204 Radial† | 916.2     | 883.1     | [10000] | µg/L | 06:45:55 |
| 3 | K 766.490 Radial†  | 20535.9   | 19756.0   | [10000] | µg/L | 06:45:34 |
| 3 | Mg 279.077 IEC†    | 827.0     | 804.7     | [10000] | µg/L | 06:45:55 |
| 3 | Na 589.592 Radial† | 21873.8   | 21228.7   | [10000] | µg/L | 06:45:34 |
| 3 | Sr 421.552†        | 167483.1  | 164052.0  | [1000]  | µg/L | 06:45:34 |
| 3 | Sc 361.383         | 1821430.5 | 1821430.5 | 100.02  | %    | 06:47:13 |
| 3 | Y 371.029          | 1254320.2 | 1254320.2 | 99.617  | %    | 06:47:13 |
| 3 | Ag 328.068†        | 109083.5  | 109603.5  | [1000]  | µg/L | 06:47:19 |
| 3 | As 188.979†        | 560.6     | 563.0     | [1000]  | µg/L | 06:47:39 |
| 3 | B 249.677†         | 19451.8   | 19139.7   | [1000]  | µg/L | 06:47:19 |
| 3 | Ba 233.527†        | 39128.0   | 39141.0   | [1000]  | µg/L | 06:47:19 |
| 3 | Be 313.107†        | 1465179.6 | 1466480.5 | [1000]  | µg/L | 06:47:13 |
| 3 | Cd 226.502†        | 35819.1   | 35979.5   | [1000]  | µg/L | 06:47:19 |
| 3 | Co 228.616†        | 19806.2   | 19778.3   | [1000]  | µg/L | 06:47:19 |
| 3 | Cr 267.716†        | 38393.2   | 38327.0   | [1000]  | µg/L | 06:47:19 |
| 3 | Cu 324.752†        | 133338.2  | 129048.2  | [1000]  | µg/L | 06:47:19 |
| 3 | Mn 257.610†        | 273856.5  | 274561.3  | [1000]  | µg/L | 06:47:19 |
| 3 | Mo 202.031†        | 8118.6    | 8107.5    | [1000]  | µg/L | 06:47:39 |
| 3 | Ni 231.604†        | 15623.2   | 15266.9   | [1000]  | µg/L | 06:47:19 |
| 3 | P 214.914†         | 2817.4    | 2529.9    | [5000]  | µg/L | 06:47:39 |
| 3 | Pb 220.353†        | 3167.4    | 3123.5    | [1000]  | µg/L | 06:47:39 |
| 3 | S 181.975 Axial†   | 558.0     | 535.9     | [2000]  | µg/L | 06:47:39 |
| 3 | Sb 206.836†        | 959.4     | 932.2     | [1000]  | µg/L | 06:47:39 |
| 3 | Se 196.026†        | 917.7     | 890.8     | [1000]  | µg/L | 06:47:39 |
| 3 | SiO2†              | 55433.2   | 52576.3   | [10695] | µg/L | 06:47:19 |
| 3 | Si 251.611†        | 65679.5   | 65247.5   | [5000]  | µg/L | 06:47:19 |
| 3 | Sn 189.927†        | 1996.2    | 1997.6    | [1000]  | µg/L | 06:47:39 |
| 3 | Ti 334.940†        | 363458.3  | 364107.5  | [1000]  | µg/L | 06:47:13 |
| 3 | Tl 190.801†        | 833.7     | 870.6     | [1000]  | µg/L | 06:47:39 |
| 3 | U 409.014†         | 9363.2    | 9419.6    | [1000]  | µg/L | 06:47:19 |
| 3 | V 292.402†         | 71258.4   | 71128.0   | [1000]  | µg/L | 06:47:19 |
| 3 | Zn 213.857†        | 38018.5   | 37380.0   | [1000]  | µg/L | 06:47:19 |

## Mean Data: SCAL

| Analyte            | Mean Corrected<br>Intensity | Std.Dev.  | RSD    | Calib<br>Conc. Units |
|--------------------|-----------------------------|-----------|--------|----------------------|
| Sc 361.383         | 1816224.2                   | 11524.30  | 0.63%  | 99.730 %             |
| Sc RADIAL          | 87616.0                     | 473.02    | 0.54%  | 102 %                |
| Y 371.029          | 1250316.4                   | 7817.43   | 0.63%  | 99.299 %             |
| Ag 328.068†        | 116559.9                    | 6044.64   | 5.19%  | [1000] µg/L          |
| Al 396.153Radial†  | 19442.9                     | 22.23     | 0.11%  | [10000] µg/L         |
| As 188.979†        | 652.6                       | 78.40     | 12.01% | [1000] µg/L          |
| B 249.677†         | 20512.1                     | 1190.24   | 5.80%  | [1000] µg/L          |
| Ba 233.527†        | 42789.3                     | 3162.30   | 7.39%  | [1000] µg/L          |
| Be 313.107†        | 1588469.8                   | 105716.28 | 6.66%  | [1000] µg/L          |
| Ca 317.933Radial†  | 27477.2                     | 67.66     | 0.25%  | [10000] µg/L         |
| Cd 226.502†        | 39382.7                     | 2951.02   | 7.49%  | [1000] µg/L          |
| Co 228.616†        | 21859.0                     | 1802.58   | 8.25%  | [1000] µg/L          |
| Cr 267.716†        | 43322.6                     | 4330.98   | 10.00% | [1000] µg/L          |
| Cu 324.752†        | 142653.8                    | 11796.18  | 8.27%  | [1000] µg/L          |
| Fe 238.204 Radial† | 890.1                       | 7.19      | 0.81%  | [10000] µg/L         |
| K 766.490 Radial†  | 19731.7                     | 80.57     | 0.41%  | [10000] µg/L         |
| Mg 279.077 IEC†    | 806.2                       | 3.16      | 0.39%  | [10000] µg/L         |
| Mn 257.610†        | 303498.1                    | 25074.68  | 8.26%  | [1000] µg/L          |
| Mo 202.031†        | 9540.6                      | 1271.47   | 13.33% | [1000] µg/L          |
| Na 589.592 Radial† | 21203.7                     | 33.57     | 0.16%  | [10000] µg/L         |

|                  |          |          |        |         |      |
|------------------|----------|----------|--------|---------|------|
| Ni 231.604†      | 16897.4  | 1412.18  | 8.36%  | [1000]  | µg/L |
| P 214.914†       | 2936.1   | 358.77   | 12.22% | [5000]  | µg/L |
| Pb 220.353†      | 3570.9   | 395.70   | 11.08% | [1000]  | µg/L |
| S 181.975 Axial† | 607.9    | 64.21    | 10.56% | [2000]  | µg/L |
| Sb 206.836†      | 1067.1   | 119.07   | 11.16% | [1000]  | µg/L |
| Se 196.026†      | 1014.1   | 108.38   | 10.69% | [1000]  | µg/L |
| SiO2†            | 56746.7  | 3612.50  | 6.37%  | [10695] | µg/L |
| Si 251.611†      | 70459.4  | 4518.34  | 6.41%  | [5000]  | µg/L |
| Sn 189.927†      | 2381.9   | 339.70   | 14.26% | [1000]  | µg/L |
| Sr 421.552†      | 163889.4 | 389.04   | 0.24%  | [1000]  | µg/L |
| Ti 334.940†      | 397055.1 | 28551.98 | 7.19%  | [1000]  | µg/L |
| Tl 190.801†      | 954.5    | 73.14    | 7.66%  | [1000]  | µg/L |
| U 409.014†       | 10503.6  | 941.87   | 8.97%  | [1000]  | µg/L |
| V 292.402†       | 79111.1  | 6918.20  | 8.74%  | [1000]  | µg/L |
| Zn 213.857†      | 41264.3  | 3366.48  | 8.16%  | [1000]  | µg/L |

Sequence No.: 5  
 Sample ID: S10  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 3/11/2010 06:47:49  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S10

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|---------------|
| 1     | Sc RADIAL          | 87716.6       | 87716.6             | 102 %        |              | 06:48:21      |
| 1     | Al 396.153Radial†  | 97675.4       | 95806.0             | [50000] µg/L |              | 06:48:21      |
| 1     | Ca 317.933Radial†  | 137866.9      | 134540.0            | [50000] µg/L |              | 06:48:21      |
| 1     | Fe 238.204 Radial† | 1817.9        | 1763.3              | [20000] µg/L |              | 06:48:41      |
| 1     | Mg 279.077 IEC†    | 4052.4        | 3958.2              | [50000] µg/L |              | 06:48:41      |
| 1     | Na 589.592 Radial† | 42831.9       | 41687.0             | [20000] µg/L |              | 06:48:21      |
| 1     | Sc 361.383         | 1842999.9     | 1842999.9           | 101.20 %     |              | 06:49:45      |
| 1     | Y 371.029          | 1260641.4     | 1260641.4           | 100.12 %     |              | 06:49:45      |
| 2     | Sc RADIAL          | 87514.5       | 87514.5             | 102 %        |              | 06:48:47      |
| 2     | Al 396.153Radial†  | 97874.8       | 96222.1             | [50000] µg/L |              | 06:48:47      |
| 2     | Ca 317.933Radial†  | 138380.9      | 135355.4            | [50000] µg/L |              | 06:48:47      |
| 2     | Fe 238.204 Radial† | 1807.8        | 1757.5              | [20000] µg/L |              | 06:49:07      |
| 2     | Mg 279.077 IEC†    | 4044.5        | 3959.6              | [50000] µg/L |              | 06:49:07      |
| 2     | Na 589.592 Radial† | 43007.2       | 41955.6             | [20000] µg/L |              | 06:48:47      |
| 2     | Sc 361.383         | 1860260.9     | 1860260.9           | 102.15 %     |              | 06:49:53      |
| 2     | Y 371.029          | 1272661.6     | 1272661.6           | 101.07 %     |              | 06:49:53      |
| 3     | Sc RADIAL          | 88014.5       | 88014.5             | 103 %        |              | 06:49:13      |
| 3     | Al 396.153Radial†  | 98044.9       | 95842.8             | [50000] µg/L |              | 06:49:13      |
| 3     | Ca 317.933Radial†  | 138648.4      | 134845.5            | [50000] µg/L |              | 06:49:13      |
| 3     | Fe 238.204 Radial† | 1792.8        | 1732.9              | [20000] µg/L |              | 06:49:33      |
| 3     | Mg 279.077 IEC†    | 4004.3        | 3897.9              | [50000] µg/L |              | 06:49:33      |
| 3     | Na 589.592 Radial† | 43130.4       | 41836.2             | [20000] µg/L |              | 06:49:13      |
| 3     | Sc 361.383         | 1853071.4     | 1853071.4           | 101.75 %     |              | 06:50:01      |
| 3     | Y 371.029          | 1266076.1     | 1266076.1           | 100.55 %     |              | 06:50:01      |

## Mean Data: S10

| Analyte            | Mean Corrected Intensity | Std.Dev. | RSD   | Conc. Units  | Calib. Units |
|--------------------|--------------------------|----------|-------|--------------|--------------|
| Sc 361.383         | 1852110.8                | 8670.52  | 0.47% | 101.70 %     |              |
| Sc RADIAL          | 87748.5                  | 251.50   | 0.29% | 102 %        |              |
| Y 371.029          | 1266459.7                | 6019.25  | 0.48% | 100.58 %     |              |
| Al 396.153Radial†  | 95957.0                  | 230.34   | 0.24% | [50000] µg/L |              |
| Ca 317.933Radial†  | 134913.6                 | 411.96   | 0.31% | [50000] µg/L |              |
| Fe 238.204 Radial† | 1751.2                   | 16.17    | 0.92% | [20000] µg/L |              |
| Mg 279.077 IEC†    | 3938.6                   | 35.22    | 0.89% | [50000] µg/L |              |
| Na 589.592 Radial† | 41826.3                  | 134.56   | 0.32% | [20000] µg/L |              |

## Calibration Summary

| Analyte          | Stds. | Equation   | Intercept | Slope  | Curvature | Corr. Coef. | Reslope |
|------------------|-------|------------|-----------|--------|-----------|-------------|---------|
| Ag 328.068       | 3     | Lin Thru 0 | 0.0       | 116.3  | 0.00000   | 0.999975    |         |
| Al 396.153Radial | 3     | Lin Thru 0 | 0.0       | 1.920  | 0.00000   | 0.999995    |         |
| As 188.979       | 3     | Lin Thru 0 | 0.0       | 0.6505 | 0.00000   | 0.999910    |         |
| B 249.677        | 3     | Lin Thru 0 | 0.0       | 20.44  | 0.00000   | 0.999963    |         |
| Ba 233.527       | 3     | Lin Thru 0 | 0.0       | 42.72  | 0.00000   | 0.999976    |         |
| Be 313.107       | 3     | Lin Thru 0 | 0.0       | 1589   | 0.00000   | 0.999981    |         |
| Ca 317.933Radial | 3     | Lin Thru 0 | 0.0       | 2.700  | 0.00000   | 0.999994    |         |
| Cd 226.502       | 3     | Lin Thru 0 | 0.0       | 39.33  | 0.00000   | 0.999971    |         |
| Co 228.616       | 3     | Lin Thru 0 | 0.0       | 21.85  | 0.00000   | 0.999976    |         |
| Cr 267.716       | 3     | Lin Thru 0 | 0.0       | 43.23  | 0.00000   | 0.999948    |         |
| Cu 324.752       | 3     | Lin Thru 0 | 0.0       | 142.4  | 0.00000   | 0.999954    |         |
| Fe 238.204 Radia | 2     | Lin Thru 0 | 0.0       | 0.0879 | 0.00000   | 0.999978    |         |
| K 766.490 Radial | 3     | Lin Thru 0 | 0.0       | 1.976  | 0.00000   | 0.999997    |         |
| Mg 279.077 IEC   | 3     | Lin Thru 0 | 0.0       | 0.0789 | 0.00000   | 0.999981    |         |
| Mn 257.610       | 3     | Lin Thru 0 | 0.0       | 304.6  | 0.00000   | 0.999953    |         |
| Mo 202.031       | 3     | Lin Thru 0 | 0.0       | 9.527  | 0.00000   | 0.999920    |         |
| Na 589.592 Radia | 2     | Lin Thru 0 | 0.0       | 2.097  | 0.00000   | 0.999985    |         |

|                 |   |            |     |        |         |          |
|-----------------|---|------------|-----|--------|---------|----------|
| Ni 231.604      | 3 | Lin Thru 0 | 0.0 | 16.89  | 0.00000 | 0.999970 |
| P 214.914       | 3 | Lin Thru 0 | 0.0 | 0.5864 | 0.00000 | 0.999916 |
| Pb 220.353      | 3 | Lin Thru 0 | 0.0 | 3.566  | 0.00000 | 0.999933 |
| S 181.975 Axial | 3 | Lin Thru 0 | 0.0 | 0.3030 | 0.00000 | 0.999960 |
| Sb 206.836      | 3 | Lin Thru 0 | 0.0 | 1.064  | 0.00000 | 0.999946 |
| Se 196.026      | 3 | Lin Thru 0 | 0.0 | 1.010  | 0.00000 | 0.999949 |
| SiO2            | 3 | Lin Thru 0 | 0.0 | 5.291  | 0.00000 | 0.999964 |
| Si 251.611      | 3 | Lin Thru 0 | 0.0 | 14.05  | 0.00000 | 0.999965 |
| Sn 189.927      | 3 | Lin Thru 0 | 0.0 | 2.374  | 0.00000 | 0.999915 |
| Sr 421.552      | 3 | Lin Thru 0 | 0.0 | 164.3  | 0.00000 | 0.999986 |
| Ti 334.940      | 3 | Lin Thru 0 | 0.0 | 397.2  | 0.00000 | 0.999986 |
| Tl 190.801      | 3 | Lin Thru 0 | 0.0 | 0.9549 | 0.00000 | 0.999960 |
| U 409.014       | 3 | Lin Thru 0 | 0.0 | 10.48  | 0.00000 | 0.999902 |
| V 292.402       | 3 | Lin Thru 0 | 0.0 | 78.89  | 0.00000 | 0.999956 |
| Zn 213.857      | 3 | Lin Thru 0 | 0.0 | 41.27  | 0.00000 | 0.999975 |

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/11/2010 06:50:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88918.1          | 88918.1                | 104 %                 |                       | 06:50:44         |
| 1     | Al 396.153Radial†  | 9805.1           | 9719.2                 | 5048.9 µg/L           | 5048.9 ppb            | 06:50:44         |
| 1     | Ca 317.933Radial†  | 14377.2          | 13549.0                | 5017.5 µg/L           | 5017.5 ppb            | 06:50:44         |
| 1     | Fe 238.204 Radial† | 479.0            | 447.2                  | 5102.0 µg/L           | 5102.0 ppb            | 06:51:04         |
| 1     | K 766.490 Radial†  | 5303.0           | 4743.7                 | 2401.2 µg/L           | 2401.2 ppb            | 06:50:44         |
| 1     | Mg 279.077 IEC†    | 428.7            | 407.7                  | 5173.6 µg/L           | 5173.6 ppb            | 06:51:04         |
| 1     | Na 589.592 Radial† | 5585.3           | 5177.5                 | 2468.9 µg/L           | 2468.9 ppb            | 06:50:44         |
| 1     | Sr 421.552†        | 88797.0          | 85571.5                | 520.77 µg/L           | 520.77 ppb            | 06:50:44         |
| 1     | Sc 361.383         | 1818623.0        | 1818623.0              | 99.862 %              |                       | 06:52:08         |
| 1     | Y 371.029          | 1251600.8        | 1251600.8              | 99.401 %              |                       | 06:52:08         |
| 1     | Ag 328.068†        | 30010.1          | 30589.1                | 266.81 µg/L           | 266.81 ppb            | 06:52:14         |
| 1     | As 188.979†        | 336.4            | 339.5                  | 519.51 µg/L           | 519.51 ppb            | 06:52:34         |
| 1     | B 249.677†         | 11214.9          | 10921.3                | 532.49 µg/L           | 532.49 ppb            | 06:52:14         |
| 1     | Ba 233.527†        | 22557.7          | 22608.2                | 530.12 µg/L           | 530.12 ppb            | 06:52:14         |
| 1     | Be 313.107†        | 431417.2         | 433549.5               | 272.58 µg/L           | 272.58 ppb            | 06:52:08         |
| 1     | Cd 226.502†        | 20403.3          | 20597.7                | 523.70 µg/L           | 523.70 ppb            | 06:52:14         |
| 1     | Co 228.616†        | 11680.7          | 11672.0                | 533.59 µg/L           | 533.59 ppb            | 06:52:14         |
| 1     | Cr 267.716†        | 22502.6          | 22473.7                | 520.18 µg/L           | 520.18 ppb            | 06:52:14         |
| 1     | Cu 324.752†        | 79420.2          | 75261.4                | 529.35 µg/L           | 529.35 ppb            | 06:52:14         |
| 1     | Mn 257.610†        | 162585.7         | 163559.2               | 536.96 µg/L           | 536.96 ppb            | 06:52:08         |
| 1     | Mo 202.031†        | 5556.3           | 5554.1                 | 583.17 µg/L           | 583.17 ppb            | 06:52:34         |
| 1     | Ni 231.604†        | 9173.3           | 8832.2                 | 522.27 µg/L           | 522.27 ppb            | 06:52:14         |
| 1     | P 214.914†         | 1890.7           | 1606.3                 | 2689.8 µg/L           | 2689.8 ppb            | 06:52:34         |
| 1     | Pb 220.353†        | 1958.4           | 1917.8                 | 538.58 µg/L           | 538.58 ppb            | 06:52:34         |
| 1     | S 181.975 Axial†   | 834.0            | 813.2                  | 2684.1 µg/L           | 2684.1 ppb            | 06:52:34         |
| 1     | Sb 206.836†        | 589.1            | 562.9                  | 532.32 µg/L           | 532.32 ppb            | 06:52:34         |
| 1     | Se 196.026†        | 2809.1           | 2786.3                 | 2770.6 µg/L           | 2770.6 ppb            | 06:52:34         |
| 1     | SiO2†              | 55685.2          | 52914.2                | 10000 µg/L            | 10000 ppb             | 06:52:14         |
| 1     | Si 251.611†        | 65954.9          | 65624.6                | 4670.0 µg/L           | 4670.0 ppb            | 06:52:14         |
| 1     | Sn 189.927†        | 1390.2           | 1393.9                 | 587.74 µg/L           | 587.74 ppb            | 06:52:34         |
| 1     | Ti 334.940†        | 204284.5         | 205274.5               | 516.48 µg/L           | 516.48 ppb            | 06:52:08         |
| 1     | Tl 190.801†        | 486.1            | 523.7                  | 553.73 µg/L           | 553.73 ppb            | 06:52:34         |
| 1     | U 409.014†         | 5344.6           | 5409.9                 | 515.29 µg/L           | 515.29 ppb            | 06:52:14         |
| 1     | V 292.402†         | 41965.0          | 41904.1                | 536.34 µg/L           | 536.34 ppb            | 06:52:14         |
| 1     | Zn 213.857†        | 22660.5          | 22059.5                | 530.85 µg/L           | 530.85 ppb            | 06:52:14         |
| 2     | Sc RADIAL          | 88548.0          | 88548.0                | 103 %                 |                       | 06:51:10         |
| 2     | Al 396.153Radial†  | 9796.7           | 9750.6                 | 5065.5 µg/L           | 5065.5 ppb            | 06:51:10         |
| 2     | Ca 317.933Radial†  | 14345.0          | 13575.8                | 5027.5 µg/L           | 5027.5 ppb            | 06:51:10         |
| 2     | Fe 238.204 Radial† | 480.2            | 450.4                  | 5138.0 µg/L           | 5138.0 ppb            | 06:51:30         |
| 2     | K 766.490 Radial†  | 5415.2           | 4873.9                 | 2467.1 µg/L           | 2467.1 ppb            | 06:51:10         |
| 2     | Mg 279.077 IEC†    | 429.3            | 410.1                  | 5203.3 µg/L           | 5203.3 ppb            | 06:51:30         |
| 2     | Na 589.592 Radial† | 5571.2           | 5186.4                 | 2473.1 µg/L           | 2473.1 ppb            | 06:51:10         |
| 2     | Sr 421.552†        | 88499.6          | 85641.5                | 521.19 µg/L           | 521.19 ppb            | 06:51:10         |
| 2     | Sc 361.383         | 1812396.4        | 1812396.4              | 99.520 %              |                       | 06:52:41         |
| 2     | Y 371.029          | 1246950.4        | 1246950.4              | 99.032 %              |                       | 06:52:41         |
| 2     | Ag 328.068†        | 31201.9          | 31889.8                | 278.02 µg/L           | 278.02 ppb            | 06:52:47         |
| 2     | As 188.979†        | 332.1            | 336.2                  | 514.54 µg/L           | 514.54 ppb            | 06:53:08         |
| 2     | B 249.677†         | 11265.0          | 11010.2                | 536.83 µg/L           | 536.83 ppb            | 06:52:47         |
| 2     | Ba 233.527†        | 22707.7          | 22836.5                | 535.47 µg/L           | 535.47 ppb            | 06:52:47         |
| 2     | Be 313.107†        | 430939.7         | 434553.9               | 273.21 µg/L           | 273.21 ppb            | 06:52:41         |
| 2     | Cd 226.502†        | 20535.0          | 20800.2                | 528.85 µg/L           | 528.85 ppb            | 06:52:47         |
| 2     | Co 228.616†        | 11736.0          | 11767.8                | 537.96 µg/L           | 537.96 ppb            | 06:52:47         |
| 2     | Cr 267.716†        | 22597.5          | 22646.4                | 524.17 µg/L           | 524.17 ppb            | 06:52:47         |
| 2     | Cu 324.752†        | 79629.7          | 75745.1                | 532.76 µg/L           | 532.76 ppb            | 06:52:47         |
| 2     | Mn 257.610†        | 162199.9         | 163730.9               | 537.52 µg/L           | 537.52 ppb            | 06:52:41         |
| 2     | Mo 202.031†        | 5429.1           | 5445.5                 | 571.76 µg/L           | 571.76 ppb            | 06:53:08         |
| 2     | Ni 231.604†        | 9243.8           | 8934.7                 | 528.33 µg/L           | 528.33 ppb            | 06:52:47         |
| 2     | P 214.914†         | 1858.2           | 1580.1                 | 2644.5 µg/L           | 2644.5 ppb            | 06:53:08         |
| 2     | Pb 220.353†        | 1937.0           | 1903.0                 | 534.40 µg/L           | 534.40 ppb            | 06:53:08         |



|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 814.7     | 796.6     | 2629.3 µg/L | 2629.3 ppb | 06:53:08 |
| 2 | Sb 206.836†        | 587.9     | 563.7     | 532.90 µg/L | 532.90 ppb | 06:53:08 |
| 2 | Se 196.026†        | 2759.1    | 2745.6    | 2730.5 µg/L | 2730.5 ppb | 06:53:08 |
| 2 | SiO2†              | 56041.0   | 53463.3   | 10104 µg/L  | 10104 ppb  | 06:52:47 |
| 2 | Si 251.611†        | 66449.2   | 66348.2   | 4721.5 µg/L | 4721.5 ppb | 06:52:47 |
| 2 | Sn 189.927†        | 1357.1    | 1365.5    | 575.77 µg/L | 575.77 ppb | 06:53:08 |
| 2 | Ti 334.940†        | 203932.6  | 205623.7  | 517.36 µg/L | 517.36 ppb | 06:52:41 |
| 2 | Tl 190.801†        | 480.0     | 519.3     | 549.05 µg/L | 549.05 ppb | 06:53:08 |
| 2 | U 409.014†         | 5287.3    | 5370.7    | 511.55 µg/L | 511.55 ppb | 06:52:47 |
| 2 | V 292.402†         | 42146.9   | 42231.3   | 540.40 µg/L | 540.40 ppb | 06:52:47 |
| 2 | Zn 213.857†        | 22763.3   | 22240.7   | 535.21 µg/L | 535.21 ppb | 06:52:47 |
| 3 | Sc RADIAL          | 88122.4   | 88122.4   | 103 %       |            | 06:51:36 |
| 3 | Al 396.153Radial†  | 9768.9    | 9769.3    | 5077.5 µg/L | 5077.5 ppb | 06:51:36 |
| 3 | Ca 317.933Radial†  | 14342.8   | 13640.7   | 5051.5 µg/L | 5051.5 ppb | 06:51:36 |
| 3 | Fe 238.204 Radial† | 475.2     | 447.8     | 5106.8 µg/L | 5106.8 ppb | 06:51:56 |
| 3 | K 766.490 Radial†  | 5314.6    | 4801.2    | 2430.3 µg/L | 2430.3 ppb | 06:51:36 |
| 3 | Mg 279.077 IEC†    | 430.3     | 413.0     | 5238.6 µg/L | 5238.6 ppb | 06:51:56 |
| 3 | Na 589.592 Radial† | 5585.5    | 5226.4    | 2492.2 µg/L | 2492.2 ppb | 06:51:36 |
| 3 | Sr 421.552†        | 88350.9   | 85910.9   | 522.83 µg/L | 522.83 ppb | 06:51:36 |
| 3 | Sc 361.383         | 1802100.2 | 1802100.2 | 98.955 %    |            | 06:53:15 |
| 3 | Y 371.029          | 1242597.0 | 1242597.0 | 98.686 %    |            | 06:53:15 |
| 3 | Ag 328.068†        | 27482.7   | 28310.6   | 246.80 µg/L | 246.80 ppb | 06:53:20 |
| 3 | As 188.979†        | 268.2     | 273.6     | 418.49 µg/L | 418.49 ppb | 06:53:41 |
| 3 | B 249.677†         | 10344.2   | 10144.4   | 494.36 µg/L | 494.36 ppb | 06:53:20 |
| 3 | Ba 233.527†        | 20132.2   | 20364.1   | 477.48 µg/L | 477.48 ppb | 06:53:20 |
| 3 | Be 313.107†        | 394529.7  | 400233.3  | 251.64 µg/L | 251.64 ppb | 06:53:15 |
| 3 | Cd 226.502†        | 18057.7   | 18414.6   | 468.13 µg/L | 468.13 ppb | 06:53:20 |
| 3 | Co 228.616†        | 10240.2   | 10323.5   | 471.86 µg/L | 471.86 ppb | 06:53:20 |
| 3 | Cr 267.716†        | 19249.6   | 19392.9   | 448.87 µg/L | 448.87 ppb | 06:53:20 |
| 3 | Cu 324.752†        | 70305.8   | 66779.9   | 469.81 µg/L | 469.81 ppb | 06:53:20 |
| 3 | Mn 257.610†        | 149269.1  | 151594.7  | 497.67 µg/L | 497.67 ppb | 06:53:15 |
| 3 | Mo 202.031†        | 4382.5    | 4419.0    | 464.02 µg/L | 464.02 ppb | 06:53:41 |
| 3 | Ni 231.604†        | 8154.2    | 7886.6    | 466.37 µg/L | 466.37 ppb | 06:53:20 |
| 3 | P 214.914†         | 1569.1    | 1298.7    | 2169.4 µg/L | 2169.4 ppb | 06:53:41 |
| 3 | Pb 220.353†        | 1622.7    | 1596.5    | 448.31 µg/L | 448.31 ppb | 06:53:41 |
| 3 | S 181.975 Axial†   | 700.3     | 685.7     | 2263.1 µg/L | 2263.1 ppb | 06:53:41 |
| 3 | Sb 206.836†        | 499.1     | 477.3     | 450.83 µg/L | 450.83 ppb | 06:53:41 |
| 3 | Se 196.026†        | 2331.2    | 2329.1    | 2317.9 µg/L | 2317.9 ppb | 06:53:41 |
| 3 | SiO2†              | 50575.0   | 48261.3   | 9121.0 µg/L | 9121.0 ppb | 06:53:20 |
| 3 | Si 251.611†        | 59584.1   | 59792.0   | 4254.9 µg/L | 4254.9 ppb | 06:53:20 |
| 3 | Sn 189.927†        | 1073.1    | 1086.3    | 458.14 µg/L | 458.14 ppb | 06:53:41 |
| 3 | Ti 334.940†        | 185527.4  | 188194.8  | 473.48 µg/L | 473.48 ppb | 06:53:15 |
| 3 | Tl 190.801†        | 427.9     | 469.4     | 496.41 µg/L | 496.41 ppb | 06:53:41 |
| 3 | U 409.014†         | 4553.2    | 4659.2    | 443.65 µg/L | 443.65 ppb | 06:53:20 |
| 3 | V 292.402†         | 36572.3   | 36839.7   | 471.00 µg/L | 471.00 ppb | 06:53:20 |
| 3 | Zn 213.857†        | 20080.8   | 19660.5   | 473.06 µg/L | 473.06 ppb | 06:53:20 |

## Mean Data: ICV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1811039.9                | 99.445 %           | 0.4582   |                    |          | 0.46%  |
| Sc RADIAL  | 88529.5                  | 103 %              | 0.5      |                    |          | 0.45%  |
| Y 371.029  | 1247049.4                | 99.039 %           | 0.3576   |                    |          | 0.36%  |
| Ag 328.068†  | 30263.2                  | 263.88 µg/L        | 15.814   | 263.88 ppb         | 15.814   | 5.99%  |
| QC value within limits for Ag 328.068 Recovery = 105.55%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9746.4                   | 5063.9 µg/L        | 14.35    | 5063.9 ppb         | 14.35    | 0.28%  |
| QC value within limits for Al 396.153Radial Recovery = 101.28% |                          |                    |          |                    |          |        |
| As 188.979†  | 316.4                    | 484.18 µg/L        | 56.942   | 484.18 ppb         | 56.942   | 11.76% |
| QC value within limits for As 188.979 Recovery = 96.84%        |                          |                    |          |                    |          |        |
| B 249.677†   | 10692.0                  | 521.23 µg/L        | 23.365   | 521.23 ppb         | 23.365   | 4.48%  |
| QC value within limits for B 249.677 Recovery = 104.25%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21936.3                  | 514.36 µg/L        | 32.048   | 514.36 ppb         | 32.048   | 6.23%  |
| QC value within limits for Ba 233.527 Recovery = 102.87%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 422778.9                 | 265.81 µg/L        | 12.279   | 265.81 ppb         | 12.279   | 4.62%  |
| QC value within limits for Be 313.107 Recovery = 106.32%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13588.5                  | 5032.2 µg/L        | 17.47    | 5032.2 ppb         | 17.47    | 0.35%  |
| QC value within limits for Ca 317.933Radial Recovery = 100.64% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19937.5                  | 506.90 µg/L        | 33.667   | 506.90 ppb         | 33.667   | 6.64%  |
| QC value within limits for Cd 226.502 Recovery = 101.38%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11254.4                  | 514.47 µg/L        | 36.964   | 514.47 ppb         | 36.964   | 7.18%  |

|   |                 |          |             |        |        |
|---|-----------------|----------|-------------|--------|--------|
| Cr  | 267.716†        | 21504.4  | 497.74 µg/L | 42.368 | 8.51%  |
| QC value within limits for Co 228.616 Recovery = 102.89%        |                 |          |             |        |        |
| Cu  | 324.752†        | 72595.4  | 510.64 µg/L | 35.402 | 6.93%  |
| QC value within limits for Cr 267.716 Recovery = 99.55%         |                 |          |             |        |        |
| Fe  | 238.204 Radial† | 448.5    | 5115.6 µg/L | 19.58  | 0.38%  |
| QC value within limits for Cu 324.752 Recovery = 102.13%        |                 |          |             |        |        |
| K   | 766.490 Radial† | 4806.3   | 2432.8 µg/L | 33.01  | 1.36%  |
| QC value within limits for Fe 238.204 Radial Recovery = 102.31% |                 |          |             |        |        |
| Mg  | 279.077 IEC†    | 410.3    | 5205.2 µg/L | 32.50  | 0.62%  |
| QC value within limits for K 766.490 Radial Recovery = 97.31%   |                 |          |             |        |        |
| Mn  | 257.610†        | 159628.3 | 524.05 µg/L | 22.847 | 4.36%  |
| QC value within limits for Mg 279.077 IEC Recovery = 104.10%    |                 |          |             |        |        |
| Mo  | 202.031†        | 5139.5   | 539.65 µg/L | 65.744 | 12.18% |
| QC value within limits for Mn 257.610 Recovery = 104.81%        |                 |          |             |        |        |
| Na  | 589.592 Radial† | 5196.8   | 2478.0 µg/L | 12.41  | 0.50%  |
| QC value within limits for Mo 202.031 Recovery = 107.93%        |                 |          |             |        |        |
| Ni  | 231.604†        | 8551.2   | 505.66 µg/L | 34.160 | 6.76%  |
| QC value within limits for Na 589.592 Radial Recovery = 99.12%  |                 |          |             |        |        |
| P   | 214.914†        | 1495.0   | 2501.2 µg/L | 288.26 | 11.52% |
| QC value within limits for Ni 231.604 Recovery = 101.13%        |                 |          |             |        |        |
| Pb  | 220.353†        | 1805.7   | 507.09 µg/L | 50.955 | 10.05% |
| QC value within limits for P 214.914 Recovery = 100.05%         |                 |          |             |        |        |
| S   | 181.975 Axial†  | 765.2    | 2525.5 µg/L | 228.89 | 9.06%  |
| QC value within limits for Pb 220.353 Recovery = 101.42%        |                 |          |             |        |        |
| Sb  | 206.836†        | 534.6    | 505.35 µg/L | 47.220 | 9.34%  |
| QC value within limits for S 181.975 Axial Recovery = 101.02%   |                 |          |             |        |        |
| Se  | 196.026†        | 2620.3   | 2606.4 µg/L | 250.59 | 9.61%  |
| QC value within limits for Sb 206.836 Recovery = 101.07%        |                 |          |             |        |        |
| SiO2†   |                 | 51546.3  | 9741.8 µg/L | 540.16 | 5.54%  |
| QC value within limits for Se 196.026 Recovery = 104.25%        |                 |          |             |        |        |
| Si  | 251.611†        | 63921.6  | 4548.8 µg/L | 255.80 | 5.62%  |
| QC value within limits for SiO2 Recovery = 91.09%               |                 |          |             |        |        |
| Sn  | 189.927†        | 1281.9   | 540.55 µg/L | 71.619 | 13.25% |
| QC value within limits for Si 251.611 Recovery = 90.98%         |                 |          |             |        |        |
| Sr  | 421.552†        | 85707.9  | 521.60 µg/L | 1.090  | 0.21%  |
| QC value within limits for Sn 189.927 Recovery = 108.11%        |                 |          |             |        |        |
| Ti  | 334.940†        | 199697.7 | 502.44 µg/L | 25.086 | 4.99%  |
| QC value within limits for Sr 421.552 Recovery = 104.32%        |                 |          |             |        |        |
| Tl  | 190.801†        | 504.1    | 533.06 µg/L | 31.827 | 5.97%  |
| QC value within limits for Ti 334.940 Recovery = 100.49%        |                 |          |             |        |        |
| U   | 409.014†        | 5146.6   | 490.16 µg/L | 40.328 | 8.23%  |
| QC value within limits for Tl 190.801 Recovery = 106.61%        |                 |          |             |        |        |
| V   | 292.402†        | 40325.0  | 515.92 µg/L | 38.947 | 7.55%  |
| QC value within limits for U 409.014 Recovery = 98.03%          |                 |          |             |        |        |
| Zn  | 213.857†        | 21320.2  | 513.04 µg/L | 34.692 | 6.76%  |
| QC value within limits for V 292.402 Recovery = 103.18%         |                 |          |             |        |        |
| QC value within limits for Zn 213.857 Recovery = 102.61%        |                 |          |             |        |        |

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/11/2010 06:53:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 85739.2       | 85739.2             | 99.9 %             |                    | 06:54:23      |
| 1     | Al 396.153Radial†  | -235.4        | 21.5                | 11.197 µg/L        | 11.197 ppb         | 06:54:23      |
| 1     | Ca 317.933Radial†  | 313.8         | -11.2               | -4.1350 µg/L       | -4.1350 ppb        | 06:54:44      |
| 1     | Fe 238.204 Radial† | 14.1          | -0.8                | -9.2235 µg/L       | -9.2235 ppb        | 06:54:44      |
| 1     | K 766.490 Radial†  | 361.0         | -12.5               | -6.3193 µg/L       | -6.3193 ppb        | 06:54:23      |
| 1     | Mg 279.077 IEC†    | 6.5           | 0.6                 | 7.5921 µg/L        | 7.5921 ppb         | 06:54:44      |
| 1     | Na 589.592 Radial† | 242.4         | 30.2                | 14.416 µg/L        | 14.416 ppb         | 06:54:23      |
| 1     | Sr 421.552†        | 179.5         | 61.1                | 0.3721 µg/L        | 0.3721 ppb         | 06:54:23      |
| 1     | Sc 361.383         | 1783480.1     | 1783480.1           | 97.932 %           |                    | 06:55:46      |
| 1     | Y 371.029          | 1231695.2     | 1231695.2           | 97.820 %           |                    | 06:55:46      |
| 1     | Ag 328.068†        | -509.7        | 17.1                | 0.1421 µg/L        | 0.1421 ppb         | 06:55:51      |
| 1     | As 188.979†        | -2.3          | 0.2                 | 0.2778 µg/L        | 0.2778 ppb         | 06:56:12      |
| 1     | B 249.677†         | 312.0         | 9.5                 | 0.4694 µg/L        | 0.4694 ppb         | 06:56:12      |
| 1     | Ba 233.527†        | -21.5         | -2.7                | -0.0634 µg/L       | -0.0634 ppb        | 06:56:12      |
| 1     | Be 313.107†        | -1492.7       | 11.3                | 0.0070 µg/L        | 0.0070 ppb         | 06:55:51      |
| 1     | Cd 226.502†        | -155.7        | 7.2                 | 0.1842 µg/L        | 0.1842 ppb         | 06:56:12      |
| 1     | Co 228.616†        | 33.9          | 9.8                 | 0.4492 µg/L        | 0.4492 ppb         | 06:56:12      |
| 1     | Cr 267.716†        | 87.9          | 29.7                | 0.6862 µg/L        | 0.6862 ppb         | 06:56:12      |
| 1     | Cu 324.752†        | 4270.0        | 91.4                | 0.6403 µg/L        | 0.6403 ppb         | 06:55:51      |
| 1     | Mn 257.610†        | -719.1        | 14.3                | 0.0460 µg/L        | 0.0460 ppb         | 06:56:12      |
| 1     | Mo 202.031†        | 19.0          | 9.6                 | 1.0058 µg/L        | 1.0058 ppb         | 06:56:12      |
| 1     | Ni 231.604†        | 355.7         | 9.5                 | 0.5598 µg/L        | 0.5598 ppb         | 06:56:12      |
| 1     | P 214.914†         | 289.9         | 9.0                 | 15.362 µg/L        | 15.362 ppb         | 06:56:12      |
| 1     | Pb 220.353†        | 47.0          | 4.6                 | 1.3040 µg/L        | 1.3040 ppb         | 06:56:12      |
| 1     | S 181.975 Axial†   | 24.0          | 2.5                 | 8.2580 µg/L        | 8.2580 ppb         | 06:56:12      |
| 1     | Sb 206.836†        | 33.9          | 7.7                 | 7.2046 µg/L        | 7.2046 ppb         | 06:56:12      |
| 1     | Se 196.026†        | 26.4          | 0.2                 | 0.1560 µg/L        | 0.1560 ppb         | 06:56:12      |
| 1     | SiO2†              | 2819.8        | 31.3                | 5.9155 µg/L        | 5.9155 ppb         | 06:56:12      |
| 1     | Si 251.611†        | 423.1         | 10.5                | 0.7500 µg/L        | 0.7500 ppb         | 06:56:12      |
| 1     | Sn 189.927†        | -3.0          | -1.2                | -0.5250 µg/L       | -0.5250 ppb        | 06:56:12      |
| 1     | Ti 334.940†        | -610.6        | 84.0                | 0.2107 µg/L        | 0.2107 ppb         | 06:55:51      |
| 1     | Tl 190.801†        | -37.5         | -1.3                | -1.3526 µg/L       | -1.3526 ppb        | 06:56:12      |
| 1     | U 409.014†         | -43.4         | 13.6                | 1.2967 µg/L        | 1.2967 ppb         | 06:55:51      |
| 1     | V 292.402†         | 72.8          | -44.6               | -0.5535 µg/L       | -0.5535 ppb        | 06:55:51      |
| 1     | Zn 213.857†        | 612.8         | -6.6                | -0.1639 µg/L       | -0.1639 ppb        | 06:56:12      |
| 2     | Sc RADIAL          | 85152.0       | 85152.0             | 99.2 %             |                    | 06:54:49      |
| 2     | Al 396.153Radial†  | -248.3        | 7.0                 | 3.6421 µg/L        | 3.6421 ppb         | 06:54:49      |
| 2     | Ca 317.933Radial†  | 315.6         | -7.1                | -2.6293 µg/L       | -2.6293 ppb        | 06:55:09      |
| 2     | Fe 238.204 Radial† | 16.1          | 1.2                 | 14.215 µg/L        | 14.215 ppb         | 06:55:09      |
| 2     | K 766.490 Radial†  | 311.9         | -59.4               | -30.058 µg/L       | -30.058 ppb        | 06:54:49      |
| 2     | Mg 279.077 IEC†    | 9.7           | 3.9                 | 48.852 µg/L        | 48.852 ppb         | 06:55:09      |
| 2     | Na 589.592 Radial† | 240.1         | 29.5                | 14.089 µg/L        | 14.089 ppb         | 06:54:49      |
| 2     | Sr 421.552†        | 148.8         | 31.5                | 0.1919 µg/L        | 0.1919 ppb         | 06:54:49      |
| 2     | Sc 361.383         | 1796037.8     | 1796037.8           | 98.622 %           |                    | 06:56:18      |
| 2     | Y 371.029          | 1243051.0     | 1243051.0           | 98.722 %           |                    | 06:56:18      |
| 2     | Ag 328.068†        | -599.1        | -70.0               | -0.6009 µg/L       | -0.6009 ppb        | 06:56:24      |
| 2     | As 188.979†        | -4.5          | -2.0                | -3.1313 µg/L       | -3.1313 ppb        | 06:56:44      |
| 2     | B 249.677†         | 317.0         | 12.4                | 0.5992 µg/L        | 0.5992 ppb         | 06:56:44      |
| 2     | Ba 233.527†        | -14.9         | 4.2                 | 0.0974 µg/L        | 0.0974 ppb         | 06:56:44      |
| 2     | Be 313.107†        | -1570.9       | -57.3               | -0.0360 µg/L       | -0.0360 ppb        | 06:56:24      |
| 2     | Cd 226.502†        | -159.8        | 4.1                 | 0.1052 µg/L        | 0.1052 ppb         | 06:56:44      |
| 2     | Co 228.616†        | 28.6          | 4.2                 | 0.1932 µg/L        | 0.1932 ppb         | 06:56:44      |
| 2     | Cr 267.716†        | 94.2          | 35.5                | 0.8212 µg/L        | 0.8212 ppb         | 06:56:44      |
| 2     | Cu 324.752†        | 4221.8        | 12.2                | 0.0881 µg/L        | 0.0881 ppb         | 06:56:24      |
| 2     | Mn 257.610†        | -718.9        | 19.7                | 0.0624 µg/L        | 0.0624 ppb         | 06:56:44      |
| 2     | Mo 202.031†        | 10.9          | 1.3                 | 0.1346 µg/L        | 0.1346 ppb         | 06:56:44      |
| 2     | Ni 231.604†        | 371.3         | 22.7                | 1.3447 µg/L        | 1.3447 ppb         | 06:56:44      |
| 2     | P 214.914†         | 296.3         | 13.4                | 22.840 µg/L        | 22.840 ppb         | 06:56:44      |
| 2     | Pb 220.353†        | 46.8          | 4.1                 | 1.1324 µg/L        | 1.1324 ppb         | 06:56:44      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 23.8      | 2.1       | 7.0601 µg/L  | 7.0601 ppb  | 06:56:44 |
| 2 | Sb 206.836†        | 25.1      | -1.5      | -1.4584 µg/L | -1.4584 ppb | 06:56:44 |
| 2 | Se 196.026†        | 17.2      | -9.3      | -9.1692 µg/L | -9.1692 ppb | 06:56:44 |
| 2 | SiO2†              | 2804.3    | -4.5      | -0.8452 µg/L | -0.8452 ppb | 06:56:44 |
| 2 | Si 251.611†        | 431.2     | 15.7      | 1.1183 µg/L  | 1.1183 ppb  | 06:56:44 |
| 2 | Sn 189.927†        | 2.0       | 3.8       | 1.5914 µg/L  | 1.5914 ppb  | 06:56:44 |
| 2 | Ti 334.940†        | -708.8    | -11.3     | -0.0324 µg/L | -0.0324 ppb | 06:56:24 |
| 2 | Tl 190.801†        | -32.2     | 4.3       | 4.5220 µg/L  | 4.5220 ppb  | 06:56:44 |
| 2 | U 409.014†         | -11.6     | 46.1      | 4.4015 µg/L  | 4.4015 ppb  | 06:56:24 |
| 2 | V 292.402†         | 110.0     | -7.5      | -0.0902 µg/L | -0.0902 ppb | 06:56:24 |
| 2 | Zn 213.857†        | 611.8     | -12.1     | -0.3027 µg/L | -0.3027 ppb | 06:56:44 |
| 3 | Sc RADIAL          | 85111.4   | 85111.4   | 99.2 %       |             | 06:55:15 |
| 3 | Al 396.153Radial†  | -290.1    | -35.3     | -18.414 µg/L | -18.414 ppb | 06:55:15 |
| 3 | Ca 317.933Radial†  | 318.3     | -4.3      | -1.6000 µg/L | -1.6000 ppb | 06:55:35 |
| 3 | Fe 238.204 Radial† | 14.5      | -0.4      | -4.2110 µg/L | -4.2110 ppb | 06:55:35 |
| 3 | K 766.490 Radial†  | 457.5     | 87.5      | 44.284 µg/L  | 44.284 ppb  | 06:55:15 |
| 3 | Mg 279.077 IEC†    | 7.5       | 1.6       | 20.070 µg/L  | 20.070 ppb  | 06:55:35 |
| 3 | Na 589.592 Radial† | 200.2     | -10.5     | -5.0189 µg/L | -5.0189 ppb | 06:55:15 |
| 3 | Sr 421.552†        | 125.4     | 8.0       | 0.0485 µg/L  | 0.0485 ppb  | 06:55:15 |
| 3 | Sc 361.383         | 1800094.1 | 1800094.1 | 98.844 %     |             | 06:56:50 |
| 3 | Y 371.029          | 1245137.8 | 1245137.8 | 98.888 %     |             | 06:56:50 |
| 3 | Ag 328.068†        | -586.0    | -55.3     | -0.4802 µg/L | -0.4802 ppb | 06:56:56 |
| 3 | As 188.979†        | -1.6      | 1.0       | 1.4966 µg/L  | 1.4966 ppb  | 06:57:16 |
| 3 | B 249.677†         | 332.7     | 27.5      | 1.3490 µg/L  | 1.3490 ppb  | 06:57:16 |
| 3 | Ba 233.527†        | -8.2      | 11.0      | 0.2572 µg/L  | 0.2572 ppb  | 06:57:16 |
| 3 | Be 313.107†        | -1604.5   | -87.7     | -0.0553 µg/L | -0.0553 ppb | 06:56:56 |
| 3 | Cd 226.502†        | -166.7    | -2.4      | -0.0597 µg/L | -0.0597 ppb | 06:57:16 |
| 3 | Co 228.616†        | 24.3      | -0.3      | -0.0108 µg/L | -0.0108 ppb | 06:57:16 |
| 3 | Cr 267.716†        | 95.5      | 36.6      | 0.8458 µg/L  | 0.8458 ppb  | 06:57:16 |
| 3 | Cu 324.752†        | 4263.1    | 44.2      | 0.3098 µg/L  | 0.3098 ppb  | 06:56:56 |
| 3 | Mn 257.610†        | -655.3    | 85.7      | 0.2797 µg/L  | 0.2797 ppb  | 06:57:16 |
| 3 | Mo 202.031†        | 19.5      | 9.9       | 1.0437 µg/L  | 1.0437 ppb  | 06:57:16 |
| 3 | Ni 231.604†        | 371.3     | 21.9      | 1.2950 µg/L  | 1.2950 ppb  | 06:57:16 |
| 3 | P 214.914†         | 295.6     | 12.1      | 20.513 µg/L  | 20.513 ppb  | 06:57:16 |
| 3 | Pb 220.353†        | 46.8      | 3.9       | 1.1056 µg/L  | 1.1056 ppb  | 06:57:16 |
| 3 | S 181.975 Axial†   | 23.2      | 1.5       | 4.9292 µg/L  | 4.9292 ppb  | 06:57:16 |
| 3 | Sb 206.836†        | 28.4      | 1.7       | 1.6403 µg/L  | 1.6403 ppb  | 06:57:16 |
| 3 | Se 196.026†        | 31.6      | 5.2       | 5.1668 µg/L  | 5.1668 ppb  | 06:57:16 |
| 3 | SiO2†              | 2809.6    | -5.6      | -1.0489 µg/L | -1.0489 ppb | 06:57:16 |
| 3 | Si 251.611†        | 429.2     | 12.7      | 0.9053 µg/L  | 0.9053 ppb  | 06:57:16 |
| 3 | Sn 189.927†        | -5.1      | -3.3      | -1.4100 µg/L | -1.4100 ppb | 06:57:16 |
| 3 | Ti 334.940†        | -645.7    | 54.1      | 0.1347 µg/L  | 0.1347 ppb  | 06:56:56 |
| 3 | Tl 190.801†        | -34.3     | 2.3       | 2.4317 µg/L  | 2.4317 ppb  | 06:57:16 |
| 3 | U 409.014†         | -31.9     | 25.6      | 2.4453 µg/L  | 2.4453 ppb  | 06:56:56 |
| 3 | V 292.402†         | 67.7      | -50.5     | -0.6266 µg/L | -0.6266 ppb | 06:56:56 |
| 3 | Zn 213.857†        | 656.9     | 32.2      | 0.7732 µg/L  | 0.7732 ppb  | 06:57:16 |

## Mean Data: ICB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1793204.0                | 98.466 %           | 0.4756   |                    |          | 0.48%   |
| Sc RADIAL   | 85334.2                  | 99.4 %             | 0.41     |                    |          | 0.41%   |
| Y 371.029   | 1239961.3                | 98.476 %           | 0.5745   |                    |          | 0.58%   |
| Ag 328.068†   | -36.1                    | -0.3130 µg/L       | 0.39873  | -0.3130 ppb        | 0.39873  | 127.39% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -2.3                     | -1.1916 µg/L       | 15.38565 | -1.1916 ppb        | 15.38565 | >999.9% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.3                     | -0.4523 µg/L       | 2.39878  | -0.4523 ppb        | 2.39878  | 530.36% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 16.4                     | 0.8059 µg/L        | 0.47483  | 0.8059 ppb         | 0.47483  | 58.92%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 4.2                      | 0.0971 µg/L        | 0.16030  | 0.0971 ppb         | 0.16030  | 165.16% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -44.6                    | -0.0281 µg/L       | 0.03190  | -0.0281 ppb        | 0.03190  | 113.64% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | -7.5                     | -2.7881 µg/L       | 1.27496  | -2.7881 ppb        | 1.27496  | 45.73%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | 3.0                      | 0.0766 µg/L        | 0.12445  | 0.0766 ppb         | 0.12445  | 162.53% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 4.6                      | 0.2105 µg/L        | 0.23050  | 0.2105 ppb         | 0.23050  | 109.49% |

|       |                        |          |                |                           |             |          |         |
|-------|------------------------|----------|----------------|---------------------------|-------------|----------|---------|
| Cr    | 267.716†               | 33.9     | 0.7844 µg/L    | 0.08591                   | 0.7844 ppb  | 0.08591  | 10.95%  |
|       | QC value within limits | for Cr   | 267.716        | Recovery = Not calculated |             |          |         |
| Cu    | 324.752†               | 49.3     | 0.3461 µg/L    | 0.27788                   | 0.3461 ppb  | 0.27788  | 80.30%  |
|       | QC value within limits | for Cu   | 324.752        | Recovery = Not calculated |             |          |         |
| Fe    | 238.204 Radial†        | 0.0      | 0.2600 µg/L    | 12.34221                  | 0.2600 ppb  | 12.34221 | >999.9% |
|       | QC value within limits | for Fe   | 238.204 Radial | Recovery = Not calculated |             |          |         |
| K     | 766.490 Radial†        | 5.2      | 2.6355 µg/L    | 37.97149                  | 2.6355 ppb  | 37.97149 | >999.9% |
|       | QC value within limits | for K    | 766.490 Radial | Recovery = Not calculated |             |          |         |
| Mg    | 279.077 IEC†           | 2.0      | 25.505 µg/L    | 21.1598                   | 25.505 ppb  | 21.1598  | 82.96%  |
|       | QC value within limits | for Mg   | 279.077 IEC    | Recovery = Not calculated |             |          |         |
| Mn    | 257.610†               | 39.9     | 0.1294 µg/L    | 0.13044                   | 0.1294 ppb  | 0.13044  | 100.82% |
|       | QC value within limits | for Mn   | 257.610        | Recovery = Not calculated |             |          |         |
| Mo    | 202.031†               | 6.9      | 0.7280 µg/L    | 0.51430                   | 0.7280 ppb  | 0.51430  | 70.64%  |
|       | QC value within limits | for Mo   | 202.031        | Recovery = Not calculated |             |          |         |
| Na    | 589.592 Radial†        | 16.4     | 7.8285 µg/L    | 11.12735                  | 7.8285 ppb  | 11.12735 | 142.14% |
|       | QC value within limits | for Na   | 589.592 Radial | Recovery = Not calculated |             |          |         |
| Ni    | 231.604†               | 18.0     | 1.0665 µg/L    | 0.43954                   | 1.0665 ppb  | 0.43954  | 41.21%  |
|       | QC value within limits | for Ni   | 231.604        | Recovery = Not calculated |             |          |         |
| P     | 214.914†               | 11.5     | 19.571 µg/L    | 3.8266                    | 19.571 ppb  | 3.8266   | 19.55%  |
|       | QC value within limits | for P    | 214.914        | Recovery = Not calculated |             |          |         |
| Pb    | 220.353†               | 4.2      | 1.1806 µg/L    | 0.10763                   | 1.1806 ppb  | 0.10763  | 9.12%   |
|       | QC value within limits | for Pb   | 220.353        | Recovery = Not calculated |             |          |         |
| S     | 181.975 Axial†         | 2.0      | 6.7491 µg/L    | 1.68607                   | 6.7491 ppb  | 1.68607  | 24.98%  |
|       | QC value within limits | for S    | 181.975 Axial  | Recovery = Not calculated |             |          |         |
| Sb    | 206.836†               | 2.6      | 2.4622 µg/L    | 4.38959                   | 2.4622 ppb  | 4.38959  | 178.28% |
|       | QC value within limits | for Sb   | 206.836        | Recovery = Not calculated |             |          |         |
| Se    | 196.026†               | -1.3     | -1.2821 µg/L   | 7.27542                   | -1.2821 ppb | 7.27542  | 567.45% |
|       | QC value within limits | for Se   | 196.026        | Recovery = Not calculated |             |          |         |
| SiO2† |                        | 7.1      | 1.3405 µg/L    | 3.96342                   | 1.3405 ppb  | 3.96342  | 295.67% |
|       | QC value within limits | for SiO2 |                | Recovery = Not calculated |             |          |         |
| Si    | 251.611†               | 13.0     | 0.9245 µg/L    | 0.18491                   | 0.9245 ppb  | 0.18491  | 20.00%  |
|       | QC value within limits | for Si   | 251.611        | Recovery = Not calculated |             |          |         |
| Sn    | 189.927†               | -0.3     | -0.1145 µg/L   | 1.54218                   | -0.1145 ppb | 1.54218  | >999.9% |
|       | QC value within limits | for Sn   | 189.927        | Recovery = Not calculated |             |          |         |
| Sr    | 421.552†               | 33.6     | 0.2042 µg/L    | 0.16216                   | 0.2042 ppb  | 0.16216  | 79.42%  |
|       | QC value within limits | for Sr   | 421.552        | Recovery = Not calculated |             |          |         |
| Ti    | 334.940†               | 42.3     | 0.1043 µg/L    | 0.12437                   | 0.1043 ppb  | 0.12437  | 119.20% |
|       | QC value within limits | for Ti   | 334.940        | Recovery = Not calculated |             |          |         |
| Tl    | 190.801†               | 1.8      | 1.8670 µg/L    | 2.97772                   | 1.8670 ppb  | 2.97772  | 159.49% |
|       | QC value within limits | for Tl   | 190.801        | Recovery = Not calculated |             |          |         |
| U     | 409.014†               | 28.4     | 2.7145 µg/L    | 1.56982                   | 2.7145 ppb  | 1.56982  | 57.83%  |
|       | QC value within limits | for U    | 409.014        | Recovery = Not calculated |             |          |         |
| V     | 292.402†               | -34.2    | -0.4234 µg/L   | 0.29089                   | -0.4234 ppb | 0.29089  | 68.70%  |
|       | QC value within limits | for V    | 292.402        | Recovery = Not calculated |             |          |         |
| Zn    | 213.857†               | 4.5      | 0.1022 µg/L    | 0.58522                   | 0.1022 ppb  | 0.58522  | 572.42% |
|       | QC value within limits | for Zn   | 213.857        | Recovery = Not calculated |             |          |         |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/11/2010 06:57:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84885.9          | 84885.9                | 98.9 %                |                       | 06:57:59         |
| 1     | Al 396.153Radial†  | 140.8            | 399.5                  | 207.82 µg/L           | 207.82 ppb            | 06:57:59         |
| 1     | Ca 317.933Radial†  | 852.0            | 536.1                  | 198.53 µg/L           | 198.53 ppb            | 06:58:19         |
| 1     | Fe 238.204 Radial† | 22.7             | 8.0                    | 91.459 µg/L           | 91.459 ppb            | 06:58:19         |
| 1     | K 766.490 Radial†  | 631.6            | 264.8                  | 134.02 µg/L           | 134.02 ppb            | 06:57:59         |
| 1     | Mg 279.077 IEC†    | 33.4             | 27.8                   | 352.21 µg/L           | 352.21 ppb            | 06:58:19         |
| 1     | Na 589.592 Radial† | 821.7            | 618.2                  | 294.77 µg/L           | 294.77 ppb            | 06:57:59         |
| 1     | Sr 421.552†        | 950.5            | 842.4                  | 5.1264 µg/L           | 5.1264 ppb            | 06:57:59         |
| 1     | Sc 361.383         | 1835881.5        | 1835881.5              | 100.81 %              |                       | 06:59:22         |
| 1     | Y 371.029          | 1267887.9        | 1267887.9              | 100.69 %              |                       | 06:59:22         |
| 1     | Ag 328.068†        | -37.9            | 499.8                  | 4.3316 µg/L           | 4.3316 ppb            | 06:59:27         |
| 1     | As 188.979†        | 14.2             | 16.7                   | 25.590 µg/L           | 25.590 ppb            | 06:59:48         |
| 1     | B 249.677†         | 1261.0           | 941.8                  | 46.039 µg/L           | 46.039 ppb            | 06:59:48         |
| 1     | Ba 233.527†        | 190.2            | 208.0                  | 4.8762 µg/L           | 4.8762 ppb            | 06:59:48         |
| 1     | Be 313.107†        | 6162.8           | 7648.9                 | 4.8106 µg/L           | 4.8106 ppb            | 06:59:27         |
| 1     | Cd 226.502†        | 23.1             | 189.1                  | 4.8019 µg/L           | 4.8019 ppb            | 06:59:48         |
| 1     | Co 228.616†        | 128.3            | 102.5                  | 4.6885 µg/L           | 4.6885 ppb            | 06:59:48         |
| 1     | Cr 267.716†        | 299.7            | 237.3                  | 5.4907 µg/L           | 5.4907 ppb            | 06:59:48         |
| 1     | Cu 324.752†        | 5719.5           | 1404.9                 | 9.8809 µg/L           | 9.8809 ppb            | 06:59:27         |
| 1     | Mn 257.610†        | 2297.6           | 3027.8                 | 9.9228 µg/L           | 9.9228 ppb            | 06:59:48         |
| 1     | Mo 202.031†        | 106.9            | 96.2                   | 10.104 µg/L           | 10.104 ppb            | 06:59:48         |
| 1     | Ni 231.604†        | 429.2            | 72.0                   | 4.2558 µg/L           | 4.2558 ppb            | 06:59:48         |
| 1     | P 214.914†         | 380.1            | 90.1                   | 152.70 µg/L           | 152.70 ppb            | 06:59:48         |
| 1     | Pb 220.353†        | 85.3             | 41.3                   | 11.553 µg/L           | 11.553 ppb            | 06:59:48         |
| 1     | S 181.975 Axial†   | 52.9             | 30.5                   | 100.76 µg/L           | 100.76 ppb            | 06:59:48         |
| 1     | Sb 206.836†        | 35.1             | 7.8                    | 7.4112 µg/L           | 7.4112 ppb            | 06:59:48         |
| 1     | Se 196.026†        | 46.7             | 19.6                   | 19.410 µg/L           | 19.410 ppb            | 06:59:48         |
| 1     | SiO2†              | 3953.0           | 1073.3                 | 202.84 µg/L           | 202.84 ppb            | 06:59:27         |
| 1     | Si 251.611†        | 1741.6           | 1306.2                 | 92.949 µg/L           | 92.949 ppb            | 06:59:48         |
| 1     | Sn 189.927†        | 24.9             | 26.5                   | 11.194 µg/L           | 11.194 ppb            | 06:59:48         |
| 1     | Ti 334.940†        | 1235.6           | 1933.1                 | 4.8421 µg/L           | 4.8421 ppb            | 06:59:27         |
| 1     | Tl 190.801†        | -12.7            | 24.4                   | 25.676 µg/L           | 25.676 ppb            | 06:59:48         |
| 1     | U 409.014†         | 535.1            | 588.6                  | 56.153 µg/L           | 56.153 ppb            | 06:59:27         |
| 1     | V 292.402†         | 462.1            | 339.4                  | 4.4336 µg/L           | 4.4336 ppb            | 06:59:27         |
| 1     | Zn 213.857†        | 1058.2           | 417.3                  | 10.053 µg/L           | 10.053 ppb            | 06:59:48         |
| 2     | Sc RADIAL          | 85301.5          | 85301.5                | 99.4 %                |                       | 06:58:25         |
| 2     | Al 396.153Radial†  | 99.9             | 357.7                  | 186.02 µg/L           | 186.02 ppb            | 06:58:25         |
| 2     | Ca 317.933Radial†  | 845.6            | 525.4                  | 194.58 µg/L           | 194.58 ppb            | 06:58:46         |
| 2     | Fe 238.204 Radial† | 23.7             | 8.9                    | 101.64 µg/L           | 101.64 ppb            | 06:58:46         |
| 2     | K 766.490 Radial†  | 711.4            | 341.9                  | 173.05 µg/L           | 173.05 ppb            | 06:58:25         |
| 2     | Mg 279.077 IEC†    | 31.0             | 25.2                   | 319.47 µg/L           | 319.47 ppb            | 06:58:46         |
| 2     | Na 589.592 Radial† | 840.8            | 633.4                  | 302.03 µg/L           | 302.03 ppb            | 06:58:25         |
| 2     | Sr 421.552†        | 935.0            | 822.1                  | 5.0029 µg/L           | 5.0029 ppb            | 06:58:25         |
| 2     | Sc 361.383         | 1840228.3        | 1840228.3              | 101.05 %              |                       | 06:59:54         |
| 2     | Y 371.029          | 1270559.6        | 1270559.6              | 100.91 %              |                       | 06:59:54         |
| 2     | Ag 328.068†        | 63.5             | 600.3                  | 5.1968 µg/L           | 5.1968 ppb            | 06:59:59         |
| 2     | As 188.979†        | 18.4             | 20.8                   | 31.851 µg/L           | 31.851 ppb            | 07:00:20         |
| 2     | B 249.677†         | 1255.3           | 933.3                  | 45.614 µg/L           | 45.614 ppb            | 07:00:20         |
| 2     | Ba 233.527†        | 187.9            | 205.2                  | 4.8116 µg/L           | 4.8116 ppb            | 07:00:20         |
| 2     | Be 313.107†        | 6213.4           | 7684.5                 | 4.8331 µg/L           | 4.8331 ppb            | 06:59:59         |
| 2     | Cd 226.502†        | 23.4             | 189.3                  | 4.8080 µg/L           | 4.8080 ppb            | 07:00:20         |
| 2     | Co 228.616†        | 128.3            | 102.1                  | 4.6727 µg/L           | 4.6727 ppb            | 07:00:20         |
| 2     | Cr 267.716†        | 287.7            | 224.7                  | 5.1996 µg/L           | 5.1996 ppb            | 07:00:20         |
| 2     | Cu 324.752†        | 5670.6           | 1343.1                 | 9.4486 µg/L           | 9.4486 ppb            | 06:59:59         |
| 2     | Mn 257.610†        | 2263.7           | 2988.8                 | 9.7975 µg/L           | 9.7975 ppb            | 07:00:20         |
| 2     | Mo 202.031†        | 111.9            | 100.9                  | 10.599 µg/L           | 10.599 ppb            | 07:00:20         |
| 2     | Ni 231.604†        | 440.2            | 81.9                   | 4.8438 µg/L           | 4.8438 ppb            | 07:00:20         |
| 2     | P 214.914†         | 377.0            | 86.1                   | 145.89 µg/L           | 145.89 ppb            | 07:00:20         |
| 2     | Pb 220.353†        | 79.6             | 35.4                   | 9.9002 µg/L           | 9.9002 ppb            | 07:00:20         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 51.7      | 29.2      | 96.374 µg/L | 96.374 ppb | 07:00:20 |
| 2 | Sb 206.836†        | 35.3      | 7.9       | 7.5664 µg/L | 7.5664 ppb | 07:00:20 |
| 2 | Se 196.026†        | 49.7      | 22.5      | 22.333 µg/L | 22.333 ppb | 07:00:20 |
| 2 | SiO2†              | 3889.7    | 1001.4    | 189.25 µg/L | 189.25 ppb | 06:59:59 |
| 2 | Si 251.611†        | 1751.8    | 1312.1    | 93.374 µg/L | 93.374 ppb | 07:00:20 |
| 2 | Sn 189.927†        | 22.4      | 23.9      | 10.098 µg/L | 10.098 ppb | 07:00:20 |
| 2 | Ti 334.940†        | 1231.4    | 1926.1    | 4.8271 µg/L | 4.8271 ppb | 06:59:59 |
| 2 | Tl 190.801†        | -15.5     | 21.7      | 22.836 µg/L | 22.836 ppb | 07:00:20 |
| 2 | U 409.014†         | 572.7     | 624.6     | 59.582 µg/L | 59.582 ppb | 06:59:59 |
| 2 | V 292.402†         | 472.5     | 348.6     | 4.5552 µg/L | 4.5552 ppb | 06:59:59 |
| 2 | Zn 213.857†        | 1053.9    | 410.6     | 9.8890 µg/L | 9.8890 ppb | 07:00:20 |
| 3 | Sc RADIAL          | 86675.6   | 86675.6   | 101 %       |            | 06:58:51 |
| 3 | Al 396.153Radial†  | 108.3     | 364.4     | 189.56 µg/L | 189.56 ppb | 06:58:51 |
| 3 | Ca 317.933Radial†  | 847.3     | 513.7     | 190.22 µg/L | 190.22 ppb | 06:59:11 |
| 3 | Fe 238.204 Radial† | 23.4      | 8.2       | 93.044 µg/L | 93.044 ppb | 06:59:11 |
| 3 | K 766.490 Radial†  | 671.8     | 291.3     | 147.46 µg/L | 147.46 ppb | 06:58:51 |
| 3 | Mg 279.077 IEC†    | 30.6      | 24.3      | 308.57 µg/L | 308.57 ppb | 06:59:11 |
| 3 | Na 589.592 Radial† | 796.0     | 575.6     | 274.49 µg/L | 274.49 ppb | 06:58:51 |
| 3 | Sr 421.552†        | 959.4     | 831.3     | 5.0589 µg/L | 5.0589 ppb | 06:58:51 |
| 3 | Sc 361.383         | 1837652.2 | 1837652.2 | 100.91 %    |            | 07:00:26 |
| 3 | Y 371.029          | 1270243.3 | 1270243.3 | 100.88 %    |            | 07:00:26 |
| 3 | Ag 328.068†        | 18.3      | 555.6     | 4.8108 µg/L | 4.8108 ppb | 07:00:32 |
| 3 | As 188.979†        | 16.4      | 18.8      | 28.879 µg/L | 28.879 ppb | 07:00:52 |
| 3 | B 249.677†         | 1153.7    | 834.2     | 40.773 µg/L | 40.773 ppb | 07:00:52 |
| 3 | Ba 233.527†        | 149.8     | 167.7     | 3.9337 µg/L | 3.9337 ppb | 07:00:52 |
| 3 | Be 313.107†        | 5473.6    | 6959.9    | 4.3773 µg/L | 4.3773 ppb | 07:00:32 |
| 3 | Cd 226.502†        | 6.6       | 172.7     | 4.3857 µg/L | 4.3857 ppb | 07:00:52 |
| 3 | Co 228.616†        | 119.3     | 93.4      | 4.2732 µg/L | 4.2732 ppb | 07:00:52 |
| 3 | Cr 267.716†        | 252.7     | 190.4     | 4.4074 µg/L | 4.4074 ppb | 07:00:52 |
| 3 | Cu 324.752†        | 5624.1    | 1304.9    | 9.1788 µg/L | 9.1788 ppb | 07:00:32 |
| 3 | Mn 257.610†        | 1895.9    | 2627.5    | 8.6113 µg/L | 8.6113 ppb | 07:00:52 |
| 3 | Mo 202.031†        | 92.3      | 81.6      | 8.5706 µg/L | 8.5706 ppb | 07:00:52 |
| 3 | Ni 231.604†        | 438.8     | 81.1      | 4.7977 µg/L | 4.7977 ppb | 07:00:52 |
| 3 | P 214.914†         | 366.6     | 76.3      | 129.22 µg/L | 129.22 ppb | 07:00:52 |
| 3 | Pb 220.353†        | 74.3      | 30.3      | 8.4710 µg/L | 8.4710 ppb | 07:00:52 |
| 3 | S 181.975 Axial†   | 43.4      | 21.0      | 69.462 µg/L | 69.462 ppb | 07:00:52 |
| 3 | Sb 206.836†        | 33.4      | 6.1       | 5.8590 µg/L | 5.8590 ppb | 07:00:52 |
| 3 | Se 196.026†        | 45.0      | 17.8      | 17.690 µg/L | 17.690 ppb | 07:00:52 |
| 3 | SiO2†              | 3901.5    | 1018.4    | 192.48 µg/L | 192.48 ppb | 07:00:32 |
| 3 | Si 251.611†        | 1572.3    | 1136.7    | 80.887 µg/L | 80.887 ppb | 07:00:52 |
| 3 | Sn 189.927†        | 21.7      | 23.2      | 9.8154 µg/L | 9.8154 ppb | 07:00:52 |
| 3 | Ti 334.940†        | 1058.7    | 1756.6    | 4.4011 µg/L | 4.4011 ppb | 07:00:32 |
| 3 | Tl 190.801†        | -21.0     | 16.2      | 17.088 µg/L | 17.088 ppb | 07:00:52 |
| 3 | U 409.014†         | 478.8     | 532.3     | 50.781 µg/L | 50.781 ppb | 07:00:32 |
| 3 | V 292.402†         | 463.0     | 339.9     | 4.4194 µg/L | 4.4194 ppb | 07:00:32 |
| 3 | Zn 213.857†        | 1029.8    | 388.2     | 9.3486 µg/L | 9.3486 ppb | 07:00:52 |

## Mean Data: PQL

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1837920.7                | 100.92 %           | 0.120    |                    |          | 0.12%  |
| Sc RADIAL   | 85621.0                  | 99.8 %             | 1.09     |                    |          | 1.09%  |
| Y 371.029   | 1269563.6                | 100.83 %           | 0.116    |                    |          | 0.11%  |
| Ag 328.068†   | 551.9                    | 4.7797 µg/L        | 0.43347  | 4.7797 ppb         | 0.43347  | 9.07%  |
| QC value within limits for Ag 328.068 Recovery = 95.59%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 373.9                    | 194.47 µg/L        | 11.700   | 194.47 ppb         | 11.700   | 6.02%  |
| QC value within limits for Al 396.153Radial Recovery = 97.23% |                          |                    |          |                    |          |        |
| As 188.979†   | 18.8                     | 28.773 µg/L        | 3.1320   | 28.773 ppb         | 3.1320   | 10.89% |
| QC value within limits for As 188.979 Recovery = 95.91%       |                          |                    |          |                    |          |        |
| B 249.677†  | 903.1                    | 44.142 µg/L        | 2.9254   | 44.142 ppb         | 2.9254   | 6.63%  |
| QC value within limits for B 249.677 Recovery = 88.28%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 193.7                    | 4.5405 µg/L        | 0.52654  | 4.5405 ppb         | 0.52654  | 11.60% |
| QC value within limits for Ba 233.527 Recovery = 90.81%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 7431.1                   | 4.6737 µg/L        | 0.25689  | 4.6737 ppb         | 0.25689  | 5.50%  |
| QC value within limits for Be 313.107 Recovery = 93.47%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 525.1                    | 194.44 µg/L        | 4.158    | 194.44 ppb         | 4.158    | 2.14%  |
| QC value within limits for Ca 317.933Radial Recovery = 97.22% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 183.7                    | 4.6652 µg/L        | 0.24206  | 4.6652 ppb         | 0.24206  | 5.19%  |
| QC value within limits for Cd 226.502 Recovery = 93.30%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 99.3                     | 4.5448 µg/L        | 0.23534  | 4.5448 ppb         | 0.23534  | 5.18%  |

|   |                    |             |         |            |                |
|---|--------------------|-------------|---------|------------|----------------|
| QC value within limits for Co 228.616             | Recovery = 90.90%  |             |         |            |                |
| Cr 267.716†                                       | 217.4              | 5.0326 µg/L | 0.56059 | 5.0326 ppb | 0.56059 11.14% |
| QC value within limits for Cr 267.716             | Recovery = 100.65% |             |         |            |                |
| Cu 324.752†                                       | 1351.0             | 9.5027 µg/L | 0.35418 | 9.5027 ppb | 0.35418 3.73%  |
| QC value within limits for Cu 324.752             | Recovery = 95.03%  |             |         |            |                |
| Fe 238.204 Radial†                                | 8.4                | 95.381 µg/L | 5.4788  | 95.381 ppb | 5.4788 5.74%   |
| QC value within limits for Fe 238.204 Radial      | Recovery = 95.38%  |             |         |            |                |
| K 766.490 Radial†                                 | 299.3              | 151.51 µg/L | 19.832  | 151.51 ppb | 19.832 13.09%  |
| QC value within limits for K 766.490 Radial       | Recovery = 101.01% |             |         |            |                |
| Mg 279.077 IEC†                                   | 25.8               | 326.75 µg/L | 22.713  | 326.75 ppb | 22.713 6.95%   |
| QC value within limits for Mg 279.077 IEC         | Recovery = 108.92% |             |         |            |                |
| Mn 257.610†                                       | 2881.4             | 9.4439 µg/L | 0.72374 | 9.4439 ppb | 0.72374 7.66%  |
| QC value within limits for Mn 257.610             | Recovery = 94.44%  |             |         |            |                |
| Mo 202.031†                                       | 92.9               | 9.7580 µg/L | 1.05777 | 9.7580 ppb | 1.05777 10.84% |
| QC value within limits for Mo 202.031             | Recovery = 97.58%  |             |         |            |                |
| Na 589.592 Radial†                                | 609.1              | 290.43 µg/L | 14.276  | 290.43 ppb | 14.276 4.92%   |
| QC value within limits for Na 589.592 Radial      | Recovery = 96.81%  |             |         |            |                |
| Ni 231.604†                                       | 78.3               | 4.6324 µg/L | 0.32701 | 4.6324 ppb | 0.32701 7.06%  |
| QC value within limits for Ni 231.604             | Recovery = 92.65%  |             |         |            |                |
| P 214.914†  | 84.1               | 142.61 µg/L | 12.078  | 142.61 ppb | 12.078 8.47%   |
| QC value within limits for P 214.914              | Recovery = 95.07%  |             |         |            |                |
| Pb 220.353†                                       | 35.7               | 9.9749 µg/L | 1.54256 | 9.9749 ppb | 1.54256 15.46% |
| QC value within limits for Pb 220.353             | Recovery = 99.75%  |             |         |            |                |
| S 181.975 Axial†                                  | 26.9               | 88.866 µg/L | 16.9468 | 88.866 ppb | 16.9468 19.07% |
| QC value within limits for S 181.975 Axial        | Recovery = 88.87%  |             |         |            |                |
| Sb 206.836†                                       | 7.3                | 6.9455 µg/L | 0.94416 | 6.9455 ppb | 0.94416 13.59% |
| QC value less than the lower limit for Sb 206.836 | Recovery = 69.46%  |             |         |            |                |
| Se 196.026†                                       | 20.0               | 19.811 µg/L | 2.3473  | 19.811 ppb | 2.3473 11.85%  |
| QC value less than the lower limit for Se 196.026 | Recovery = 66.04%  |             |         |            |                |
| SiO2†   | 1031.0             | 194.86 µg/L | 7.100   | 194.86 ppb | 7.100 3.64%    |
| QC value within limits for SiO2                   | Recovery = 91.48%  |             |         |            |                |
| Si 251.611†                                       | 1251.7             | 89.070 µg/L | 7.0900  | 89.070 ppb | 7.0900 7.96%   |
| QC value within limits for Si 251.611             | Recovery = 89.07%  |             |         |            |                |
| Sn 189.927†                                       | 24.6               | 10.369 µg/L | 0.7284  | 10.369 ppb | 0.7284 7.03%   |
| QC value within limits for Sn 189.927             | Recovery = 103.69% |             |         |            |                |
| Sr 421.552†                                       | 831.9              | 5.0627 µg/L | 0.06185 | 5.0627 ppb | 0.06185 1.22%  |
| QC value within limits for Sr 421.552             | Recovery = 101.25% |             |         |            |                |
| Ti 334.940†                                       | 1871.9             | 4.6901 µg/L | 0.25039 | 4.6901 ppb | 0.25039 5.34%  |
| QC value within limits for Ti 334.940             | Recovery = 93.80%  |             |         |            |                |
| Tl 190.801†                                       | 20.8               | 21.867 µg/L | 4.3753  | 21.867 ppb | 4.3753 20.01%  |
| QC value within limits for Tl 190.801             | Recovery = 109.33% |             |         |            |                |
| U 409.014†  | 581.8              | 55.505 µg/L | 4.4364  | 55.505 ppb | 4.4364 7.99%   |
| QC value within limits for U 409.014              | Recovery = 111.01% |             |         |            |                |
| V 292.402†  | 342.7              | 4.4694 µg/L | 0.07463 | 4.4694 ppb | 0.07463 1.67%  |
| QC value within limits for V 292.402              | Recovery = 89.39%  |             |         |            |                |
| Zn 213.857†                                       | 405.3              | 9.7635 µg/L | 0.36853 | 9.7635 ppb | 0.36853 3.77%  |
| QC value within limits for Zn 213.857             | Recovery = 97.64%  |             |         |            |                |

QC Failed. Continue with analysis.



Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 103  
 Date Collected: 3/11/2010 07:01:01  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSA

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 84400.1       | 84400.1             | 98.4 %             |                    | 07:01:43      |
| 1     | Al 396.153Radial†  | 970608.6      | 987043.1            | 513960 µg/L        | 513960 ppb         | 07:01:37      |
| 1     | Ca 317.933Radial†  | 1281759.1     | 1302797.3           | 482460 µg/L        | 482460 ppb         | 07:01:37      |
| 1     | Fe 238.204 Radial† | 16038.3       | 16290.6             | 185430 µg/L        | 185430 ppb         | 07:01:43      |
| 1     | K 766.490 Radial†  | 162.0         | -209.0              | -105.81 µg/L       | -105.81 ppb        | 07:01:43      |
| 1     | Mg 279.077 IEC†    | 37847.1       | 38471.9             | 487560 µg/L        | 487560 ppb         | 07:01:43      |
| 1     | Na 589.592 Radial† | 125.6         | -84.7               | -40.396 µg/L       | -40.396 ppb        | 07:01:43      |
| 1     | Sr 421.552†        | 696.2         | 589.3               | 3.5864 µg/L        | 3.5864 ppb         | 07:01:43      |
| 1     | Sc 361.383         | 1706634.0     | 1706634.0           | 93.712 %           |                    | 07:02:18      |
| 1     | Y 371.029          | 1166522.9     | 1166522.9           | 92.644 %           |                    | 07:02:18      |
| 1     | Ag 328.068†        | -2262.6       | -1876.9             | -1.7023 µg/L       | -1.7023 ppb        | 07:02:39      |
| 1     | As 188.979†        | 25.8          | 30.1                | -35.355 µg/L       | -35.355 ppb        | 07:02:39      |
| 1     | B 249.677†         | 1396.2        | 1180.8              | -38.990 µg/L       | -38.990 ppb        | 07:02:18      |
| 1     | Ba 233.527†        | 294.7         | 333.7               | 7.8573 µg/L        | 7.8573 ppb         | 07:02:39      |
| 1     | Be 313.107†        | -2039.6       | -640.9              | -0.4147 µg/L       | -0.4147 ppb        | 07:02:18      |
| 1     | Cd 226.502†        | 766.0         | 983.6               | 4.0539 µg/L        | 4.0539 ppb         | 07:02:39      |
| 1     | Co 228.616†        | 94.3          | 75.8                | 3.4011 µg/L        | 3.4011 ppb         | 07:02:39      |
| 1     | Cr 267.716†        | -4.0          | -64.3               | -1.4712 µg/L       | -1.4712 ppb        | 07:02:39      |
| 1     | Cu 324.752†        | -1088.9       | -5430.6             | -3.2659 µg/L       | -3.2659 ppb        | 07:02:39      |
| 1     | Mn 257.610†        | 5711.5        | 6843.4              | 0.5713 µg/L        | 0.5713 ppb         | 07:02:18      |
| 1     | Mo 202.031†        | -53.9         | -67.4               | -0.0245 µg/L       | -0.0245 ppb        | 07:02:39      |
| 1     | Ni 231.604†        | 288.3         | -46.1               | -0.3237 µg/L       | -0.3237 ppb        | 07:02:39      |
| 1     | P 214.914†         | 295.3         | 28.2                | 48.859 µg/L        | 48.859 ppb         | 07:02:39      |
| 1     | Pb 220.353†        | -85.0         | -134.0              | 4.0660 µg/L        | 4.0660 ppb         | 07:02:39      |
| 1     | S 181.975 Axial†   | -14.8         | -37.8               | -124.61 µg/L       | -124.61 ppb        | 07:02:39      |
| 1     | Sb 206.836†        | 16.8          | -9.1                | -15.865 µg/L       | -15.865 ppb        | 07:02:39      |
| 1     | Se 196.026†        | -136.1        | -171.9              | 14.140 µg/L        | 14.140 ppb         | 07:02:39      |
| 1     | SiO2†              | 2526.5        | -152.0              | -28.719 µg/L       | -28.719 ppb        | 07:02:39      |
| 1     | Si 251.611†        | 452.8         | 61.7                | 4.3925 µg/L        | 4.3925 ppb         | 07:02:39      |
| 1     | Sn 189.927†        | -98.0         | -102.8              | 6.1327 µg/L        | 6.1327 ppb         | 07:02:39      |
| 1     | Ti 334.940†        | 10545.0       | 11960.0             | -0.7988 µg/L       | -0.7988 ppb        | 07:02:18      |
| 1     | Tl 190.801†        | 3.9           | 41.1                | -24.100 µg/L       | -24.100 ppb        | 07:02:39      |
| 1     | U 409.014†         | -51.7         | 2.7                 | -54.946 µg/L       | -54.946 ppb        | 07:02:18      |
| 1     | V 292.402†         | 2014.3        | 2030.5              | -8.4402 µg/L       | -8.4402 ppb        | 07:02:39      |
| 1     | Zn 213.857†        | 2071.1        | 1577.7              | 1.8404 µg/L        | 1.8404 ppb         | 07:02:39      |
| 2     | Sc RADIAL          | 84311.4       | 84311.4             | 98.3 %             |                    | 07:01:54      |
| 2     | Al 396.153Radial†  | 960051.7      | 977336.7            | 508910 µg/L        | 508910 ppb         | 07:01:49      |
| 2     | Ca 317.933Radial†  | 1264357.5     | 1286457.5           | 476410 µg/L        | 476410 ppb         | 07:01:49      |
| 2     | Fe 238.204 Radial† | 15976.3       | 16244.7             | 184910 µg/L        | 184910 ppb         | 07:01:54      |
| 2     | K 766.490 Radial†  | 200.6         | -169.6              | -85.836 µg/L       | -85.836 ppb        | 07:01:54      |
| 2     | Mg 279.077 IEC†    | 37560.6       | 38220.9             | 484380 µg/L        | 484380 ppb         | 07:01:54      |
| 2     | Na 589.592 Radial† | 147.3         | -62.5               | -29.782 µg/L       | -29.782 ppb        | 07:01:54      |
| 2     | Sr 421.552†        | 722.5         | 616.9               | 3.7542 µg/L        | 3.7542 ppb         | 07:01:54      |
| 2     | Sc 361.383         | 1718795.6     | 1718795.6           | 94.380 %           |                    | 07:02:47      |
| 2     | Y 371.029          | 1175434.6     | 1175434.6           | 93.352 %           |                    | 07:02:47      |
| 2     | Ag 328.068†        | -2231.2       | -1826.6             | -1.3118 µg/L       | -1.3118 ppb        | 07:03:08      |
| 2     | As 188.979†        | 25.6          | 29.7                | -35.164 µg/L       | -35.164 ppb        | 07:03:08      |
| 2     | B 249.677†         | 1371.5        | 1144.1              | -40.513 µg/L       | -40.513 ppb        | 07:02:47      |
| 2     | Ba 233.527†        | 274.9         | 310.6               | 7.3154 µg/L        | 7.3154 ppb         | 07:03:08      |
| 2     | Be 313.107†        | -1939.0       | -518.9              | -0.3376 µg/L       | -0.3376 ppb        | 07:02:47      |
| 2     | Cd 226.502†        | 741.2         | 951.5               | 3.2963 µg/L        | 3.2963 ppb         | 07:03:08      |
| 2     | Co 228.616†        | 78.7          | 58.6                | 2.6155 µg/L        | 2.6155 ppb         | 07:03:08      |
| 2     | Cr 267.716†        | -9.1          | -69.7               | -1.5954 µg/L       | -1.5954 ppb        | 07:03:08      |
| 2     | Cu 324.752†        | -1082.4       | -5415.5             | -3.2583 µg/L       | -3.2583 ppb        | 07:03:08      |
| 2     | Mn 257.610†        | 5581.8        | 6662.8              | 0.1620 µg/L        | 0.1620 ppb         | 07:02:47      |
| 2     | Mo 202.031†        | -52.9         | -65.9               | 0.1079 µg/L        | 0.1079 ppb         | 07:03:08      |
| 2     | Ni 231.604†        | 269.2         | -68.5               | -1.6570 µg/L       | -1.6570 ppb        | 07:03:08      |
| 2     | P 214.914†         | 300.6         | 31.5                | 53.496 µg/L        | 53.496 ppb         | 07:03:08      |
| 2     | Pb 220.353†        | -94.5         | -143.5              | 1.0237 µg/L        | 1.0237 ppb         | 07:03:08      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | -30.3     | -54.1     | -178.48 µg/L | -178.48 ppb | 07:03:08 |
| 2 | Sb 206.836†        | 9.3       | -17.1     | -23.303 µg/L | -23.303 ppb | 07:03:08 |
| 2 | Se 196.026†        | -156.9    | -193.0    | -5.4589 µg/L | -5.4589 ppb | 07:03:08 |
| 2 | SiO2†              | 2532.1    | -165.1    | -31.209 µg/L | -31.209 ppb | 07:03:08 |
| 2 | Si 251.611†        | 453.0     | 58.5      | 4.1602 µg/L  | 4.1602 ppb  | 07:03:08 |
| 2 | Sn 189.927†        | -102.7    | -107.1    | 3.7179 µg/L  | 3.7179 ppb  | 07:03:08 |
| 2 | Ti 334.940†        | 10247.4   | 11564.9   | -1.6374 µg/L | -1.6374 ppb | 07:02:47 |
| 2 | Tl 190.801†        | 4.2       | 41.5      | -22.584 µg/L | -22.584 ppb | 07:03:08 |
| 2 | U 409.014†         | -45.6     | 9.6       | -53.851 µg/L | -53.851 ppb | 07:02:47 |
| 2 | V 292.402†         | 2013.7    | 2014.7    | -8.5428 µg/L | -8.5428 ppb | 07:03:08 |
| 2 | Zn 213.857†        | 2046.3    | 1535.8    | 1.0361 µg/L  | 1.0361 ppb  | 07:03:08 |
| 3 | Sc RADIAL          | 84210.5   | 84210.5   | 98.1 %       |             | 07:02:06 |
| 3 | Al 396.153Radial†  | 960696.2  | 979164.7  | 509860 µg/L  | 509860 ppb  | 07:02:00 |
| 3 | Ca 317.933Radial†  | 1265498.4 | 1289162.6 | 477410 µg/L  | 477410 ppb  | 07:02:00 |
| 3 | Fe 238.204 Radial† | 15897.4   | 16183.8   | 184220 µg/L  | 184220 ppb  | 07:02:06 |
| 3 | K 766.490 Radial†  | 261.3     | -107.5    | -54.399 µg/L | -54.399 ppb | 07:02:06 |
| 3 | Mg 279.077 IEC†    | 37369.1   | 38071.6   | 482480 µg/L  | 482480 ppb  | 07:02:06 |
| 3 | Na 589.592 Radial† | 187.2     | -21.6     | -10.320 µg/L | -10.320 ppb | 07:02:06 |
| 3 | Sr 421.552†        | 659.8     | 553.8     | 3.3706 µg/L  | 3.3706 ppb  | 07:02:06 |
| 3 | Sc 361.383         | 1711909.9 | 1711909.9 | 94.002 %     |             | 07:03:16 |
| 3 | Y 371.029          | 1171863.5 | 1171863.5 | 93.068 %     |             | 07:03:16 |
| 3 | Ag 328.068†        | -2244.2   | -1849.9   | -1.5671 µg/L | -1.5671 ppb | 07:03:37 |
| 3 | As 188.979†        | 24.1      | 28.2      | -37.562 µg/L | -37.562 ppb | 07:03:37 |
| 3 | B 249.677†         | 1318.5    | 1093.6    | -42.623 µg/L | -42.623 ppb | 07:03:16 |
| 3 | Ba 233.527†        | 265.9     | 302.2     | 7.1183 µg/L  | 7.1183 ppb  | 07:03:37 |
| 3 | Be 313.107†        | -2027.6   | -621.4    | -0.4020 µg/L | -0.4020 ppb | 07:03:16 |
| 3 | Cd 226.502†        | 733.0     | 945.9     | 3.2320 µg/L  | 3.2320 ppb  | 07:03:37 |
| 3 | Co 228.616†        | 88.4      | 69.2      | 3.1006 µg/L  | 3.1006 ppb  | 07:03:37 |
| 3 | Cr 267.716†        | -2.9      | -63.1     | -1.4438 µg/L | -1.4438 ppb | 07:03:37 |
| 3 | Cu 324.752†        | -1098.0   | -5436.7   | -3.5376 µg/L | -3.5376 ppb | 07:03:37 |
| 3 | Mn 257.610†        | 5469.9    | 6567.6    | -0.0642 µg/L | -0.0642 ppb | 07:03:16 |
| 3 | Mo 202.031†        | -69.3     | -83.6     | -1.7700 µg/L | -1.7700 ppb | 07:03:37 |
| 3 | Ni 231.604†        | 268.1     | -68.5     | -1.6661 µg/L | -1.6661 ppb | 07:03:37 |
| 3 | P 214.914†         | 309.2     | 41.9      | 72.081 µg/L  | 72.081 ppb  | 07:03:37 |
| 3 | Pb 220.353†        | -105.3    | -155.3    | -2.2518 µg/L | -2.2518 ppb | 07:03:37 |
| 3 | S 181.975 Axial†   | -23.0     | -46.4     | -153.25 µg/L | -153.25 ppb | 07:03:37 |
| 3 | Sb 206.836†        | 23.6      | -1.9      | -9.1039 µg/L | -9.1039 ppb | 07:03:37 |
| 3 | Se 196.026†        | -140.3    | -176.0    | 10.445 µg/L  | 10.445 ppb  | 07:03:37 |
| 3 | SiO2†              | 2521.2    | -166.0    | -31.364 µg/L | -31.364 ppb | 07:03:37 |
| 3 | Si 251.611†        | 462.0     | 70.0      | 4.9826 µg/L  | 4.9826 ppb  | 07:03:37 |
| 3 | Sn 189.927†        | -109.0    | -114.1    | 0.8346 µg/L  | 0.8346 ppb  | 07:03:37 |
| 3 | Ti 334.940†        | 10137.0   | 11491.2   | -1.6578 µg/L | -1.6578 ppb | 07:03:16 |
| 3 | Tl 190.801†        | -3.7      | 33.0      | -31.703 µg/L | -31.703 ppb | 07:03:37 |
| 3 | U 409.014†         | 26.4      | 85.9      | -46.531 µg/L | -46.531 ppb | 07:03:16 |
| 3 | V 292.402†         | 1984.8    | 1992.4    | -8.7033 µg/L | -8.7033 ppb | 07:03:37 |
| 3 | Zn 213.857†        | 2043.2    | 1541.1    | 1.3057 µg/L  | 1.3057 ppb  | 07:03:37 |

## Mean Data: ICSCA

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1712446.5                | 94.032 %           | 0.3349   |                    |          | 0.36%  |
| Sc RADIAL   | 84307.3                  | 98.3 %             | 0.11     |                    |          | 0.11%  |
| Y 371.029   | 1171273.7                | 93.021 %           | 0.3562   |                    |          | 0.38%  |
| Ag 328.068†   | -1851.1                  | -1.5271 µg/L       | 0.19829  | -1.5271 ppb        | 0.19829  | 12.98% |
| QC value within limits for Ag 328.068 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 981181.5                 | 510910 µg/L        | 2685.8   | 510910 ppb         | 2685.8   | 0.53%  |
| QC value within limits for Al 396.153Radial Recovery = 102.18%  |                          |                    |          |                    |          |        |
| As 188.979†   | 29.3                     | -36.027 µg/L       | 1.3329   | -36.027 ppb        | 1.3329   | 3.70%  |
| QC value within limits for As 188.979 Recovery = Not calculated |                          |                    |          |                    |          |        |
| B 249.677†  | 1139.5                   | -40.709 µg/L       | 1.8241   | -40.709 ppb        | 1.8241   | 4.48%  |
| QC value within limits for B 249.677 Recovery = Not calculated  |                          |                    |          |                    |          |        |
| Ba 233.527†   | 315.5                    | 7.4303 µg/L        | 0.38263  | 7.4303 ppb         | 0.38263  | 5.15%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Be 313.107†   | -593.7                   | -0.3847 µg/L       | 0.04135  | -0.3847 ppb        | 0.04135  | 10.75% |
| QC value within limits for Be 313.107 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 1292805.8                | 478760 µg/L        | 3243.3   | 478760 ppb         | 3243.3   | 0.68%  |
| QC value within limits for Ca 317.933Radial Recovery = 95.75%   |                          |                    |          |                    |          |        |
| Cd 226.502†   | 960.3                    | 3.5274 µg/L        | 0.45709  | 3.5274 ppb         | 0.45709  | 12.96% |
| QC value within limits for Cd 226.502 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Co 228.616†   | 67.9                     | 3.0391 µg/L        | 0.39640  | 3.0391 ppb         | 0.39640  | 13.04% |

|  |         |              |          |             |          |         |
|--|---------|--------------|----------|-------------|----------|---------|
| Cr 267.716†  | -65.7   | -1.5035 µg/L | 0.08075  | -1.5035 ppb | 0.08075  | 5.37%   |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |         |              |          |             |          |         |
| Cu 324.752†  | -5427.6 | -3.3539 µg/L | 0.15910  | -3.3539 ppb | 0.15910  | 4.74%   |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |         |              |          |             |          |         |
| Fe 238.204 Radial†   | 16239.7 | 184850 µg/L  | 610.1    | 184850 ppb  | 610.1    | 0.33%   |
| QC value within limits for Fe 238.204 Radial Recovery = 92.43%         |         |              |          |             |          |         |
| K 766.490 Radial†  | -162.0  | -82.016 µg/L | 25.9184  | -82.016 ppb | 25.9184  | 31.60%  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |         |              |          |             |          |         |
| Mg 279.077 IEC†  | 38254.8 | 484810 µg/L  | 2564.6   | 484810 ppb  | 2564.6   | 0.53%   |
| QC value within limits for Mg 279.077 IEC Recovery = 96.96%            |         |              |          |             |          |         |
| Mn 257.610†  | 6691.3  | 0.2230 µg/L  | 0.32210  | 0.2230 ppb  | 0.32210  | 144.42% |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |         |              |          |             |          |         |
| Mo 202.031†  | -72.3   | -0.5622 µg/L | 1.04807  | -0.5622 ppb | 1.04807  | 186.42% |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |         |              |          |             |          |         |
| Na 589.592 Radial†   | -56.3   | -26.833 µg/L | 15.2534  | -26.833 ppb | 15.2534  | 56.85%  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |         |              |          |             |          |         |
| Ni 231.604†  | -61.1   | -1.2156 µg/L | 0.77245  | -1.2156 ppb | 0.77245  | 63.54%  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |         |              |          |             |          |         |
| P 214.914†   | 33.9    | 58.145 µg/L  | 12.2894  | 58.145 ppb  | 12.2894  | 21.14%  |
| QC value within limits for P 214.914 Recovery = Not calculated         |         |              |          |             |          |         |
| Pb 220.353†  | -144.3  | 0.9459 µg/L  | 3.15962  | 0.9459 ppb  | 3.15962  | 334.02% |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |         |              |          |             |          |         |
| S 181.975 Axial†   | -46.1   | -152.11 µg/L | 26.953   | -152.11 ppb | 26.953   | 17.72%  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |         |              |          |             |          |         |
| Sb 206.836†  | -9.4    | -16.091 µg/L | 7.1022   | -16.091 ppb | 7.1022   | 44.14%  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |         |              |          |             |          |         |
| Se 196.026†  | -180.3  | 6.3751 µg/L  | 10.41384 | 6.3751 ppb  | 10.41384 | 163.35% |
| QC value within limits for Se 196.026 Recovery = Not calculated        |         |              |          |             |          |         |
| SiO2†  | -161.0  | -30.431 µg/L | 1.4845   | -30.431 ppb | 1.4845   | 4.88%   |
| QC value within limits for SiO2 Recovery = Not calculated              |         |              |          |             |          |         |
| Si 251.611†  | 63.4    | 4.5118 µg/L  | 0.42397  | 4.5118 ppb  | 0.42397  | 9.40%   |
| QC value within limits for Si 251.611 Recovery = Not calculated        |         |              |          |             |          |         |
| Sn 189.927†  | -108.0  | 3.5617 µg/L  | 2.65247  | 3.5617 ppb  | 2.65247  | 74.47%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |         |              |          |             |          |         |
| Sr 421.552†  | 586.7   | 3.5704 µg/L  | 0.19231  | 3.5704 ppb  | 0.19231  | 5.39%   |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |         |              |          |             |          |         |
| Ti 334.940†  | 11672.0 | -1.3647 µg/L | 0.49019  | -1.3647 ppb | 0.49019  | 35.92%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |         |              |          |             |          |         |
| Tl 190.801†  | 38.5    | -26.129 µg/L | 4.8865   | -26.129 ppb | 4.8865   | 18.70%  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |         |              |          |             |          |         |
| U 409.014†   | 32.7    | -51.776 µg/L | 4.5753   | -51.776 ppb | 4.5753   | 8.84%   |
| QC value within limits for U 409.014 Recovery = Not calculated         |         |              |          |             |          |         |
| V 292.402†   | 2012.5  | -8.5621 µg/L | 0.13261  | -8.5621 ppb | 0.13261  | 1.55%   |
| QC value within limits for V 292.402 Recovery = Not calculated         |         |              |          |             |          |         |
| Zn 213.857†  | 1551.5  | 1.3940 µg/L  | 0.40939  | 1.3940 ppb  | 0.40939  | 29.37%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |         |              |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 3/11/2010 07:03:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICSAB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 82508.6          | 82508.6                | 96.2 %                |                       | 07:04:26         |
| 1     | Al 396.153Radial†  | 974433.5         | 1013643.3              | 527800 µg/L           | 527800 ppb            | 07:04:20         |
| 1     | Ca 317.933Radial†  | 1278117.1        | 1328884.1              | 492120 µg/L           | 492120 ppb            | 07:04:20         |
| 1     | Fe 238.204 Radial† | 15976.7          | 16600.3                | 188970 µg/L           | 188970 ppb            | 07:04:26         |
| 1     | K 766.490 Radial†  | 10193.2          | 10227.0                | 5176.7 µg/L           | 5176.7 ppb            | 07:04:26         |
| 1     | Mg 279.077 IEC†    | 37676.5          | 39176.7                | 496500 µg/L           | 496500 ppb            | 07:04:26         |
| 1     | Na 589.592 Radial† | 10671.2          | 10885.4                | 5190.6 µg/L           | 5190.6 ppb            | 07:04:26         |
| 1     | Sr 421.552†        | 80506.2          | 83606.0                | 508.80 µg/L           | 508.80 ppb            | 07:04:26         |
| 1     | Sc 361.383         | 1651506.0        | 1651506.0              | 90.685 %              |                       | 07:05:03         |
| 1     | Y 371.029          | 1128886.4        | 1128886.4              | 89.655 %              |                       | 07:05:03         |
| 1     | Ag 328.068†        | 25821.9          | 29011.6                | 267.54 µg/L           | 267.54 ppb            | 07:05:03         |
| 1     | As 188.979†        | 342.2            | 379.9                  | 499.75 µg/L           | 499.75 ppb            | 07:05:24         |
| 1     | B 249.677†         | 11252.0          | 12098.7                | 494.11 µg/L           | 494.11 ppb            | 07:05:03         |
| 1     | Ba 233.527†        | 19927.3          | 21993.3                | 515.77 µg/L           | 515.77 ppb            | 07:05:24         |
| 1     | Be 313.107†        | 357928.8         | 396228.6               | 249.08 µg/L           | 249.08 ppb            | 07:05:03         |
| 1     | Cd 226.502†        | 17605.1          | 19579.5                | 476.97 µg/L           | 476.97 ppb            | 07:05:24         |
| 1     | Co 228.616†        | 9217.0           | 10138.9                | 463.29 µg/L           | 463.29 ppb            | 07:05:24         |
| 1     | Cr 267.716†        | 19539.8          | 21486.7                | 497.36 µg/L           | 497.36 ppb            | 07:05:24         |
| 1     | Cu 324.752†        | 73206.7          | 76457.3                | 572.32 µg/L           | 572.32 ppb            | 07:05:03         |
| 1     | Mn 257.610†        | 143015.5         | 158453.8               | 497.95 µg/L           | 497.95 ppb            | 07:05:03         |
| 1     | Mo 202.031†        | 4529.2           | 4984.6                 | 530.38 µg/L           | 530.38 ppb            | 07:05:24         |
| 1     | Ni 231.604†        | 7315.1           | 7712.6                 | 458.47 µg/L           | 458.47 ppb            | 07:05:24         |
| 1     | P 214.914†         | 1729.9           | 1620.6                 | 2713.1 µg/L           | 2713.1 ppb            | 07:05:24         |
| 1     | Pb 220.353†        | 1526.8           | 1640.2                 | 502.80 µg/L           | 502.80 ppb            | 07:05:24         |
| 1     | S 181.975 Axial†   | 739.8            | 793.7                  | 2619.9 µg/L           | 2619.9 ppb            | 07:05:24         |
| 1     | Sb 206.836†        | 548.4            | 577.7                  | 538.24 µg/L           | 538.24 ppb            | 07:05:24         |
| 1     | Se 196.026†        | 2223.3           | 2424.9                 | 2589.0 µg/L           | 2589.0 ppb            | 07:05:24         |
| 1     | SiO2†              | 57000.5          | 60007.3                | 11341 µg/L            | 11341 ppb             | 07:05:03         |
| 1     | Si 251.611†        | 68028.1          | 74594.1                | 5308.3 µg/L           | 5308.3 ppb            | 07:05:03         |
| 1     | Sn 189.927†        | 1067.9           | 1179.4                 | 547.28 µg/L           | 547.28 ppb            | 07:05:24         |
| 1     | Ti 334.940†        | 200400.1         | 221691.4               | 526.68 µg/L           | 526.68 ppb            | 07:05:03         |
| 1     | Tl 190.801†        | 422.7            | 503.2                  | 464.21 µg/L           | 464.21 ppb            | 07:05:24         |
| 1     | U 409.014†         | 4802.7           | 5353.8                 | 454.67 µg/L           | 454.67 ppb            | 07:05:03         |
| 1     | V 292.402†         | 39707.0          | 43666.4                | 524.33 µg/L           | 524.33 ppb            | 07:05:03         |
| 1     | Zn 213.857†        | 20475.6          | 21946.3                | 491.79 µg/L           | 491.79 ppb            | 07:05:24         |
| 2     | Sc RADIAL          | 82804.0          | 82804.0                | 96.5 %                |                       | 07:04:38         |
| 2     | Al 396.153Radial†  | 969733.5         | 1005156.9              | 523380 µg/L           | 523380 ppb            | 07:04:32         |
| 2     | Ca 317.933Radial†  | 1270601.9        | 1316353.6              | 487480 µg/L           | 487480 ppb            | 07:04:32         |
| 2     | Fe 238.204 Radial† | 16045.4          | 16612.3                | 189100 µg/L           | 189100 ppb            | 07:04:38         |
| 2     | K 766.490 Radial†  | 10259.8          | 10258.1                | 5192.5 µg/L           | 5192.5 ppb            | 07:04:38         |
| 2     | Mg 279.077 IEC†    | 37846.5          | 39213.0                | 496960 µg/L           | 496960 ppb            | 07:04:38         |
| 2     | Na 589.592 Radial† | 10759.3          | 10937.1                | 5215.3 µg/L           | 5215.3 ppb            | 07:04:38         |
| 2     | Sr 421.552†        | 80860.0          | 83673.8                | 509.22 µg/L           | 509.22 ppb            | 07:04:38         |
| 2     | Sc 361.383         | 1658420.6        | 1658420.6              | 91.065 %              |                       | 07:05:33         |
| 2     | Y 371.029          | 1135468.0        | 1135468.0              | 90.178 %              |                       | 07:05:33         |
| 2     | Ag 328.068†        | 25972.8          | 29058.6                | 267.97 µg/L           | 267.97 ppb            | 07:05:33         |
| 2     | As 188.979†        | 344.1            | 380.4                  | 501.13 µg/L           | 501.13 ppb            | 07:05:54         |
| 2     | B 249.677†         | 11390.4          | 12199.0                | 498.94 µg/L           | 498.94 ppb            | 07:05:33         |
| 2     | Ba 233.527†        | 19859.5          | 21827.4                | 511.89 µg/L           | 511.89 ppb            | 07:05:54         |
| 2     | Be 313.107†        | 360314.3         | 397202.6               | 249.70 µg/L           | 249.70 ppb            | 07:05:33         |
| 2     | Cd 226.502†        | 17494.7          | 19377.4                | 471.81 µg/L           | 471.81 ppb            | 07:05:54         |
| 2     | Co 228.616†        | 9169.0           | 10043.8                | 458.93 µg/L           | 458.93 ppb            | 07:05:54         |
| 2     | Cr 267.716†        | 19483.0          | 21334.6                | 493.84 µg/L           | 493.84 ppb            | 07:05:54         |
| 2     | Cu 324.752†        | 73599.6          | 76552.2                | 573.01 µg/L           | 573.01 ppb            | 07:05:33         |
| 2     | Mn 257.610†        | 143980.3         | 158855.7               | 499.25 µg/L           | 499.25 ppb            | 07:05:33         |
| 2     | Mo 202.031†        | 4504.9           | 4937.1                 | 525.39 µg/L           | 525.39 ppb            | 07:05:54         |
| 2     | Ni 231.604†        | 7267.5           | 7626.8                 | 453.40 µg/L           | 453.40 ppb            | 07:05:54         |
| 2     | P 214.914†         | 1746.6           | 1631.0                 | 2729.3 µg/L           | 2729.3 ppb            | 07:05:54         |
| 2     | Pb 220.353†        | 1520.1           | 1625.9                 | 498.43 µg/L           | 498.43 ppb            | 07:05:54         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 735.0     | 785.2     | 2591.5 µg/L | 2591.5 ppb | 07:05:54 |
| 2 | Sb 206.836†        | 550.0     | 577.0     | 537.59 µg/L | 537.59 ppb | 07:05:54 |
| 2 | Se 196.026†        | 2217.8    | 2408.7    | 2573.5 µg/L | 2573.5 ppb | 07:05:54 |
| 2 | SiO2†              | 57310.8   | 60086.0   | 11356 µg/L  | 11356 ppb  | 07:05:33 |
| 2 | Si 251.611†        | 68578.9   | 74886.1   | 5329.0 µg/L | 5329.0 ppb | 07:05:33 |
| 2 | Sn 189.927†        | 1061.2    | 1167.1    | 541.67 µg/L | 541.67 ppb | 07:05:54 |
| 2 | Ti 334.940†        | 201315.2  | 221774.9  | 526.78 µg/L | 526.78 ppb | 07:05:33 |
| 2 | Tl 190.801†        | 424.3     | 502.9     | 464.92 µg/L | 464.92 ppb | 07:05:54 |
| 2 | U 409.014†         | 4827.9    | 5359.5    | 455.48 µg/L | 455.48 ppb | 07:05:33 |
| 2 | V 292.402†         | 40072.5   | 43885.3   | 527.04 µg/L | 527.04 ppb | 07:05:33 |
| 2 | Zn 213.857†        | 20401.0   | 21770.2   | 487.51 µg/L | 487.51 ppb | 07:05:54 |
| 3 | Sc RADIAL          | 82311.7   | 82311.7   | 95.9 %      |            | 07:04:49 |
| 3 | Al 396.153Radial†  | 970661.2  | 1012134.3 | 527020 µg/L | 527020 ppb | 07:04:44 |
| 3 | Ca 317.933Radial†  | 1272726.4 | 1326443.4 | 491220 µg/L | 491220 ppb | 07:04:44 |
| 3 | Fe 238.204 Radial† | 15981.2   | 16644.8   | 189470 µg/L | 189470 ppb | 07:04:49 |
| 3 | K 766.490 Radial†  | 10205.0   | 10264.6   | 5195.8 µg/L | 5195.8 ppb | 07:04:49 |
| 3 | Mg 279.077 IEC†    | 37659.8   | 39252.9   | 497460 µg/L | 497460 ppb | 07:04:49 |
| 3 | Na 589.592 Radial† | 10680.6   | 10921.8   | 5208.0 µg/L | 5208.0 ppb | 07:04:49 |
| 3 | Sr 421.552†        | 80565.4   | 83867.9   | 510.40 µg/L | 510.40 ppb | 07:04:49 |
| 3 | Sc 361.383         | 1663859.4 | 1663859.4 | 91.364 %    |            | 07:06:03 |
| 3 | Y 371.029          | 1140591.9 | 1140591.9 | 90.585 %    |            | 07:06:03 |
| 3 | Ag 328.068†        | 25988.4   | 28982.5   | 267.33 µg/L | 267.33 ppb | 07:06:03 |
| 3 | As 188.979†        | 335.8     | 370.1     | 484.67 µg/L | 484.67 ppb | 07:06:24 |
| 3 | B 249.677†         | 11246.8   | 12000.9   | 489.05 µg/L | 489.05 ppb | 07:06:03 |
| 3 | Ba 233.527†        | 19844.9   | 21740.0   | 509.84 µg/L | 509.84 ppb | 07:06:24 |
| 3 | Be 313.107†        | 359955.8  | 395516.9  | 248.64 µg/L | 248.64 ppb | 07:06:03 |
| 3 | Cd 226.502†        | 17500.8   | 19321.3   | 470.34 µg/L | 470.34 ppb | 07:06:24 |
| 3 | Co 228.616†        | 9169.3    | 10011.2   | 457.45 µg/L | 457.45 ppb | 07:06:24 |
| 3 | Cr 267.716†        | 19391.2   | 21164.2   | 489.90 µg/L | 489.90 ppb | 07:06:24 |
| 3 | Cu 324.752†        | 73552.2   | 76236.2   | 570.86 µg/L | 570.86 ppb | 07:06:03 |
| 3 | Mn 257.610†        | 144267.7  | 158653.5  | 498.57 µg/L | 498.57 ppb | 07:06:03 |
| 3 | Mo 202.031†        | 4516.1    | 4933.1    | 524.99 µg/L | 524.99 ppb | 07:06:24 |
| 3 | Ni 231.604†        | 7274.9    | 7608.9    | 452.34 µg/L | 452.34 ppb | 07:06:24 |
| 3 | P 214.914†         | 1741.1    | 1618.6    | 2709.1 µg/L | 2709.1 ppb | 07:06:24 |
| 3 | Pb 220.353†        | 1525.5    | 1626.3    | 498.85 µg/L | 498.85 ppb | 07:06:24 |
| 3 | S 181.975 Axial†   | 738.5     | 786.3     | 2595.2 µg/L | 2595.2 ppb | 07:06:24 |
| 3 | Sb 206.836†        | 548.9     | 573.8     | 534.55 µg/L | 534.55 ppb | 07:06:24 |
| 3 | Se 196.026†        | 2192.6    | 2373.1    | 2538.8 µg/L | 2538.8 ppb | 07:06:24 |
| 3 | SiO2†              | 57165.6   | 59721.3   | 11287 µg/L  | 11287 ppb  | 07:06:03 |
| 3 | Si 251.611†        | 68450.5   | 74499.4   | 5301.5 µg/L | 5301.5 ppb | 07:06:03 |
| 3 | Sn 189.927†        | 1048.5    | 1149.4    | 534.56 µg/L | 534.56 ppb | 07:06:24 |
| 3 | Ti 334.940†        | 200956.1  | 220659.2  | 523.99 µg/L | 523.99 ppb | 07:06:03 |
| 3 | Tl 190.801†        | 427.1     | 504.5     | 465.81 µg/L | 465.81 ppb | 07:06:24 |
| 3 | U 409.014†         | 4791.6    | 5302.4    | 449.75 µg/L | 449.75 ppb | 07:06:03 |
| 3 | V 292.402†         | 39992.2   | 43653.6   | 524.02 µg/L | 524.02 ppb | 07:06:03 |
| 3 | Zn 213.857†        | 20363.8   | 21656.3   | 484.71 µg/L | 484.71 ppb | 07:06:24 |

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Mean Data: ICSAB

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383   | 1657928.7                | 91.038 %           | 0.3400   |                    |          | 0.37% |
| Sc RADIAL  | 82541.4                  | 96.2 %             | 0.29     |                    |          | 0.30% |
| Y 371.029  | 1134982.1                | 90.139 %           | 0.4660   |                    |          | 0.52% |
| Ag 328.068†  | 29017.6                  | 267.61 µg/L        | 0.329    | 267.61 ppb         | 0.329    | 0.12% |
| QC value within limits for Ag 328.068 Recovery = 107.05%       |                          |                    |          |                    |          |       |
| Al 396.153Radial†  | 1010311.5                | 526070 µg/L        | 2357.4   | 526070 ppb         | 2357.4   | 0.45% |
| QC value within limits for Al 396.153Radial Recovery = 105.21% |                          |                    |          |                    |          |       |
| As 188.979†  | 376.8                    | 495.18 µg/L        | 9.133    | 495.18 ppb         | 9.133    | 1.84% |
| QC value within limits for As 188.979 Recovery = 99.04%        |                          |                    |          |                    |          |       |
| B 249.677†   | 12099.5                  | 494.03 µg/L        | 4.945    | 494.03 ppb         | 4.945    | 1.00% |
| QC value within limits for B 249.677 Recovery = 98.81%         |                          |                    |          |                    |          |       |
| Ba 233.527†  | 21853.6                  | 512.50 µg/L        | 3.012    | 512.50 ppb         | 3.012    | 0.59% |
| QC value within limits for Ba 233.527 Recovery = 102.50%       |                          |                    |          |                    |          |       |
| Be 313.107†  | 396316.0                 | 249.14 µg/L        | 0.532    | 249.14 ppb         | 0.532    | 0.21% |
| QC value within limits for Be 313.107 Recovery = 99.66%        |                          |                    |          |                    |          |       |
| Ca 317.933Radial†  | 1323893.7                | 490270 µg/L        | 2460.1   | 490270 ppb         | 2460.1   | 0.50% |
| QC value within limits for Ca 317.933Radial Recovery = 98.05%  |                          |                    |          |                    |          |       |
| Cd 226.502†  | 19426.1                  | 473.04 µg/L        | 3.482    | 473.04 ppb         | 3.482    | 0.74% |
| QC value within limits for Cd 226.502 Recovery = 94.61%        |                          |                    |          |                    |          |       |
| Co 228.616†  | 10064.6                  | 459.89 µg/L        | 3.038    | 459.89 ppb         | 3.038    | 0.66% |

|   |                 |          |             |       |            |       |       |
|---|-----------------|----------|-------------|-------|------------|-------|-------|
| Cr  | 267.716†        | 21328.5  | 493.70 µg/L | 3.732 | 493.70 ppb | 3.732 | 0.76% |
| QC value within limits for Cr 267.716 Recovery = 98.74%         |                 |          |             |       |            |       |       |
| Cu  | 324.752†        | 76415.3  | 572.06 µg/L | 1.097 | 572.06 ppb | 1.097 | 0.19% |
| QC value within limits for Cu 324.752 Recovery = 114.41%        |                 |          |             |       |            |       |       |
| Fe  | 238.204 Radial† | 16619.2  | 189180 µg/L | 261.8 | 189180 ppb | 261.8 | 0.14% |
| QC value within limits for Fe 238.204 Radial Recovery = 94.59%  |                 |          |             |       |            |       |       |
| K   | 766.490 Radial† | 10249.9  | 5188.3 µg/L | 10.19 | 5188.3 ppb | 10.19 | 0.20% |
| QC value within limits for K 766.490 Radial Recovery = 103.77%  |                 |          |             |       |            |       |       |
| Mg  | 279.077 IEC†    | 39214.2  | 496970 µg/L | 483.0 | 496970 ppb | 483.0 | 0.10% |
| QC value within limits for Mg 279.077 IEC Recovery = 99.39%     |                 |          |             |       |            |       |       |
| Mn  | 257.610†        | 158654.4 | 498.59 µg/L | 0.649 | 498.59 ppb | 0.649 | 0.13% |
| QC value within limits for Mn 257.610 Recovery = 99.72%         |                 |          |             |       |            |       |       |
| Mo  | 202.031†        | 4951.6   | 526.92 µg/L | 3.001 | 526.92 ppb | 3.001 | 0.57% |
| QC value within limits for Mo 202.031 Recovery = 105.38%        |                 |          |             |       |            |       |       |
| Na  | 589.592 Radial† | 10914.7  | 5204.6 µg/L | 12.67 | 5204.6 ppb | 12.67 | 0.24% |
| QC value within limits for Na 589.592 Radial Recovery = 104.09% |                 |          |             |       |            |       |       |
| Ni  | 231.604†        | 7649.4   | 454.74 µg/L | 3.278 | 454.74 ppb | 3.278 | 0.72% |
| QC value within limits for Ni 231.604 Recovery = 90.95%         |                 |          |             |       |            |       |       |
| P   | 214.914†        | 1623.4   | 2717.2 µg/L | 10.69 | 2717.2 ppb | 10.69 | 0.39% |
| QC value within limits for P 214.914 Recovery = 108.69%         |                 |          |             |       |            |       |       |
| Pb  | 220.353†        | 1630.8   | 500.03 µg/L | 2.412 | 500.03 ppb | 2.412 | 0.48% |
| QC value within limits for Pb 220.353 Recovery = 100.01%        |                 |          |             |       |            |       |       |
| S   | 181.975 Axial†  | 788.4    | 2602.2 µg/L | 15.40 | 2602.2 ppb | 15.40 | 0.59% |
| QC value within limits for S 181.975 Axial Recovery = 104.09%   |                 |          |             |       |            |       |       |
| Sb  | 206.836†        | 576.1    | 536.79 µg/L | 1.971 | 536.79 ppb | 1.971 | 0.37% |
| QC value within limits for Sb 206.836 Recovery = 107.36%        |                 |          |             |       |            |       |       |
| Se  | 196.026†        | 2402.2   | 2567.1 µg/L | 25.72 | 2567.1 ppb | 25.72 | 1.00% |
| QC value within limits for Se 196.026 Recovery = 102.68%        |                 |          |             |       |            |       |       |
| SiO2†   |                 | 59938.2  | 11328 µg/L  | 36.3  | 11328 ppb  | 36.3  | 0.32% |
| QC value within limits for SiO2 Recovery = 105.92%              |                 |          |             |       |            |       |       |
| Si  | 251.611†        | 74659.9  | 5312.9 µg/L | 14.35 | 5312.9 ppb | 14.35 | 0.27% |
| QC value within limits for Si 251.611 Recovery = 106.26%        |                 |          |             |       |            |       |       |
| Sn  | 189.927†        | 1165.3   | 541.17 µg/L | 6.373 | 541.17 ppb | 6.373 | 1.18% |
| QC value within limits for Sn 189.927 Recovery = 108.23%        |                 |          |             |       |            |       |       |
| Sr  | 421.552†        | 83715.9  | 509.47 µg/L | 0.827 | 509.47 ppb | 0.827 | 0.16% |
| QC value within limits for Sr 421.552 Recovery = 101.89%        |                 |          |             |       |            |       |       |
| Ti  | 334.940†        | 221375.2 | 525.82 µg/L | 1.582 | 525.82 ppb | 1.582 | 0.30% |
| QC value within limits for Ti 334.940 Recovery = 105.16%        |                 |          |             |       |            |       |       |
| Tl  | 190.801†        | 503.5    | 464.98 µg/L | 0.800 | 464.98 ppb | 0.800 | 0.17% |
| QC value within limits for Tl 190.801 Recovery = 93.00%         |                 |          |             |       |            |       |       |
| U   | 409.014†        | 5338.6   | 453.30 µg/L | 3.101 | 453.30 ppb | 3.101 | 0.68% |
| QC value within limits for U 409.014 Recovery = 90.66%          |                 |          |             |       |            |       |       |
| V   | 292.402†        | 43735.1  | 525.13 µg/L | 1.660 | 525.13 ppb | 1.660 | 0.32% |
| QC value within limits for V 292.402 Recovery = 105.03%         |                 |          |             |       |            |       |       |
| Zn  | 213.857†        | 21791.0  | 488.00 µg/L | 3.564 | 488.00 ppb | 3.564 | 0.73% |
| QC value within limits for Zn 213.857 Recovery = 97.60%         |                 |          |             |       |            |       |       |

All analyte(s) passed QC.

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 105  
 Date Collected: 3/11/2010 07:06:33  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: LR1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 83078.1       | 83078.1             | 96.8 %             |                    | 07:07:13      |
| 1     | Al 396.153Radial†  | 972617.0      | 1004820.3           | 523220 µg/L        | 523220 ppb         | 07:07:08      |
| 1     | Ca 317.933Radial†  | 1282533.2     | 1324333.5           | 490430 µg/L        | 490430 ppb         | 07:07:08      |
| 1     | Fe 238.204 Radial† | 39116.1       | 40385.9             | 459700 µg/L        | 459700 ppb         | 07:07:13      |
| 1     | K 766.490 Radial†  | 180.2         | -187.6              | -94.966 µg/L       | -94.966 ppb        | 07:07:13      |
| 1     | Mg 279.077 IEC†    | 38004.0       | 39246.3             | 497080 µg/L        | 497080 ppb         | 07:07:13      |
| 1     | Na 589.592 Radial† | 1036159.8     | 1069980.6           | 510210 µg/L        | 510210 ppb         | 07:07:08      |
| 1     | Sr 421.552†        | 2087.6        | 2037.7              | 12.401 µg/L        | 12.401 ppb         | 07:07:13      |
| 1     | Sc 361.383         | 1687073.3     | 1687073.3           | 92.638 %           |                    | 07:07:50      |
| 1     | Y 371.029          | 1148674.8     | 1148674.8           | 91.227 %           |                    | 07:07:50      |
| 1     | Ag 328.068†        | -4417.2       | -4230.7             | -0.6784 µg/L       | -0.6784 ppb        | 07:07:50      |
| 1     | As 188.979†        | 10.7          | 14.1                | -94.770 µg/L       | -94.770 ppb        | 07:08:11      |
| 1     | B 249.677†         | 2722.5        | 2629.8              | -111.20 µg/L       | -111.20 ppb        | 07:07:50      |
| 1     | Ba 233.527†        | 675.8         | 748.8               | 17.617 µg/L        | 17.617 ppb         | 07:08:11      |
| 1     | Be 313.107†        | -9111.2       | -8299.6             | -5.2360 µg/L       | -5.2360 ppb        | 07:07:50      |
| 1     | Cd 226.502†        | 1976.4        | 2299.6              | 6.5222 µg/L        | 6.5222 ppb         | 07:08:11      |
| 1     | Co 228.616†        | 225.5         | 218.7               | 9.9102 µg/L        | 9.9102 ppb         | 07:08:11      |
| 1     | Cr 267.716†        | 371.2         | 340.6               | 7.9114 µg/L        | 7.9114 ppb         | 07:08:11      |
| 1     | Cu 324.752†        | -7007.2       | -11832.8            | 3.3484 µg/L        | 3.3484 ppb         | 07:08:11      |
| 1     | Mn 257.610†        | 6406.6        | 7664.4              | 18.842 µg/L        | 18.842 ppb         | 07:07:50      |
| 1     | Mo 202.031†        | -180.0        | -204.2              | -3.9599 µg/L       | -3.9599 ppb        | 07:08:11      |
| 1     | Ni 231.604†        | 246.2         | -88.0               | 0.7574 µg/L        | 0.7574 ppb         | 07:08:11      |
| 1     | P 214.914†         | 450.7         | 199.5               | 125.91 µg/L        | 125.91 ppb         | 07:08:11      |
| 1     | Pb 220.353†        | -33.2         | -79.2               | 9.3273 µg/L        | 9.3273 ppb         | 07:08:11      |
| 1     | S 181.975 Axial†   | -32.9         | -57.5               | -189.68 µg/L       | -189.68 ppb        | 07:08:11      |
| 1     | Sb 206.836†        | 17.6          | -8.0                | -15.292 µg/L       | -15.292 ppb        | 07:08:11      |
| 1     | Se 196.026†        | -341.4        | -395.3              | 657.15 µg/L        | 657.15 ppb         | 07:08:11      |
| 1     | SiO2†              | 2631.5        | -7.4                | -1.4008 µg/L       | -1.4008 ppb        | 07:08:11      |
| 1     | Si 251.611†        | -146.0        | -579.0              | -41.206 µg/L       | -41.206 ppb        | 07:08:11      |
| 1     | Sn 189.927†        | -87.8         | -93.0               | 9.7887 µg/L        | 9.7887 ppb         | 07:08:11      |
| 1     | Ti 334.940†        | 12943.7       | 14679.7             | 5.3991 µg/L        | 5.3991 ppb         | 07:07:50      |
| 1     | Tl 190.801†        | 0.0           | 37.0                | 27.055 µg/L        | 27.055 ppb         | 07:08:11      |
| 1     | U 409.014†         | 144156.8      | 155670.3            | 14763 µg/L         | 14763 ppb          | 07:07:50      |
| 1     | V 292.402†         | 3808.0        | 3991.7              | -18.702 µg/L       | -18.702 ppb        | 07:08:11      |
| 1     | Zn 213.857†        | 3481.2        | 3125.5              | 25.845 µg/L        | 25.845 ppb         | 07:08:11      |
| 2     | Sc RADIAL          | 83013.1       | 83013.1             | 96.7 %             |                    | 07:07:25      |
| 2     | Al 396.153Radial†  | 964997.7      | 997731.1            | 519530 µg/L        | 519530 ppb         | 07:07:20      |
| 2     | Ca 317.933Radial†  | 1273959.9     | 1316508.8           | 487540 µg/L        | 487540 ppb         | 07:07:20      |
| 2     | Fe 238.204 Radial† | 38811.9       | 40103.1             | 456480 µg/L        | 456480 ppb         | 07:07:25      |
| 2     | K 766.490 Radial†  | 156.4         | -212.1              | -107.35 µg/L       | -107.35 ppb        | 07:07:25      |
| 2     | Mg 279.077 IEC†    | 37640.9       | 38901.7             | 492720 µg/L        | 492720 ppb         | 07:07:25      |
| 2     | Na 589.592 Radial† | 1032791.1     | 1067336.5           | 508950 µg/L        | 508950 ppb         | 07:07:20      |
| 2     | Sr 421.552†        | 2059.6        | 2010.4              | 12.235 µg/L        | 12.235 ppb         | 07:07:25      |
| 2     | Sc 361.383         | 1688422.2     | 1688422.2           | 92.712 %           |                    | 07:08:20      |
| 2     | Y 371.029          | 1152103.2     | 1152103.2           | 91.499 %           |                    | 07:08:20      |
| 2     | Ag 328.068†        | -4337.2       | -4140.6             | -0.1518 µg/L       | -0.1518 ppb        | 07:08:20      |
| 2     | As 188.979†        | 15.6          | 19.4                | -85.895 µg/L       | -85.895 ppb        | 07:08:40      |
| 2     | B 249.677†         | 2553.7        | 2445.4              | -118.54 µg/L       | -118.54 ppb        | 07:08:20      |
| 2     | Ba 233.527†        | 674.1         | 746.4               | 17.561 µg/L        | 17.561 ppb         | 07:08:40      |
| 2     | Be 313.107†        | -9112.2       | -8292.9             | -5.2318 µg/L       | -5.2318 ppb        | 07:08:20      |
| 2     | Cd 226.502†        | 1981.0        | 2302.9              | 6.9692 µg/L        | 6.9692 ppb         | 07:08:40      |
| 2     | Co 228.616†        | 241.9         | 236.1               | 10.710 µg/L        | 10.710 ppb         | 07:08:40      |
| 2     | Cr 267.716†        | 376.2         | 345.8               | 8.0305 µg/L        | 8.0305 ppb         | 07:08:40      |
| 2     | Cu 324.752†        | -6944.2       | -11758.7            | 3.2630 µg/L        | 3.2630 ppb         | 07:08:40      |
| 2     | Mn 257.610†        | 6507.5        | 7767.7              | 19.285 µg/L        | 19.285 ppb         | 07:08:20      |
| 2     | Mo 202.031†        | -152.6        | -174.4              | -0.9607 µg/L       | -0.9607 ppb        | 07:08:40      |
| 2     | Ni 231.604†        | 246.1         | -88.3               | 0.6918 µg/L        | 0.6918 ppb         | 07:08:40      |
| 2     | P 214.914†         | 454.7         | 203.4               | 134.12 µg/L        | 134.12 ppb         | 07:08:40      |
| 2     | Pb 220.353†        | -11.4         | -55.6               | 15.524 µg/L        | 15.524 ppb         | 07:08:40      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | -38.7     | -63.7     | -210.35 µg/L | -210.35 ppb | 07:08:40 |
| 2 | Sb 206.836†        | 18.6      | -7.0      | -14.232 µg/L | -14.232 ppb | 07:08:40 |
| 2 | Se 196.026†        | -348.1    | -402.2    | 643.56 µg/L  | 643.56 ppb  | 07:08:40 |
| 2 | SiO2†              | 2627.9    | -13.5     | -2.5552 µg/L | -2.5552 ppb | 07:08:40 |
| 2 | Si 251.611†        | -142.1    | -574.8    | -40.903 µg/L | -40.903 ppb | 07:08:40 |
| 2 | Sn 189.927†        | -78.3     | -82.7     | 13.834 µg/L  | 13.834 ppb  | 07:08:40 |
| 2 | Ti 334.940†        | 13002.4   | 14731.9   | 5.8299 µg/L  | 5.8299 ppb  | 07:08:20 |
| 2 | Tl 190.801†        | -19.2     | 16.2      | 5.4876 µg/L  | 5.4876 ppb  | 07:08:40 |
| 2 | U 409.014†         | 145142.3  | 156608.9  | 14853 µg/L   | 14853 ppb   | 07:08:20 |
| 2 | V 292.402†         | 3805.6    | 3985.8    | -18.067 µg/L | -18.067 ppb | 07:08:40 |
| 2 | Zn 213.857†        | 3471.0    | 3111.4    | 25.905 µg/L  | 25.905 ppb  | 07:08:40 |
| 3 | Sc RADIAL          | 84800.2   | 84800.2   | 98.8 %       |             | 07:07:37 |
| 3 | Al 396.153Radial†  | 959633.3  | 971281.7  | 505760 µg/L  | 505760 ppb  | 07:07:32 |
| 3 | Ca 317.933Radial†  | 1265873.5 | 1280574.8 | 474230 µg/L  | 474230 ppb  | 07:07:32 |
| 3 | Fe 238.204 Radial† | 38777.5   | 39222.9   | 446470 µg/L  | 446470 ppb  | 07:07:37 |
| 3 | K 766.490 Radial†  | 98.3      | -274.2    | -138.82 µg/L | -138.82 ppb | 07:07:37 |
| 3 | Mg 279.077 IEC†    | 37553.5   | 37993.3   | 481210 µg/L  | 481210 ppb  | 07:07:37 |
| 3 | Na 589.592 Radial† | 1028445.1 | 1040440.8 | 496130 µg/L  | 496130 ppb  | 07:07:32 |
| 3 | Sr 421.552†        | 2063.1    | 1969.1    | 11.984 µg/L  | 11.984 ppb  | 07:07:37 |
| 3 | Sc 361.383         | 1688235.9 | 1688235.9 | 92.702 %     |             | 07:08:49 |
| 3 | Y 371.029          | 1151799.4 | 1151799.4 | 91.475 %     |             | 07:08:49 |
| 3 | Ag 328.068†        | -4454.5   | -4267.7   | -2.0139 µg/L | -2.0139 ppb | 07:08:49 |
| 3 | As 188.979†        | 13.8      | 17.5      | -86.011 µg/L | -86.011 ppb | 07:09:10 |
| 3 | B 249.677†         | 2751.0    | 2658.5    | -102.89 µg/L | -102.89 ppb | 07:08:49 |
| 3 | Ba 233.527†        | 678.2     | 750.9     | 17.667 µg/L  | 17.667 ppb  | 07:09:10 |
| 3 | Be 313.107†        | -8956.6   | -8126.1   | -5.1268 µg/L | -5.1268 ppb | 07:08:49 |
| 3 | Cd 226.502†        | 1967.6    | 2288.7    | 7.7410 µg/L  | 7.7410 ppb  | 07:09:10 |
| 3 | Co 228.616†        | 240.7     | 234.8     | 10.651 µg/L  | 10.651 ppb  | 07:09:10 |
| 3 | Cr 267.716†        | 359.1     | 327.3     | 7.6026 µg/L  | 7.6026 ppb  | 07:09:10 |
| 3 | Cu 324.752†        | -6922.8   | -11736.4  | 1.5360 µg/L  | 1.5360 ppb  | 07:09:10 |
| 3 | Mn 257.610†        | 6415.7    | 7669.4    | 19.145 µg/L  | 19.145 ppb  | 07:08:49 |
| 3 | Mo 202.031†        | -160.6    | -183.1    | -2.2551 µg/L | -2.2551 ppb | 07:09:10 |
| 3 | Ni 231.604†        | 250.5     | -83.6     | 0.8433 µg/L  | 0.8433 ppb  | 07:09:10 |
| 3 | P 214.914†         | 434.4     | 181.6     | 100.84 µg/L  | 100.84 ppb  | 07:09:10 |
| 3 | Pb 220.353†        | -28.3     | -73.8     | 9.2954 µg/L  | 9.2954 ppb  | 07:09:10 |
| 3 | S 181.975 Axial†   | -31.4     | -55.9     | -184.38 µg/L | -184.38 ppb | 07:09:10 |
| 3 | Sb 206.836†        | 21.0      | -4.4      | -11.618 µg/L | -11.618 ppb | 07:09:10 |
| 3 | Se 196.026†        | -351.3    | -405.7    | 618.00 µg/L  | 618.00 ppb  | 07:09:10 |
| 3 | SiO2†              | 2630.4    | -10.5     | -1.9833 µg/L | -1.9833 ppb | 07:09:10 |
| 3 | Si 251.611†        | -109.6    | -539.7    | -38.407 µg/L | -38.407 ppb | 07:09:10 |
| 3 | Sn 189.927†        | -97.4     | -103.3    | 3.8226 µg/L  | 3.8226 ppb  | 07:09:10 |
| 3 | Ti 334.940†        | 12950.0   | 14676.9   | 6.3909 µg/L  | 6.3909 ppb  | 07:08:49 |
| 3 | Tl 190.801†        | -6.1      | 30.4      | 21.437 µg/L  | 21.437 ppb  | 07:09:10 |
| 3 | U 409.014†         | 144337.4  | 155757.9  | 14774 µg/L   | 14774 ppb   | 07:08:49 |
| 3 | V 292.402†         | 3817.2    | 3998.7    | -16.152 µg/L | -16.152 ppb | 07:09:10 |
| 3 | Zn 213.857†        | 3428.7    | 3066.2    | 25.935 µg/L  | 25.935 ppb  | 07:09:10 |

## Mean Data: LR1

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383   | 1687910.5                | 92.684 %           | 0.0401   |                    |          | 0.04%   |
| Sc RADIAL  | 83630.4                  | 97.5 %             | 1.18     |                    |          | 1.21%   |
| Y 371.029  | 1150859.1                | 91.400 %           | 0.1507   |                    |          | 0.16%   |
| Ag 328.068†  | -4213.0                  | -0.9481 µg/L       | 0.95984  | -0.9481 ppb        | 0.95984  | 101.24% |
| Al 396.153Radial†  | 991277.7                 | 516170 µg/L        | 9204.1   | 516170 ppb         | 9204.1   | 1.78%   |
| QC value within limits for Al 396.153Radial Recovery = 103.23% |                          |                    |          |                    |          |         |
| As 188.979†  | 17.0                     | -88.892 µg/L       | 5.0911   | -88.892 ppb        | 5.0911   | 5.73%   |
| B 249.677†   | 2577.9                   | -110.88 µg/L       | 7.833    | -110.88 ppb        | 7.833    | 7.06%   |
| Ba 233.527†  | 748.7                    | 17.615 µg/L        | 0.0533   | 17.615 ppb         | 0.0533   | 0.30%   |
| Be 313.107†  | -8239.5                  | -5.1982 µg/L       | 0.06186  | -5.1982 ppb        | 0.06186  | 1.19%   |
| Ca 317.933Radial†  | 1307139.0                | 484070 µg/L        | 8641.7   | 484070 ppb         | 8641.7   | 1.79%   |
| QC value within limits for Ca 317.933Radial Recovery = 96.81%  |                          |                    |          |                    |          |         |
| Cd 226.502†  | 2297.1                   | 7.0775 µg/L        | 0.61655  | 7.0775 ppb         | 0.61655  | 8.71%   |
| Co 228.616†  | 229.9                    | 10.424 µg/L        | 0.4459   | 10.424 ppb         | 0.4459   | 4.28%   |
| Cr 267.716†  | 337.9                    | 7.8482 µg/L        | 0.22085  | 7.8482 ppb         | 0.22085  | 2.81%   |
| Cu 324.752†  | -11776.0                 | 2.7158 µg/L        | 1.02264  | 2.7158 ppb         | 1.02264  | 37.66%  |
| Fe 238.204 Radial†   | 39904.0                  | 454220 µg/L        | 6904.2   | 454220 ppb         | 6904.2   | 1.52%   |
| QC value within limits for Fe 238.204 Radial Recovery = 90.84% |                          |                    |          |                    |          |         |
| K 766.490 Radial†  | -224.6                   | -113.71 µg/L       | 22.606   | -113.71 ppb        | 22.606   | 19.88%  |
| Mg 279.077 IEC†  | 38713.8                  | 490340 µg/L        | 8199.1   | 490340 ppb         | 8199.1   | 1.67%   |



|   |           |              |         |             |         |        |  |
|---|-----------|--------------|---------|-------------|---------|--------|--|
| QC value within limits for Mg 279.077 IEC Recovery = 98.07%     |           |              |         |             |         |        |  |
| Mn 257.610†   | 7700.5    | 19.091 µg/L  | 0.2266  | 19.091 ppb  | 0.2266  | 1.19%  |  |
| Mo 202.031†   | -187.2    | -2.3919 µg/L | 1.50427 | -2.3919 ppb | 1.50427 | 62.89% |  |
| Na 589.592 Radial†  | 1059252.6 | 505100 µg/L  | 7794.0  | 505100 ppb  | 7794.0  | 1.54%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 101.02% |           |              |         |             |         |        |  |
| Ni 231.604†   | -86.6     | 0.7642 µg/L  | 0.07599 | 0.7642 ppb  | 0.07599 | 9.94%  |  |
| P 214.914†  | 194.8     | 120.29 µg/L  | 17.338  | 120.29 ppb  | 17.338  | 14.41% |  |
| Pb 220.353†   | -69.6     | 11.382 µg/L  | 3.5871  | 11.382 ppb  | 3.5871  | 31.51% |  |
| S 181.975 Axial†  | -59.0     | -194.81 µg/L | 13.721  | -194.81 ppb | 13.721  | 7.04%  |  |
| Sb 206.836†   | -6.4      | -13.714 µg/L | 1.8911  | -13.714 ppb | 1.8911  | 13.79% |  |
| Se 196.026†   | -401.1    | 639.57 µg/L  | 19.877  | 639.57 ppb  | 19.877  | 3.11%  |  |
| SiO2†   | -10.5     | -1.9798 µg/L | 0.57721 | -1.9798 ppb | 0.57721 | 29.16% |  |
| Si 251.611†   | -564.5    | -40.172 µg/L | 1.5358  | -40.172 ppb | 1.5358  | 3.82%  |  |
| Sn 189.927†   | -93.0     | 9.1484 µg/L  | 5.03635 | 9.1484 ppb  | 5.03635 | 55.05% |  |
| Sr 421.552†   | 2005.8    | 12.207 µg/L  | 0.2102  | 12.207 ppb  | 0.2102  | 1.72%  |  |
| Ti 334.940†   | 14696.2   | 5.8733 µg/L  | 0.49732 | 5.8733 ppb  | 0.49732 | 8.47%  |  |
| Tl 190.801†   | 27.9      | 17.993 µg/L  | 11.1886 | 17.993 ppb  | 11.1886 | 62.18% |  |
| U 409.014†  | 156012.4  | 14797 µg/L   | 49.2    | 14797 ppb   | 49.2    | 0.33%  |  |
| QC value within limits for U 409.014 Recovery = 98.65%          |           |              |         |             |         |        |  |
| V 292.402†  | 3992.1    | -17.640 µg/L | 1.3277  | -17.640 ppb | 1.3277  | 7.53%  |  |
| Zn 213.857†   | 3101.0    | 25.895 µg/L  | 0.0462  | 25.895 ppb  | 0.0462  | 0.18%  |  |
| All analyte(s) passed QC.                                       |           |              |         |             |         |        |  |

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 3/11/2010 07:09:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR2

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 83176.1          | 83176.1                | 96.9 %                |                       | 07:10:02         |
| 1     | Al 396.153Radial†  | 612.7            | 889.3                  | 239.11 µg/L           | 239.11 ppb            | 07:10:02         |
| 1     | Ca 317.933Radial†  | 563.7            | 256.4                  | 94.941 µg/L           | 94.941 ppb            | 07:10:23         |
| 1     | Fe 238.204 Radial† | 12.5             | -2.0                   | 196.20 µg/L           | 196.20 ppb            | 07:10:23         |
| 1     | K 766.490 Radial†  | 587500.8         | 605709.1               | 306600 µg/L           | 306600 ppb            | 07:09:57         |
| 1     | Mg 279.077 IEC†    | 5.6              | -0.2                   | 180.97 µg/L           | 180.97 ppb            | 07:10:23         |
| 1     | Na 589.592 Radial† | 1189.6           | 1014.9                 | 483.94 µg/L           | 483.94 ppb            | 07:10:02         |
| 1     | Sr 421.552†        | 1591313.6        | 1641526.5              | 9989.9 µg/L           | 9989.9 ppb            | 07:09:57         |
| 1     | Sc 361.383         | 1848150.6        | 1848150.6              | 101.48 %              |                       | 07:11:55         |
| 1     | Y 371.029          | 1270762.9        | 1270762.9              | 100.92 %              |                       | 07:11:55         |
| 1     | Ag 328.068†        | -7096.2          | -6455.0                | 14.385 µg/L           | 14.385 ppb            | 07:12:00         |
| 1     | As 188.979†        | 7062.6           | 6962.0                 | 10681 µg/L            | 10681 ppb             | 07:12:00         |
| 1     | B 249.677†         | 106598.0         | 104730.9               | 5166.2 µg/L           | 5166.2 ppb            | 07:11:55         |
| 1     | Ba 233.527†        | 551881.5         | 543834.6               | 12748 µg/L            | 12748 ppb             | 07:11:55         |
| 1     | Be 313.107†        | 4963829.5        | 4892815.3              | 3074.5 µg/L           | 3074.5 ppb            | 07:11:44         |
| 1     | Cd 226.502†        | 424971.5         | 418926.4               | 10663 µg/L            | 10663 ppb             | 07:11:55         |
| 1     | Co 228.616†        | 229236.4         | 225861.2               | 10324 µg/L            | 10324 ppb             | 07:11:55         |
| 1     | Cr 267.716†        | 1162228.2        | 1145181.4              | 26496 µg/L            | 26496 ppb             | 07:11:55         |
| 1     | Cu 324.752†        | 2999677.7        | 2951566.7              | 20722 µg/L            | 20722 ppb             | 07:11:55         |
| 1     | Mn 257.610†        | 3138296.3        | 3093176.6              | 10156 µg/L            | 10156 ppb             | 07:11:55         |
| 1     | Mo 202.031†        | 105404.5         | 103854.1               | 10901 µg/L            | 10901 ppb             | 07:11:55         |
| 1     | Ni 231.604†        | 182993.0         | 179964.6               | 10641 µg/L            | 10641 ppb             | 07:11:55         |
| 1     | P 214.914†         | 13403.1          | 12920.2                | 20021 µg/L            | 20021 ppb             | 07:12:00         |
| 1     | Pb 220.353†        | 98209.2          | 96730.4                | 27126 µg/L            | 27126 ppb             | 07:11:55         |
| 1     | S 181.975 Axial†   | 17222.8          | 16949.1                | 55942 µg/L            | 55942 ppb             | 07:12:00         |
| 1     | Sb 206.836†        | 11985.2          | 11783.0                | 10947 µg/L            | 10947 ppb             | 07:12:00         |
| 1     | Se 196.026†        | 11153.0          | 10963.3                | 10855 µg/L            | 10855 ppb             | 07:12:00         |
| 1     | SiO2†              | 554064.3         | 543118.3               | 102640 µg/L           | 102640 ppb            | 07:11:55         |
| 1     | Si 251.611†        | 683506.5         | 673095.1               | 47899 µg/L            | 47899 ppb             | 07:11:55         |
| 1     | Sn 189.927†        | 28396.6          | 27983.4                | 11789 µg/L            | 11789 ppb             | 07:12:00         |
| 1     | Ti 334.940†        | 4142848.0        | 4083004.8              | 10280 µg/L            | 10280 ppb             | 07:11:44         |
| 1     | Tl 190.801†        | 10231.7          | 10119.1                | 10693 µg/L            | 10693 ppb             | 07:12:00         |
| 1     | U 409.014†         | -1708.3          | -1625.4                | -155.13 µg/L          | -155.13 ppb           | 07:11:55         |
| 1     | V 292.402†         | 847942.1         | 835429.8               | 10729 µg/L            | 10729 ppb             | 07:11:55         |
| 1     | Zn 213.857†        | 656499.3         | 646271.7               | 15580 µg/L            | 15580 ppb             | 07:11:55         |
| 2     | Sc RADIAL          | 84540.8          | 84540.8                | 98.5 %                |                       | 07:10:34         |
| 2     | Al 396.153Radial†  | 605.2            | 871.4                  | 240.19 µg/L           | 240.19 ppb            | 07:10:34         |
| 2     | Ca 317.933Radial†  | 540.9            | 223.8                  | 82.884 µg/L           | 82.884 ppb            | 07:10:55         |
| 2     | Fe 238.204 Radial† | 13.9             | -0.8                   | 199.45 µg/L           | 199.45 ppb            | 07:10:55         |
| 2     | K 766.490 Radial†  | 594535.6         | 603065.2               | 305260 µg/L           | 305260 ppb            | 07:10:29         |
| 2     | Mg 279.077 IEC†    | 4.4              | -1.5                   | 155.36 µg/L           | 155.36 ppb            | 07:10:55         |
| 2     | Na 589.592 Radial† | 927.1            | 728.6                  | 347.44 µg/L           | 347.44 ppb            | 07:10:34         |
| 2     | Sr 421.552†        | 1598645.3        | 1622466.9              | 9873.9 µg/L           | 9873.9 ppb            | 07:10:29         |
| 2     | Sc 361.383         | 1884161.5        | 1884161.5              | 103.46 %              |                       | 07:12:19         |
| 2     | Y 371.029          | 1290911.0        | 1290911.0              | 102.52 %              |                       | 07:12:19         |
| 2     | Ag 328.068†        | -6614.1          | -5855.3                | 15.845 µg/L           | 15.845 ppb            | 07:12:25         |
| 2     | As 188.979†        | 6807.6           | 6582.5                 | 10099 µg/L            | 10099 ppb             | 07:12:25         |
| 2     | B 249.677†         | 105287.5         | 101456.7               | 5003.3 µg/L           | 5003.3 ppb            | 07:12:19         |
| 2     | Ba 233.527†        | 539019.5         | 521009.2               | 12213 µg/L            | 12213 ppb             | 07:12:19         |
| 2     | Be 313.107†        | 4945710.3        | 4781818.0              | 3004.8 µg/L           | 3004.8 ppb            | 07:12:09         |
| 2     | Cd 226.502†        | 414957.5         | 401243.9               | 10213 µg/L            | 10213 ppb             | 07:12:19         |
| 2     | Co 228.616†        | 222341.3         | 214879.5               | 9821.9 µg/L           | 9821.9 ppb            | 07:12:19         |
| 2     | Cr 267.716†        | 1110150.9        | 1072957.8              | 24825 µg/L            | 24825 ppb             | 07:12:19         |
| 2     | Cu 324.752†        | 2891245.3        | 2790268.1              | 19590 µg/L            | 19590 ppb             | 07:12:19         |
| 2     | Mn 257.610†        | 3043966.2        | 2942898.0              | 9662.2 µg/L           | 9662.2 ppb            | 07:12:19         |
| 2     | Mo 202.031†        | 102476.5         | 99039.0                | 10395 µg/L            | 10395 ppb             | 07:12:19         |
| 2     | Ni 231.604†        | 177764.6         | 171464.8               | 10139 µg/L            | 10139 ppb             | 07:12:19         |
| 2     | P 214.914†         | 12591.2          | 11883.0                | 18356 µg/L            | 18356 ppb             | 07:12:25         |
| 2     | Pb 220.353†        | 96679.7          | 93402.5                | 26193 µg/L            | 26193 ppb             | 07:12:19         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 16602.3   | 16025.0   | 52892 µg/L   | 52892 ppb   | 07:12:25 |
| 2 | Sb 206.836†        | 11350.6   | 10943.9   | 10170 µg/L   | 10170 ppb   | 07:12:25 |
| 2 | Se 196.026†        | 10671.4   | 10287.7   | 10186 µg/L   | 10186 ppb   | 07:12:25 |
| 2 | SiO2†              | 546233.5  | 525114.7  | 99242 µg/L   | 99242 ppb   | 07:12:19 |
| 2 | Si 251.611†        | 674026.2  | 651059.4  | 46331 µg/L   | 46331 ppb   | 07:12:19 |
| 2 | Sn 189.927†        | 26298.5   | 25420.6   | 10710 µg/L   | 10710 ppb   | 07:12:25 |
| 2 | Ti 334.940†        | 4109214.6 | 3972474.0 | 10001 µg/L   | 10001 ppb   | 07:12:09 |
| 2 | Tl 190.801†        | 10046.6   | 9747.5    | 10301 µg/L   | 10301 ppb   | 07:12:25 |
| 2 | U 409.014†         | -1652.3   | -1539.2   | -146.90 µg/L | -146.90 ppb | 07:12:19 |
| 2 | V 292.402†         | 818754.9  | 791249.6  | 10162 µg/L   | 10162 ppb   | 07:12:19 |
| 2 | Zn 213.857†        | 637663.4  | 615702.0  | 14843 µg/L   | 14843 ppb   | 07:12:19 |
| 3 | Sc RADIAL          | 85863.0   | 85863.0   | 100 %        |             | 07:11:06 |
| 3 | Al 396.153Radial†  | 594.2     | 851.0     | 263.17 µg/L  | 263.17 ppb  | 07:11:06 |
| 3 | Ca 317.933Radial†  | 519.8     | 194.2     | 71.932 µg/L  | 71.932 ppb  | 07:11:27 |
| 3 | Fe 238.204 Radial† | 10.7      | -4.3      | 127.38 µg/L  | 127.38 ppb  | 07:11:27 |
| 3 | K 766.490 Radial†  | 605933.7  | 605163.4  | 306320 µg/L  | 306320 ppb  | 07:11:01 |
| 3 | Mg 279.077 IEC†    | 3.0       | -2.9      | 110.51 µg/L  | 110.51 ppb  | 07:11:27 |
| 3 | Na 589.592 Radial† | 750.0     | 537.1     | 256.10 µg/L  | 256.10 ppb  | 07:11:06 |
| 3 | Sr 421.552†        | 1624005.8 | 1622824.6 | 9876.1 µg/L  | 9876.1 ppb  | 07:11:01 |
| 3 | Sc 361.383         | 1905709.6 | 1905709.6 | 104.64 %     |             | 07:12:44 |
| 3 | Y 371.029          | 1310085.0 | 1310085.0 | 104.05 %     |             | 07:12:44 |
| 3 | Ag 328.068†        | -5651.9   | -4863.6   | 13.761 µg/L  | 13.761 ppb  | 07:12:50 |
| 3 | As 188.979†        | 5802.5    | 5547.5    | 8511.2 µg/L  | 8511.2 ppb  | 07:12:50 |
| 3 | B 249.677†         | 93175.3   | 88731.3   | 4373.9 µg/L  | 4373.9 ppb  | 07:12:44 |
| 3 | Ba 233.527†        | 464897.1  | 444285.4  | 10414 µg/L   | 10414 ppb   | 07:12:44 |
| 3 | Be 313.107†        | 4395793.9 | 4202254.4 | 2640.6 µg/L  | 2640.6 ppb  | 07:12:34 |
| 3 | Cd 226.502†        | 358082.7  | 342358.1  | 8714.0 µg/L  | 8714.0 ppb  | 07:12:44 |
| 3 | Co 228.616†        | 189733.7  | 181289.0  | 8285.8 µg/L  | 8285.8 ppb  | 07:12:44 |
| 3 | Cr 267.716†        | 927869.4  | 886632.7  | 20514 µg/L   | 20514 ppb   | 07:12:44 |
| 3 | Cu 324.752†        | 2456263.3 | 2342991.4 | 16450 µg/L   | 16450 ppb   | 07:12:44 |
| 3 | Mn 257.610†        | 2599151.7 | 2484556.0 | 8157.4 µg/L  | 8157.4 ppb  | 07:12:44 |
| 3 | Mo 202.031†        | 87329.2   | 83443.9   | 8758.5 µg/L  | 8758.5 ppb  | 07:12:44 |
| 3 | Ni 231.604†        | 151477.5  | 144401.5  | 8538.3 µg/L  | 8538.3 ppb  | 07:12:44 |
| 3 | P 214.914†         | 10620.8   | 9862.5    | 15214 µg/L   | 15214 ppb   | 07:12:50 |
| 3 | Pb 220.353†        | 84588.3   | 80791.1   | 22657 µg/L   | 22657 ppb   | 07:12:44 |
| 3 | S 181.975 Axial†   | 14154.5   | 13504.4   | 44573 µg/L   | 44573 ppb   | 07:12:50 |
| 3 | Sb 206.836†        | 9592.9    | 9140.2    | 8497.2 µg/L  | 8497.2 ppb  | 07:12:50 |
| 3 | Se 196.026†        | 9150.4    | 8717.6    | 8631.3 µg/L  | 8631.3 ppb  | 07:12:50 |
| 3 | SiO2†              | 480945.9  | 456754.7  | 86323 µg/L   | 86323 ppb   | 07:12:44 |
| 3 | Si 251.611†        | 593039.6  | 566300.4  | 40299 µg/L   | 40299 ppb   | 07:12:44 |
| 3 | Sn 189.927†        | 21997.2   | 21022.8   | 8856.9 µg/L  | 8856.9 ppb  | 07:12:50 |
| 3 | Ti 334.940†        | 3643894.6 | 3482894.5 | 8768.8 µg/L  | 8768.8 ppb  | 07:12:34 |
| 3 | Tl 190.801†        | 8849.8    | 8494.1    | 8976.6 µg/L  | 8976.6 ppb  | 07:12:50 |
| 3 | U 409.014†         | -1408.1   | -1287.7   | -122.90 µg/L | -122.90 ppb | 07:12:44 |
| 3 | V 292.402†         | 695414.2  | 664434.4  | 8532.8 µg/L  | 8532.8 ppb  | 07:12:44 |
| 3 | Zn 213.857†        | 547145.4  | 522232.0  | 12591 µg/L   | 12591 ppb   | 07:12:44 |

## Mean Data: LR2

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1879340.6                | 103.20 %           | 1.597    |                    |          | 1.55%  |
| Sc RADIAL   | 84526.6                  | 98.5 %             | 1.57     |                    |          | 1.59%  |
| Y 371.029   | 1290586.3                | 102.50 %           | 1.562    |                    |          | 1.52%  |
| Ag 328.068†   | -5724.6                  | 14.664 µg/L        | 1.0698   | 14.664 ppb         | 1.0698   | 7.30%  |
| Al 396.153Radial†   | 870.5                    | 247.49 µg/L        | 13.593   | 247.49 ppb         | 13.593   | 5.49%  |
| As 188.979†   | 6364.0                   | 9763.8 µg/L        | 1123.26  | 9763.8 ppb         | 1123.26  | 11.50% |
| QC value within limits for As 188.979 Recovery = 97.64%             |                          |                    |          |                    |          |        |
| B 249.677†  | 98306.3                  | 4847.8 µg/L        | 418.43   | 4847.8 ppb         | 418.43   | 8.63%  |
| QC value within limits for B 249.677 Recovery = 96.96%              |                          |                    |          |                    |          |        |
| Ba 233.527†   | 503043.1                 | 11792 µg/L         | 1222.6   | 11792 ppb          | 1222.6   | 10.37% |
| QC value less than the lower limit for Ba 233.527 Recovery = 78.61% |                          |                    |          |                    |          |        |
| Be 313.107†   | 4625629.2                | 2906.6 µg/L        | 233.01   | 2906.6 ppb         | 233.01   | 8.02%  |
| QC value within limits for Be 313.107 Recovery = 96.89%             |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 224.8                    | 83.253 µg/L        | 11.5089  | 83.253 ppb         | 11.5089  | 13.82% |
| Cd 226.502†   | 387509.4                 | 9863.3 µg/L        | 1020.48  | 9863.3 ppb         | 1020.48  | 10.35% |
| QC value within limits for Cd 226.502 Recovery = 98.63%             |                          |                    |          |                    |          |        |
| Co 228.616†   | 207343.2                 | 9477.4 µg/L        | 1062.04  | 9477.4 ppb         | 1062.04  | 11.21% |
| QC value within limits for Co 228.616 Recovery = 94.77%             |                          |                    |          |                    |          |        |
| Cr 267.716†   | 1034924.0                | 23945 µg/L         | 3086.5   | 23945 ppb          | 3086.5   | 12.89% |
| QC value within limits for Cr 267.716 Recovery = 95.78%             |                          |                    |          |                    |          |        |

|  |           |              |         |             |         |        |
|--|-----------|--------------|---------|-------------|---------|--------|
| Cu 324.752†  | 2694942.1 | 18921 µg/L   | 2213.6  | 18921 ppb   | 2213.6  | 11.70% |
| QC value within limits for Cu 324.752 Recovery = 94.60%                |           |              |         |             |         |        |
| Fe 238.204 Radial†   | -2.4      | 174.34 µg/L  | 40.705  | 174.34 ppb  | 40.705  | 23.35% |
| K 766.490 Radial†  | 604645.9  | 306060 µg/L  | 706.6   | 306060 ppb  | 706.6   | 0.23%  |
| QC value within limits for K 766.490 Radial Recovery = 102.02%         |           |              |         |             |         |        |
| Mg 279.077 IEC†  | -1.5      | 148.95 µg/L  | 35.664  | 148.95 ppb  | 35.664  | 23.94% |
| Mn 257.610†  | 2840210.2 | 9325.1 µg/L  | 1040.91 | 9325.1 ppb  | 1040.91 | 11.16% |
| QC value within limits for Mn 257.610 Recovery = 93.25%                |           |              |         |             |         |        |
| Mo 202.031†  | 95445.7   | 10018 µg/L   | 1119.8  | 10018 ppb   | 1119.8  | 11.18% |
| QC value within limits for Mo 202.031 Recovery = 100.18%               |           |              |         |             |         |        |
| Na 589.592 Radial†   | 760.2     | 362.49 µg/L  | 114.662 | 362.49 ppb  | 114.662 | 31.63% |
| Ni 231.604†  | 165277.0  | 9772.7 µg/L  | 1098.12 | 9772.7 ppb  | 1098.12 | 11.24% |
| QC value within limits for Ni 231.604 Recovery = 97.73%                |           |              |         |             |         |        |
| P 214.914†   | 11555.2   | 17864 µg/L   | 2441.0  | 17864 ppb   | 2441.0  | 13.66% |
| QC value greater than the upper limit for P 214.914 Recovery = 119.09% |           |              |         |             |         |        |
| Pb 220.353†  | 90308.0   | 25325 µg/L   | 2357.7  | 25325 ppb   | 2357.7  | 9.31%  |
| QC value within limits for Pb 220.353 Recovery = 101.30%               |           |              |         |             |         |        |
| S 181.975 Axial†   | 15492.8   | 51136 µg/L   | 5884.9  | 51136 ppb   | 5884.9  | 11.51% |
| QC value within limits for S 181.975 Axial Recovery = 102.27%          |           |              |         |             |         |        |
| Sb 206.836†  | 10622.4   | 9871.3 µg/L  | 1251.94 | 9871.3 ppb  | 1251.94 | 12.68% |
| QC value within limits for Sb 206.836 Recovery = 98.71%                |           |              |         |             |         |        |
| Se 196.026†  | 9989.5    | 9890.8 µg/L  | 1140.81 | 9890.8 ppb  | 1140.81 | 11.53% |
| QC value within limits for Se 196.026 Recovery = 98.91%                |           |              |         |             |         |        |
| SiO2†  | 508329.2  | 96070 µg/L   | 8611.0  | 96070 ppb   | 8611.0  | 8.96%  |
| QC value less than the lower limit for SiO2 Recovery = 89.79%          |           |              |         |             |         |        |
| Si 251.611†  | 630151.6  | 44843 µg/L   | 4012.4  | 44843 ppb   | 4012.4  | 8.95%  |
| QC value less than the lower limit for Si 251.611 Recovery = 89.69%    |           |              |         |             |         |        |
| Sn 189.927†  | 24808.9   | 10452 µg/L   | 1483.1  | 10452 ppb   | 1483.1  | 14.19% |
| QC value within limits for Sn 189.927 Recovery = 104.52%               |           |              |         |             |         |        |
| Sr 421.552†  | 1628939.3 | 9913.3 µg/L  | 66.35   | 9913.3 ppb  | 66.35   | 0.67%  |
| QC value within limits for Sr 421.552 Recovery = 99.13%                |           |              |         |             |         |        |
| Ti 334.940†  | 3846124.4 | 9683.3 µg/L  | 804.10  | 9683.3 ppb  | 804.10  | 8.30%  |
| QC value within limits for Ti 334.940 Recovery = 96.83%                |           |              |         |             |         |        |
| Tl 190.801†  | 9453.6    | 9990.1 µg/L  | 899.29  | 9990.1 ppb  | 899.29  | 9.00%  |
| QC value within limits for Tl 190.801 Recovery = 99.90%                |           |              |         |             |         |        |
| U 409.014†   | -1484.1   | -141.64 µg/L | 16.748  | -141.64 ppb | 16.748  | 11.82% |
| V 292.402†   | 763704.6  | 9808.0 µg/L  | 1140.25 | 9808.0 ppb  | 1140.25 | 11.63% |
| QC value within limits for V 292.402 Recovery = 98.08%                 |           |              |         |             |         |        |
| Zn 213.857†  | 594735.2  | 14338 µg/L   | 1557.5  | 14338 ppb   | 1557.5  | 10.86% |
| QC value within limits for Zn 213.857 Recovery = 95.59%                |           |              |         |             |         |        |
| QC Failed. Continue with analysis.                                     |           |              |         |             |         |        |

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 07:13:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86464.7       | 86464.7             | 101 %              |                    | 07:13:37      |
| 1     | Al 396.153Radial†  | 9601.5        | 9785.6              | 5083.6 µg/L        | 5083.6 ppb         | 07:13:37      |
| 1     | Ca 317.933Radial†  | 14994.1       | 14554.8             | 5390.0 µg/L        | 5390.0 ppb         | 07:13:37      |
| 1     | Fe 238.204 Radial† | 481.4         | 462.8               | 5279.3 µg/L        | 5279.3 ppb         | 07:13:58      |
| 1     | K 766.490 Radial†  | 11360.8       | 10900.7             | 5517.7 µg/L        | 5517.7 ppb         | 07:13:37      |
| 1     | Mg 279.077 IEC†    | 442.2         | 432.9               | 5492.6 µg/L        | 5492.6 ppb         | 07:13:58      |
| 1     | Na 589.592 Radial† | 21723.0       | 21345.3             | 10178 µg/L         | 10178 ppb          | 07:13:37      |
| 1     | Sr 421.552†        | 82287.5       | 81542.9             | 496.25 µg/L        | 496.25 ppb         | 07:13:37      |
| 1     | Sc 361.383         | 1836308.2     | 1836308.2           | 100.83 %           |                    | 07:15:01      |
| 1     | Y 371.029          | 1267941.1     | 1267941.1           | 100.70 %           |                    | 07:15:01      |
| 1     | Ag 328.068†        | 60658.5       | 60694.9             | 525.65 µg/L        | 525.65 ppb         | 07:15:07      |
| 1     | As 188.979†        | 369.7         | 369.3               | 565.22 µg/L        | 565.22 ppb         | 07:15:27      |
| 1     | B 249.677†         | 11321.7       | 10919.1             | 532.34 µg/L        | 532.34 ppb         | 07:15:07      |
| 1     | Ba 233.527†        | 23562.7       | 23387.3             | 548.37 µg/L        | 548.37 ppb         | 07:15:07      |
| 1     | Be 313.107†        | 868902.2      | 863259.9            | 542.94 µg/L        | 542.94 ppb         | 07:15:01      |
| 1     | Cd 226.502†        | 22020.9       | 22005.2             | 559.50 µg/L        | 559.50 ppb         | 07:15:07      |
| 1     | Co 228.616†        | 12087.2       | 11962.6             | 546.86 µg/L        | 546.86 ppb         | 07:15:27      |
| 1     | Cr 267.716†        | 24187.3       | 23927.5             | 553.81 µg/L        | 553.81 ppb         | 07:15:07      |
| 1     | Cu 324.752†        | 80749.1       | 75813.3             | 533.26 µg/L        | 533.26 ppb         | 07:15:07      |
| 1     | Mn 257.610†        | 166233.5      | 165608.9            | 543.68 µg/L        | 543.68 ppb         | 07:15:07      |
| 1     | Mo 202.031†        | 5550.5        | 5494.8              | 576.95 µg/L        | 576.95 ppb         | 07:15:27      |
| 1     | Ni 231.604†        | 9738.7        | 9304.5              | 550.22 µg/L        | 550.22 ppb         | 07:15:27      |
| 1     | P 214.914†         | 1984.7        | 1681.3              | 2817.1 µg/L        | 2817.1 ppb         | 07:15:27      |
| 1     | Pb 220.353†        | 2123.5        | 2062.6              | 579.17 µg/L        | 579.17 ppb         | 07:15:27      |
| 1     | S 181.975 Axial†   | 362.4         | 337.4               | 1113.5 µg/L        | 1113.5 ppb         | 07:15:27      |
| 1     | Sb 206.836†        | 637.3         | 605.0               | 571.41 µg/L        | 571.41 ppb         | 07:15:27      |
| 1     | Se 196.026†        | 595.3         | 563.7               | 570.28 µg/L        | 570.28 ppb         | 07:15:27      |
| 1     | SiO2†              | 33390.4       | 30266.6             | 5720.1 µg/L        | 5720.1 ppb         | 07:15:07      |
| 1     | Si 251.611†        | 38500.6       | 37761.1             | 2687.1 µg/L        | 2687.1 ppb         | 07:15:07      |
| 1     | Sn 189.927†        | 1414.4        | 1404.5              | 592.25 µg/L        | 592.25 ppb         | 07:15:27      |
| 1     | Ti 334.940†        | 210735.0      | 209701.5            | 527.61 µg/L        | 527.61 ppb         | 07:15:07      |
| 1     | Tl 190.801†        | 489.6         | 522.6               | 552.53 µg/L        | 552.53 ppb         | 07:15:27      |
| 1     | U 409.014†         | 5607.3        | 5618.8              | 535.19 µg/L        | 535.19 ppb         | 07:15:07      |
| 1     | V 292.402†         | 43137.8       | 42662.5             | 545.97 µg/L        | 545.97 ppb         | 07:15:07      |
| 1     | Zn 213.857†        | 23505.8       | 22679.2             | 545.71 µg/L        | 545.71 ppb         | 07:15:07      |
| 2     | Sc RADIAL          | 86675.0       | 86675.0             | 101 %              |                    | 07:14:03      |
| 2     | Al 396.153Radial†  | 9686.9        | 9847.0              | 5116.0 µg/L        | 5116.0 ppb         | 07:14:03      |
| 2     | Ca 317.933Radial†  | 15033.3       | 14557.5             | 5391.0 µg/L        | 5391.0 ppb         | 07:14:03      |
| 2     | Fe 238.204 Radial† | 483.9         | 464.1               | 5293.4 µg/L        | 5293.4 ppb         | 07:14:24      |
| 2     | K 766.490 Radial†  | 11160.3       | 10674.8             | 5403.4 µg/L        | 5403.4 ppb         | 07:14:03      |
| 2     | Mg 279.077 IEC†    | 442.2         | 431.9               | 5479.0 µg/L        | 5479.0 ppb         | 07:14:24      |
| 2     | Na 589.592 Radial† | 21793.2       | 21362.5             | 10187 µg/L         | 10187 ppb          | 07:14:03      |
| 2     | Sr 421.552†        | 82523.5       | 81578.4             | 496.46 µg/L        | 496.46 ppb         | 07:14:03      |
| 2     | Sc 361.383         | 1846648.6     | 1846648.6           | 101.40 %           |                    | 07:15:34      |
| 2     | Y 371.029          | 1272705.4     | 1272705.4           | 101.08 %           |                    | 07:15:34      |
| 2     | Ag 328.068†        | 60751.6       | 60449.8             | 523.52 µg/L        | 523.52 ppb         | 07:15:39      |
| 2     | As 188.979†        | 363.4         | 361.0               | 552.52 µg/L        | 552.52 ppb         | 07:16:00      |
| 2     | B 249.677†         | 11288.1       | 10823.1             | 527.63 µg/L        | 527.63 ppb         | 07:15:39      |
| 2     | Ba 233.527†        | 23497.9       | 23192.6             | 543.81 µg/L        | 543.81 ppb         | 07:15:39      |
| 2     | Be 313.107†        | 874845.3      | 864295.6            | 543.59 µg/L        | 543.59 ppb         | 07:15:34      |
| 2     | Cd 226.502†        | 21921.2       | 21784.5             | 553.86 µg/L        | 553.86 ppb         | 07:15:39      |
| 2     | Co 228.616†        | 11684.0       | 11497.8             | 525.57 µg/L        | 525.57 ppb         | 07:16:00      |
| 2     | Cr 267.716†        | 24133.7       | 23740.3             | 549.48 µg/L        | 549.48 ppb         | 07:15:39      |
| 2     | Cu 324.752†        | 80804.8       | 75419.9             | 530.50 µg/L        | 530.50 ppb         | 07:15:39      |
| 2     | Mn 257.610†        | 166370.6      | 164821.0            | 541.09 µg/L        | 541.09 ppb         | 07:15:39      |
| 2     | Mo 202.031†        | 5381.5        | 5297.3              | 556.22 µg/L        | 556.22 ppb         | 07:16:00      |
| 2     | Ni 231.604†        | 9407.7        | 8924.0              | 527.72 µg/L        | 527.72 ppb         | 07:16:00      |
| 2     | P 214.914†         | 1937.6        | 1623.8              | 2719.0 µg/L        | 2719.0 ppb         | 07:16:00      |
| 2     | Pb 220.353†        | 2076.3        | 2004.3              | 562.76 µg/L        | 562.76 ppb         | 07:16:00      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 359.9     | 332.9     | 1098.8 µg/L | 1098.8 ppb | 07:16:00 |
| 2 | Sb 206.836†        | 615.5     | 580.0     | 547.62 µg/L | 547.62 ppb | 07:16:00 |
| 2 | Se 196.026†        | 576.8     | 542.1     | 548.96 µg/L | 548.96 ppb | 07:16:00 |
| 2 | SiO2†              | 33380.5   | 30071.4   | 5683.3 µg/L | 5683.3 ppb | 07:15:39 |
| 2 | Si 251.611†        | 38477.0   | 37524.0   | 2670.3 µg/L | 2670.3 ppb | 07:15:39 |
| 2 | Sn 189.927†        | 1356.4    | 1339.4    | 564.83 µg/L | 564.83 ppb | 07:16:00 |
| 2 | Ti 334.940†        | 210590.0  | 208388.3  | 524.31 µg/L | 524.31 ppb | 07:15:39 |
| 2 | Tl 190.801†        | 485.7     | 516.0     | 545.73 µg/L | 545.73 ppb | 07:16:00 |
| 2 | U 409.014†         | 5577.2    | 5558.0    | 529.38 µg/L | 529.38 ppb | 07:15:39 |
| 2 | V 292.402†         | 43077.5   | 42363.4   | 542.00 µg/L | 542.00 ppb | 07:15:39 |
| 2 | Zn 213.857†        | 23411.2   | 22455.4   | 540.39 µg/L | 540.39 ppb | 07:15:39 |
| 3 | Sc RADIAL          | 86369.8   | 86369.8   | 101 %       |            | 07:14:29 |
| 3 | Al 396.153Radial†  | 9601.7    | 9796.3    | 5091.6 µg/L | 5091.6 ppb | 07:14:29 |
| 3 | Ca 317.933Radial†  | 14979.0   | 14556.2   | 5390.5 µg/L | 5390.5 ppb | 07:14:29 |
| 3 | Fe 238.204 Radial† | 483.1     | 465.0     | 5302.1 µg/L | 5302.1 ppb | 07:14:50 |
| 3 | K 766.490 Radial†  | 11099.8   | 10653.7   | 5392.7 µg/L | 5392.7 ppb | 07:14:29 |
| 3 | Mg 279.077 IEC†    | 443.3     | 434.5     | 5510.8 µg/L | 5510.8 ppb | 07:14:50 |
| 3 | Na 589.592 Radial† | 21770.8   | 21416.5   | 10212 µg/L  | 10212 ppb  | 07:14:29 |
| 3 | Sr 421.552†        | 82636.3   | 81979.2   | 498.90 µg/L | 498.90 ppb | 07:14:29 |
| 3 | Sc 361.383         | 1833705.2 | 1833705.2 | 100.69 %    |            | 07:16:06 |
| 3 | Y 371.029          | 1262170.0 | 1262170.0 | 100.24 %    |            | 07:16:06 |
| 3 | Ag 328.068†        | 55961.7   | 56115.6   | 485.82 µg/L | 485.82 ppb | 07:16:12 |
| 3 | As 188.979†        | 299.7     | 300.3     | 459.39 µg/L | 459.39 ppb | 07:16:33 |
| 3 | B 249.677†         | 10293.7   | 9914.1    | 483.02 µg/L | 483.02 ppb | 07:16:12 |
| 3 | Ba 233.527†        | 20828.3   | 20704.9   | 485.46 µg/L | 485.46 ppb | 07:16:12 |
| 3 | Be 313.107†        | 779673.1  | 775865.5  | 487.98 µg/L | 487.98 ppb | 07:16:06 |
| 3 | Cd 226.502†        | 19306.7   | 19340.6   | 491.63 µg/L | 491.63 ppb | 07:16:12 |
| 3 | Co 228.616†        | 9504.3    | 9414.4    | 430.29 µg/L | 430.29 ppb | 07:16:33 |
| 3 | Cr 267.716†        | 20379.7   | 20180.0   | 467.08 µg/L | 467.08 ppb | 07:16:12 |
| 3 | Cu 324.752†        | 71258.2   | 66501.1   | 467.89 µg/L | 467.89 ppb | 07:16:12 |
| 3 | Mn 257.610†        | 144655.6  | 144412.9  | 474.08 µg/L | 474.08 ppb | 07:16:12 |
| 3 | Mo 202.031†        | 4389.2    | 4349.3    | 456.71 µg/L | 456.71 ppb | 07:16:33 |
| 3 | Ni 231.604†        | 7754.9    | 7348.0    | 434.54 µg/L | 434.54 ppb | 07:16:33 |
| 3 | P 214.914†         | 1653.5    | 1355.1    | 2265.7 µg/L | 2265.7 ppb | 07:16:33 |
| 3 | Pb 220.353†        | 1744.3    | 1689.0    | 474.23 µg/L | 474.23 ppb | 07:16:33 |
| 3 | S 181.975 Axial†   | 309.8     | 285.6     | 942.81 µg/L | 942.81 ppb | 07:16:33 |
| 3 | Sb 206.836†        | 530.7     | 500.1     | 471.89 µg/L | 471.89 ppb | 07:16:33 |
| 3 | Se 196.026†        | 500.4     | 470.2     | 477.81 µg/L | 477.81 ppb | 07:16:33 |
| 3 | SiO2†              | 30334.7   | 27278.8   | 5155.5 µg/L | 5155.5 ppb | 07:16:12 |
| 3 | Si 251.611†        | 34683.2   | 34024.0   | 2421.2 µg/L | 2421.2 ppb | 07:16:12 |
| 3 | Sn 189.927†        | 1084.9    | 1079.3    | 455.24 µg/L | 455.24 ppb | 07:16:33 |
| 3 | Ti 334.940†        | 180743.6  | 180212.4  | 453.37 µg/L | 453.37 ppb | 07:16:12 |
| 3 | Tl 190.801†        | 423.1     | 457.2     | 483.49 µg/L | 483.49 ppb | 07:16:33 |
| 3 | U 409.014†         | 4754.3    | 4779.6    | 455.09 µg/L | 455.09 ppb | 07:16:12 |
| 3 | V 292.402†         | 37367.3   | 36992.3   | 472.90 µg/L | 472.90 ppb | 07:16:12 |
| 3 | Zn 213.857†        | 20623.6   | 19849.9   | 477.77 µg/L | 477.77 ppb | 07:16:12 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1838887.3                | 100.97 %           | 0.376    |                    |          | 0.37%  |
| Sc RADIAL  | 86503.2                  | 101 %              | 0.2      |                    |          | 0.18%  |
| Y 371.029  | 1267605.5                | 100.67 %           | 0.419    |                    |          | 0.42%  |
| Ag 328.068†  | 59086.8                  | 511.66 µg/L        | 22.407   | 511.66 ppb         | 22.407   | 4.38%  |
| QC value within limits for Ag 328.068 Recovery = 102.33%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9809.6                   | 5097.1 µg/L        | 16.88    | 5097.1 ppb         | 16.88    | 0.33%  |
| QC value within limits for Al 396.153Radial Recovery = 101.94% |                          |                    |          |                    |          |        |
| As 188.979†  | 343.5                    | 525.71 µg/L        | 57.782   | 525.71 ppb         | 57.782   | 10.99% |
| QC value within limits for As 188.979 Recovery = 105.14%       |                          |                    |          |                    |          |        |
| B 249.677†   | 10552.1                  | 514.33 µg/L        | 27.216   | 514.33 ppb         | 27.216   | 5.29%  |
| QC value within limits for B 249.677 Recovery = 102.87%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 22428.3                  | 525.88 µg/L        | 35.081   | 525.88 ppb         | 35.081   | 6.67%  |
| QC value within limits for Ba 233.527 Recovery = 105.18%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 834473.7                 | 524.84 µg/L        | 31.920   | 524.84 ppb         | 31.920   | 6.08%  |
| QC value within limits for Be 313.107 Recovery = 104.97%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 14556.2                  | 5390.5 µg/L        | 0.50     | 5390.5 ppb         | 0.50     | 0.01%  |
| QC value within limits for Ca 317.933Radial Recovery = 107.81% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 21043.4                  | 535.00 µg/L        | 37.666   | 535.00 ppb         | 37.666   | 7.04%  |
| QC value within limits for Cd 226.502 Recovery = 107.00%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 10958.2                  | 500.91 µg/L        | 62.074   | 500.91 ppb         | 62.074   | 12.39% |

|   |          |             |        |            |        |        |
|---|----------|-------------|--------|------------|--------|--------|
| QC value within limits for Co 228.616 Recovery = 100.18%        |          |             |        |            |        |        |
| Cr 267.716†   | 22615.9  | 523.46 µg/L | 48.870 | 523.46 ppb | 48.870 | 9.34%  |
| QC value within limits for Cr 267.716 Recovery = 104.69%        |          |             |        |            |        |        |
| Cu 324.752†   | 72578.1  | 510.55 µg/L | 36.973 | 510.55 ppb | 36.973 | 7.24%  |
| QC value within limits for Cu 324.752 Recovery = 102.11%        |          |             |        |            |        |        |
| Fe 238.204 Radial†  | 463.9    | 5291.6 µg/L | 11.48  | 5291.6 ppb | 11.48  | 0.22%  |
| QC value within limits for Fe 238.204 Radial Recovery = 105.83% |          |             |        |            |        |        |
| K 766.490 Radial†   | 10743.1  | 5438.0 µg/L | 69.30  | 5438.0 ppb | 69.30  | 1.27%  |
| QC value within limits for K 766.490 Radial Recovery = 108.76%  |          |             |        |            |        |        |
| Mg 279.077 IEC†   | 433.1    | 5494.1 µg/L | 15.98  | 5494.1 ppb | 15.98  | 0.29%  |
| QC value within limits for Mg 279.077 IEC Recovery = 109.88%    |          |             |        |            |        |        |
| Mn 257.610†   | 158280.9 | 519.62 µg/L | 39.453 | 519.62 ppb | 39.453 | 7.59%  |
| QC value within limits for Mn 257.610 Recovery = 103.92%        |          |             |        |            |        |        |
| Mo 202.031†   | 5047.1   | 529.96 µg/L | 64.277 | 529.96 ppb | 64.277 | 12.13% |
| QC value within limits for Mo 202.031 Recovery = 105.99%        |          |             |        |            |        |        |
| Na 589.592 Radial†  | 21374.8  | 10192 µg/L  | 17.7   | 10192 ppb  | 17.7   | 0.17%  |
| QC value within limits for Na 589.592 Radial Recovery = 101.92% |          |             |        |            |        |        |
| Ni 231.604†   | 8525.5   | 504.16 µg/L | 61.334 | 504.16 ppb | 61.334 | 12.17% |
| QC value within limits for Ni 231.604 Recovery = 100.83%        |          |             |        |            |        |        |
| P 214.914†  | 1553.4   | 2600.6 µg/L | 294.17 | 2600.6 ppb | 294.17 | 11.31% |
| QC value within limits for P 214.914 Recovery = 104.02%         |          |             |        |            |        |        |
| Pb 220.353†   | 1918.6   | 538.72 µg/L | 56.450 | 538.72 ppb | 56.450 | 10.48% |
| QC value within limits for Pb 220.353 Recovery = 107.74%        |          |             |        |            |        |        |
| S 181.975 Axial†  | 318.6    | 1051.7 µg/L | 94.61  | 1051.7 ppb | 94.61  | 9.00%  |
| QC value within limits for S 181.975 Axial Recovery = 105.17%   |          |             |        |            |        |        |
| Sb 206.836†   | 561.7    | 530.31 µg/L | 51.973 | 530.31 ppb | 51.973 | 9.80%  |
| QC value within limits for Sb 206.836 Recovery = 106.06%        |          |             |        |            |        |        |
| Se 196.026†   | 525.3    | 532.35 µg/L | 48.424 | 532.35 ppb | 48.424 | 9.10%  |
| QC value within limits for Se 196.026 Recovery = 106.47%        |          |             |        |            |        |        |
| SiO2†   | 29205.6  | 5519.6 µg/L | 315.90 | 5519.6 ppb | 315.90 | 5.72%  |
| QC value within limits for SiO2 Recovery = 103.22%              |          |             |        |            |        |        |
| Si 251.611†   | 36436.3  | 2592.9 µg/L | 148.91 | 2592.9 ppb | 148.91 | 5.74%  |
| QC value within limits for Si 251.611 Recovery = 103.72%        |          |             |        |            |        |        |
| Sn 189.927†   | 1274.4   | 537.44 µg/L | 72.494 | 537.44 ppb | 72.494 | 13.49% |
| QC value within limits for Sn 189.927 Recovery = 107.49%        |          |             |        |            |        |        |
| Sr 421.552†   | 81700.2  | 497.21 µg/L | 1.475  | 497.21 ppb | 1.475  | 0.30%  |
| QC value within limits for Sr 421.552 Recovery = 99.44%         |          |             |        |            |        |        |
| Ti 334.940†   | 199434.1 | 501.76 µg/L | 41.944 | 501.76 ppb | 41.944 | 8.36%  |
| QC value within limits for Ti 334.940 Recovery = 100.35%        |          |             |        |            |        |        |
| Tl 190.801†   | 498.6    | 527.25 µg/L | 38.047 | 527.25 ppb | 38.047 | 7.22%  |
| QC value within limits for Tl 190.801 Recovery = 105.45%        |          |             |        |            |        |        |
| U 409.014†  | 5318.8   | 506.55 µg/L | 44.666 | 506.55 ppb | 44.666 | 8.82%  |
| QC value within limits for U 409.014 Recovery = 101.31%         |          |             |        |            |        |        |
| V 292.402†  | 40672.7  | 520.29 µg/L | 41.090 | 520.29 ppb | 41.090 | 7.90%  |
| QC value within limits for V 292.402 Recovery = 104.06%         |          |             |        |            |        |        |
| Zn 213.857†   | 21661.5  | 521.29 µg/L | 37.787 | 521.29 ppb | 37.787 | 7.25%  |
| QC value within limits for Zn 213.857 Recovery = 104.26%        |          |             |        |            |        |        |
| All analyte(s) passed QC.                                       |          |             |        |            |        |        |

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 07:16:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84785.3          | 84785.3                | 98.8 %                |                       | 07:17:15         |
| 1     | Al 396.153Radial†  | -219.0           | 35.6                   | 18.493 µg/L           | 18.493 ppb            | 07:17:15         |
| 1     | Ca 317.933Radial†  | 363.2            | 42.4                   | 15.699 µg/L           | 15.699 ppb            | 07:17:36         |
| 1     | Fe 238.204 Radial† | 17.9             | 3.1                    | 35.697 µg/L           | 35.697 ppb            | 07:17:36         |
| 1     | K 766.490 Radial†  | 616.0            | 249.7                  | 126.38 µg/L           | 126.38 ppb            | 07:17:15         |
| 1     | Mg 279.077 IEC†    | 13.0             | 7.2                    | 91.080 µg/L           | 91.080 ppb            | 07:17:36         |
| 1     | Na 589.592 Radial† | 310.2            | 101.5                  | 48.403 µg/L           | 48.403 ppb            | 07:17:15         |
| 1     | Sr 421.552†        | 195.5            | 79.4                   | 0.4832 µg/L           | 0.4832 ppb            | 07:17:15         |
| 1     | Sc 361.383         | 1850660.7        | 1850660.7              | 101.62 %              |                       | 07:18:38         |
| 1     | Y 371.029          | 1277745.8        | 1277745.8              | 101.48 %              |                       | 07:18:38         |
| 1     | Ag 328.068†        | -512.4           | 33.2                   | 0.2909 µg/L           | 0.2909 ppb            | 07:18:44         |
| 1     | As 188.979†        | -2.2             | 0.4                    | 0.6139 µg/L           | 0.6139 ppb            | 07:19:04         |
| 1     | B 249.677†         | 413.2            | 97.5                   | 4.7539 µg/L           | 4.7539 ppb            | 07:19:04         |
| 1     | Ba 233.527†        | 2.7              | 21.9                   | 0.5143 µg/L           | 0.5143 ppb            | 07:19:04         |
| 1     | Be 313.107†        | -1350.1          | 207.0                  | 0.1298 µg/L           | 0.1298 ppb            | 07:18:44         |
| 1     | Cd 226.502†        | -154.6           | 14.1                   | 0.3540 µg/L           | 0.3540 ppb            | 07:19:04         |
| 1     | Co 228.616†        | 47.8             | 22.3                   | 1.0188 µg/L           | 1.0188 ppb            | 07:19:04         |
| 1     | Cr 267.716†        | 97.0             | 35.4                   | 0.8198 µg/L           | 0.8198 ppb            | 07:19:04         |
| 1     | Cu 324.752†        | 4889.9           | 543.2                  | 3.8203 µg/L           | 3.8203 ppb            | 07:18:44         |
| 1     | Mn 257.610†        | -751.3           | 9.3                    | 0.0265 µg/L           | 0.0265 ppb            | 07:19:04         |
| 1     | Mo 202.031†        | 25.9             | 15.6                   | 1.6409 µg/L           | 1.6409 ppb            | 07:19:04         |
| 1     | Ni 231.604†        | 352.5            | -6.9                   | -0.4095 µg/L          | -0.4095 ppb           | 07:19:04         |
| 1     | P 214.914†         | 294.9            | 3.2                    | 5.0168 µg/L           | 5.0168 ppb            | 07:19:04         |
| 1     | Pb 220.353†        | 54.5             | 10.2                   | 2.8565 µg/L           | 2.8565 ppb            | 07:19:04         |
| 1     | S 181.975 Axial†   | 23.1             | 0.8                    | 2.6059 µg/L           | 2.6059 ppb            | 07:19:04         |
| 1     | Sb 206.836†        | 36.8             | 9.2                    | 8.6975 µg/L           | 8.6975 ppb            | 07:19:04         |
| 1     | Se 196.026†        | 24.1             | -3.0                   | -2.9689 µg/L          | -2.9689 ppb           | 07:19:04         |
| 1     | SiO2†              | 2931.4           | 36.7                   | 6.9331 µg/L           | 6.9331 ppb            | 07:18:44         |
| 1     | Si 251.611†        | 536.6            | 106.5                  | 7.5789 µg/L           | 7.5789 ppb            | 07:19:04         |
| 1     | Sn 189.927†        | 4.9              | 6.7                    | 2.8087 µg/L           | 2.8087 ppb            | 07:19:04         |
| 1     | Ti 334.940†        | -296.9           | 415.3                  | 1.0386 µg/L           | 1.0386 ppb            | 07:18:44         |
| 1     | Tl 190.801†        | -35.4            | 2.1                    | 2.2697 µg/L           | 2.2697 ppb            | 07:19:04         |
| 1     | U 409.014†         | 87.9             | 144.3                  | 13.770 µg/L           | 13.770 ppb            | 07:18:44         |
| 1     | V 292.402†         | 152.2            | 30.8                   | 0.4124 µg/L           | 0.4124 ppb            | 07:18:44         |
| 1     | Zn 213.857†        | 662.6            | 19.6                   | 0.4636 µg/L           | 0.4636 ppb            | 07:19:04         |
| 2     | Sc RADIAL          | 85541.3          | 85541.3                | 99.7 %                |                       | 07:17:41         |
| 2     | Al 396.153Radial†  | -228.3           | 28.2                   | 14.636 µg/L           | 14.636 ppb            | 07:17:41         |
| 2     | Ca 317.933Radial†  | 355.6            | 31.5                   | 11.659 µg/L           | 11.659 ppb            | 07:18:02         |
| 2     | Fe 238.204 Radial† | 14.5             | -0.4                   | -4.4832 µg/L          | -4.4832 ppb           | 07:18:02         |
| 2     | K 766.490 Radial†  | 667.8            | 296.1                  | 149.88 µg/L           | 149.88 ppb            | 07:17:41         |
| 2     | Mg 279.077 IEC†    | 7.3              | 1.4                    | 17.637 µg/L           | 17.637 ppb            | 07:18:02         |
| 2     | Na 589.592 Radial† | 319.3            | 107.9                  | 51.455 µg/L           | 51.455 ppb            | 07:17:41         |
| 2     | Sr 421.552†        | 176.9            | 59.0                   | 0.3588 µg/L           | 0.3588 ppb            | 07:17:41         |
| 2     | Sc 361.383         | 1841178.8        | 1841178.8              | 101.10 %              |                       | 07:19:10         |
| 2     | Y 371.029          | 1271277.3        | 1271277.3              | 100.96 %              |                       | 07:19:10         |
| 2     | Ag 328.068†        | -561.4           | -17.9                  | -0.1546 µg/L          | -0.1546 ppb           | 07:19:16         |
| 2     | As 188.979†        | -1.8             | 0.8                    | 1.2396 µg/L           | 1.2396 ppb            | 07:19:36         |
| 2     | B 249.677†         | 392.2            | 78.9                   | 3.8637 µg/L           | 3.8637 ppb            | 07:19:36         |
| 2     | Ba 233.527†        | -11.6            | 7.8                    | 0.1832 µg/L           | 0.1832 ppb            | 07:19:36         |
| 2     | Be 313.107†        | -1442.8          | 108.4                  | 0.0678 µg/L           | 0.0678 ppb            | 07:19:16         |
| 2     | Cd 226.502†        | -166.8           | 1.2                    | 0.0328 µg/L           | 0.0328 ppb            | 07:19:36         |
| 2     | Co 228.616†        | 34.6             | 9.4                    | 0.4302 µg/L           | 0.4302 ppb            | 07:19:36         |
| 2     | Cr 267.716†        | 117.5            | 56.2                   | 1.2991 µg/L           | 1.2991 ppb            | 07:19:36         |
| 2     | Cu 324.752†        | 4917.8           | 595.6                  | 4.1809 µg/L           | 4.1809 ppb            | 07:19:16         |
| 2     | Mn 257.610†        | -702.3           | 54.0                   | 0.1759 µg/L           | 0.1759 ppb            | 07:19:36         |
| 2     | Mo 202.031†        | 30.1             | 19.9                   | 2.0894 µg/L           | 2.0894 ppb            | 07:19:36         |
| 2     | Ni 231.604†        | 383.4            | 25.5                   | 1.5090 µg/L           | 1.5090 ppb            | 07:19:36         |
| 2     | P 214.914†         | 292.1            | 1.9                    | 2.9359 µg/L           | 2.9359 ppb            | 07:19:36         |
| 2     | Pb 220.353†        | 54.1             | 10.1                   | 2.8300 µg/L           | 2.8300 ppb            | 07:19:36         |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 23.9      | 1.6       | 5.4363 µg/L  | 5.4363 ppb  | 07:19:36 |
| 2 | Sb 206.836†        | 33.1      | 5.7       | 5.3932 µg/L  | 5.3932 ppb  | 07:19:36 |
| 2 | Se 196.026†        | 29.7      | 2.7       | 2.6167 µg/L  | 2.6167 ppb  | 07:19:36 |
| 2 | SiO2†              | 2912.9    | 33.2      | 6.2667 µg/L  | 6.2667 ppb  | 07:19:16 |
| 2 | Si 251.611†        | 548.8     | 121.3     | 8.6315 µg/L  | 8.6315 ppb  | 07:19:36 |
| 2 | Sn 189.927†        | 7.3       | 9.0       | 3.8070 µg/L  | 3.8070 ppb  | 07:19:36 |
| 2 | Ti 334.940†        | -321.0    | 389.9     | 0.9805 µg/L  | 0.9805 ppb  | 07:19:16 |
| 2 | Tl 190.801†        | -35.4     | 2.0       | 2.1357 µg/L  | 2.1357 ppb  | 07:19:36 |
| 2 | U 409.014†         | -12.3     | 45.7      | 4.3645 µg/L  | 4.3645 ppb  | 07:19:16 |
| 2 | V 292.402†         | 111.2     | -9.0      | -0.0902 µg/L | -0.0902 ppb | 07:19:16 |
| 2 | Zn 213.857†        | 660.6     | 21.0      | 0.4943 µg/L  | 0.4943 ppb  | 07:19:36 |
| 3 | Sc RADIAL          | 86021.7   | 86021.7   | 100 %        |             | 07:18:07 |
| 3 | Al 396.153Radial†  | -249.8    | 8.0       | 4.1487 µg/L  | 4.1487 ppb  | 07:18:07 |
| 3 | Ca 317.933Radial†  | 364.8     | 38.7      | 14.328 µg/L  | 14.328 ppb  | 07:18:28 |
| 3 | Fe 238.204 Radial† | 15.1      | 0.1       | 0.7698 µg/L  | 0.7698 ppb  | 07:18:28 |
| 3 | K 766.490 Radial†  | 617.8     | 242.5     | 122.75 µg/L  | 122.75 ppb  | 07:18:07 |
| 3 | Mg 279.077 IEC†    | 14.7      | 8.7       | 109.93 µg/L  | 109.93 ppb  | 07:18:28 |
| 3 | Na 589.592 Radial† | 297.9     | 84.7      | 40.410 µg/L  | 40.410 ppb  | 07:18:07 |
| 3 | Sr 421.552†        | 177.7     | 58.8      | 0.3577 µg/L  | 0.3577 ppb  | 07:18:07 |
| 3 | Sc 361.383         | 1842414.1 | 1842414.1 | 101.17 %     |             | 07:19:42 |
| 3 | Y 371.029          | 1271442.9 | 1271442.9 | 100.98 %     |             | 07:19:42 |
| 3 | Ag 328.068†        | -566.4    | -22.4     | -0.1939 µg/L | -0.1939 ppb | 07:19:48 |
| 3 | As 188.979†        | -0.1      | 2.5       | 3.8137 µg/L  | 3.8137 ppb  | 07:20:08 |
| 3 | B 249.677†         | 373.2     | 59.8      | 2.9291 µg/L  | 2.9291 ppb  | 07:20:08 |
| 3 | Ba 233.527†        | -5.6      | 13.8      | 0.3219 µg/L  | 0.3219 ppb  | 07:20:08 |
| 3 | Be 313.107†        | -1411.7   | 140.1     | 0.0879 µg/L  | 0.0879 ppb  | 07:19:48 |
| 3 | Cd 226.502†        | -153.0    | 14.9      | 0.3815 µg/L  | 0.3815 ppb  | 07:20:08 |
| 3 | Co 228.616†        | 35.0      | 9.8       | 0.4488 µg/L  | 0.4488 ppb  | 07:20:08 |
| 3 | Cr 267.716†        | 103.0     | 41.7      | 0.9655 µg/L  | 0.9655 ppb  | 07:20:08 |
| 3 | Cu 324.752†        | 4835.0    | 510.4     | 3.5839 µg/L  | 3.5839 ppb  | 07:19:48 |
| 3 | Mn 257.610†        | -677.7    | 78.8      | 0.2513 µg/L  | 0.2513 ppb  | 07:20:08 |
| 3 | Mo 202.031†        | 27.3      | 17.2      | 1.8003 µg/L  | 1.8003 ppb  | 07:20:08 |
| 3 | Ni 231.604†        | 388.2     | 29.9      | 1.7704 µg/L  | 1.7704 ppb  | 07:20:08 |
| 3 | P 214.914†         | 291.3     | 1.0       | 1.3548 µg/L  | 1.3548 ppb  | 07:20:08 |
| 3 | Pb 220.353†        | 45.7      | 1.8       | 0.5098 µg/L  | 0.5098 ppb  | 07:20:08 |
| 3 | S 181.975 Axial†   | 26.6      | 4.3       | 14.130 µg/L  | 14.130 ppb  | 07:20:08 |
| 3 | Sb 206.836†        | 29.6      | 2.2       | 2.1206 µg/L  | 2.1206 ppb  | 07:20:08 |
| 3 | Se 196.026†        | 21.8      | -5.2      | -5.2219 µg/L | -5.2219 ppb | 07:20:08 |
| 3 | SiO2†              | 2918.1    | 36.4      | 6.8867 µg/L  | 6.8867 ppb  | 07:19:48 |
| 3 | Si 251.611†        | 544.5     | 116.7     | 8.3064 µg/L  | 8.3064 ppb  | 07:20:08 |
| 3 | Sn 189.927†        | 10.1      | 11.8      | 4.9755 µg/L  | 4.9755 ppb  | 07:20:08 |
| 3 | Ti 334.940†        | -391.6    | 320.3     | 0.7980 µg/L  | 0.7980 ppb  | 07:19:48 |
| 3 | Tl 190.801†        | -29.7     | 7.6       | 8.0065 µg/L  | 8.0065 ppb  | 07:20:08 |
| 3 | U 409.014†         | -13.7     | 44.3      | 4.2287 µg/L  | 4.2287 ppb  | 07:19:48 |
| 3 | V 292.402†         | 105.0     | -15.2     | -0.1719 µg/L | -0.1719 ppb | 07:19:48 |
| 3 | Zn 213.857†        | 696.5     | 56.0      | 1.3381 µg/L  | 1.3381 ppb  | 07:20:08 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1844751.2                | 101.30 %           | 0.283    |                    |          | 0.28%   |
| Sc RADIAL   | 85449.4                  | 99.6 %             | 0.73     |                    |          | 0.73%   |
| Y 371.029   | 1273488.6                | 101.14 %           | 0.293    |                    |          | 0.29%   |
| Ag 328.068†   | -2.4                     | -0.0192 µg/L       | 0.26925  | -0.0192 ppb        | 0.26925  | >999.9% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 23.9                     | 12.426 µg/L        | 7.4232   | 12.426 ppb         | 7.4232   | 59.74%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 1.2                      | 1.8890 µg/L        | 1.69588  | 1.8890 ppb         | 1.69588  | 89.78%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 78.8                     | 3.8489 µg/L        | 0.91249  | 3.8489 ppb         | 0.91249  | 23.71%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 14.5                     | 0.3398 µg/L        | 0.16628  | 0.3398 ppb         | 0.16628  | 48.93%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 151.9                    | 0.0952 µg/L        | 0.03164  | 0.0952 ppb         | 0.03164  | 33.24%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 37.5                     | 13.895 µg/L        | 2.0548   | 13.895 ppb         | 2.0548   | 14.79%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | 10.1                     | 0.2561 µg/L        | 0.19385  | 0.2561 ppb         | 0.19385  | 75.69%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 13.8                     | 0.6326 µg/L        | 0.33461  | 0.6326 ppb         | 0.33461  | 52.90%  |

|  |       |              |         |             |         |         |  |
|--|-------|--------------|---------|-------------|---------|---------|--|
| QC value within limits for Co 228.616 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Cr 267.716†  | 44.4  | 1.0281 µg/L  | 0.24569 | 1.0281 ppb  | 0.24569 | 23.90%  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Cu 324.752†  | 549.8 | 3.8617 µg/L  | 0.30063 | 3.8617 ppb  | 0.30063 | 7.78%   |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Fe 238.204 Radial†   | 0.9   | 10.661 µg/L  | 21.8404 | 10.661 ppb  | 21.8404 | 204.86% |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |       |              |         |             |         |         |  |
| K 766.490 Radial†  | 262.8 | 133.01 µg/L  | 14.728  | 133.01 ppb  | 14.728  | 11.07%  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |       |              |         |             |         |         |  |
| Mg 279.077 IEC†  | 5.7   | 72.881 µg/L  | 48.7620 | 72.881 ppb  | 48.7620 | 66.91%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |       |              |         |             |         |         |  |
| Mn 257.610†  | 47.4  | 0.1513 µg/L  | 0.11442 | 0.1513 ppb  | 0.11442 | 75.65%  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Mo 202.031†  | 17.6  | 1.8435 µg/L  | 0.22736 | 1.8435 ppb  | 0.22736 | 12.33%  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Na 589.592 Radial†   | 98.1  | 46.756 µg/L  | 5.7040  | 46.756 ppb  | 5.7040  | 12.20%  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |       |              |         |             |         |         |  |
| Ni 231.604†  | 16.2  | 0.9566 µg/L  | 1.19030 | 0.9566 ppb  | 1.19030 | 124.43% |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |       |              |         |             |         |         |  |
| P 214.914†   | 2.0   | 3.1025 µg/L  | 1.83666 | 3.1025 ppb  | 1.83666 | 59.20%  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |       |              |         |             |         |         |  |
| Pb 220.353†  | 7.4   | 2.0654 µg/L  | 1.34727 | 2.0654 ppb  | 1.34727 | 65.23%  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |       |              |         |             |         |         |  |
| S 181.975 Axial†   | 2.2   | 7.3908 µg/L  | 6.00558 | 7.3908 ppb  | 6.00558 | 81.26%  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |       |              |         |             |         |         |  |
| Sb 206.836†  | 5.7   | 5.4037 µg/L  | 3.28849 | 5.4037 ppb  | 3.28849 | 60.86%  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Se 196.026†  | -1.9  | -1.8580 µg/L | 4.03563 | -1.8580 ppb | 4.03563 | 217.20% |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |       |              |         |             |         |         |  |
| SiO2†  | 35.4  | 6.6955 µg/L  | 0.37209 | 6.6955 ppb  | 0.37209 | 5.56%   |  |
| QC value within limits for SiO2 Recovery = Not calculated              |       |              |         |             |         |         |  |
| Si 251.611†  | 114.8 | 8.1723 µg/L  | 0.53900 | 8.1723 ppb  | 0.53900 | 6.60%   |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Sn 189.927†  | 9.2   | 3.8637 µg/L  | 1.08452 | 3.8637 ppb  | 1.08452 | 28.07%  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Sr 421.552†  | 65.7  | 0.3999 µg/L  | 0.07218 | 0.3999 ppb  | 0.07218 | 18.05%  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Ti 334.940†  | 375.2 | 0.9390 µg/L  | 0.12558 | 0.9390 ppb  | 0.12558 | 13.37%  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |       |              |         |             |         |         |  |
| Tl 190.801†  | 3.9   | 4.1373 µg/L  | 3.35151 | 4.1373 ppb  | 3.35151 | 81.01%  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |       |              |         |             |         |         |  |
| U 409.014†   | 78.1  | 7.4544 µg/L  | 5.46979 | 7.4544 ppb  | 5.46979 | 73.38%  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |       |              |         |             |         |         |  |
| V 292.402†   | 2.2   | 0.0501 µg/L  | 0.31642 | 0.0501 ppb  | 0.31642 | 631.86% |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |       |              |         |             |         |         |  |
| Zn 213.857†  | 32.2  | 0.7653 µg/L  | 0.49628 | 0.7653 ppb  | 0.49628 | 64.84%  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |       |              |         |             |         |         |  |

All analyte(s) passed QC.

## =====

Analysis Begun

Start Time: 3/11/2010 07:24:55

Plasma On Time: 3/6/2010 19:06:21

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031110A.sif

Batch ID:

Results Data Set: 031110

Results Library: c:\pe\optimal\Results\Results.mdb

## =====

Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 3/11/2010 06:15:32

IEC File: 011510.iec

MSF File:

Method Description:

| Analyte           | Calibration Equation | Processing | View   | Internal Standard | IEC |
|-------------------|----------------------|------------|--------|-------------------|-----|
| Ag 328.068        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Al 396.153Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| As 188.979        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| B 249.677         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ba 233.527        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Be 313.107        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ca 317.933Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Cd 226.502        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Co 228.616        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cr 267.716        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cu 324.752        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Fe 238.204 Radial | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| K 766.490 Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Mg 279.077 IEC    | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| Mn 257.610        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Mo 202.031        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Na 589.592 Radial | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Ni 231.604        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| P 214.914         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Pb 220.353        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| S 181.975 Axial   | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Sb 206.836        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sc 361.383        | Lin Thru 0           | Peak Area  | Axial  | n/a               | n/a |
| Sc RADIAL         | Lin, Calc Int        | Peak Area  | Radial | n/a               | n/a |
| Se 196.026        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| SiO2              | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Si 251.611        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Sn 189.927        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sr 421.552        | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Ti 334.940        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Tl 190.801        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| U 409.014         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| V 292.402         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Y 371.029         | Lin, Calc Int        | Peak Area  | Axial  | n/a               | n/a |
| Zn 213.857        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |

=====

Sequence No.: 1

Autosampler Location: 113

Sample ID: LR2

Date Collected: 3/11/2010 07:24:58

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

-----

Replicate Data: LR2

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86022.8       | 86022.8             | 100 %              |                    | 07:25:32      |
| 1     | Al 396.153Radial†  | -242.7        | 15.1                | 7.8444 µg/L        | 7.8444 ppb         | 07:25:32      |
| 1     | Ca 317.933Radial†  | 435.3         | 109.0               | 40.373 µg/L        | 40.373 ppb         | 07:25:53      |
| 1     | Fe 238.204 Radial† | 13.0          | -2.0                | -22.870 µg/L       | -22.870 ppb        | 07:25:53      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 1 | K 766.490 Radial†  | 385.0     | 10.3      | 5.1985 µg/L  | 5.1985 ppb  | 07:25:32 |
| 1 | Mg 279.077 IEC†    | 13.3      | 7.3       | 92.733 µg/L  | 92.733 ppb  | 07:25:53 |
| 1 | Na 589.592 Radial† | 270.7     | 57.7      | 27.493 µg/L  | 27.493 ppb  | 07:25:32 |
| 1 | Sr 421.552†        | 141.7     | 22.8      | 0.1390 µg/L  | 0.1390 ppb  | 07:25:32 |
| 1 | Sc 361.383         | 1824520.3 | 1824520.3 | 100.19 %     |             | 07:26:55 |
| 1 | Y 371.029          | 1260207.2 | 1260207.2 | 100.08 %     |             | 07:26:55 |
| 1 | Ag 328.068†        | -568.0    | -29.5     | -0.2546 µg/L | -0.2546 ppb | 07:27:01 |
| 1 | As 188.979†        | -3.5      | -1.0      | -1.4703 µg/L | -1.4703 ppb | 07:27:22 |
| 1 | B 249.677†         | 326.2     | 16.6      | 0.8233 µg/L  | 0.8233 ppb  | 07:27:22 |
| 1 | Ba 233.527†        | 479520.6  | 478651.1  | 11203 µg/L   | 11203 ppb   | 07:26:55 |
| 1 | Be 313.107†        | -1502.4   | 36.0      | 0.0225 µg/L  | 0.0225 ppb  | 07:27:01 |
| 1 | Cd 226.502†        | -167.0    | -0.5      | -0.0093 µg/L | -0.0093 ppb | 07:27:22 |
| 1 | Co 228.616†        | -282.1    | -306.4    | -14.023 µg/L | -14.023 ppb | 07:27:22 |
| 1 | Cr 267.716†        | 93.4      | 33.2      | 0.7677 µg/L  | 0.7677 ppb  | 07:27:22 |
| 1 | Cu 324.752†        | 4550.8    | 273.7     | 1.9173 µg/L  | 1.9173 ppb  | 07:27:01 |
| 1 | Mn 257.610†        | -783.6    | -33.5     | -0.1177 µg/L | -0.1177 ppb | 07:27:22 |
| 1 | Mo 202.031†        | 14.1      | 4.2       | 0.4436 µg/L  | 0.4436 ppb  | 07:27:22 |
| 1 | Ni 231.604†        | 362.5     | 8.0       | 0.4918 µg/L  | 0.4918 ppb  | 07:27:22 |
| 1 | P 214.914†         | 285.2     | -2.4      | -4.1742 µg/L | -4.1742 ppb | 07:27:22 |
| 1 | Pb 220.353†        | 54.4      | 10.9      | 3.0576 µg/L  | 3.0576 ppb  | 07:27:22 |
| 1 | S 181.975 Axial†   | 24.2      | 2.2       | 7.3017 µg/L  | 7.3017 ppb  | 07:27:22 |
| 1 | Sb 206.836†        | 30.9      | 3.9       | 3.6369 µg/L  | 3.6369 ppb  | 07:27:22 |
| 1 | Se 196.026†        | 22.2      | -4.6      | -4.6521 µg/L | -4.6521 ppb | 07:27:22 |
| 1 | SiO2†              | 2888.4    | 35.0      | 6.6196 µg/L  | 6.6196 ppb  | 07:27:01 |
| 1 | Si 251.611†        | 460.3     | 38.0      | 2.7040 µg/L  | 2.7040 ppb  | 07:27:22 |
| 1 | Sn 189.927†        | 4.5       | 6.2       | 2.6330 µg/L  | 2.6330 ppb  | 07:27:22 |
| 1 | Ti 334.940†        | -524.2    | 184.2     | 0.4570 µg/L  | 0.4570 ppb  | 07:27:01 |
| 1 | Tl 190.801†        | -36.8     | 0.3       | 0.3380 µg/L  | 0.3380 ppb  | 07:27:22 |
| 1 | U 409.014†         | -52.1     | 5.9       | 0.5593 µg/L  | 0.5593 ppb  | 07:27:01 |
| 1 | V 292.402†         | 125.5     | 6.3       | 0.0893 µg/L  | 0.0893 ppb  | 07:27:01 |
| 1 | Zn 213.857†        | 639.2     | 5.6       | 0.1273 µg/L  | 0.1273 ppb  | 07:27:22 |
| 2 | Sc RADIAL          | 84849.6   | 84849.6   | 98.9 %       |             | 07:25:58 |
| 2 | Al 396.153Radial†  | -250.4    | 3.9       | 2.0485 µg/L  | 2.0485 ppb  | 07:25:58 |
| 2 | Ca 317.933Radial†  | 425.7     | 105.3     | 39.006 µg/L  | 39.006 ppb  | 07:26:19 |
| 2 | Fe 238.204 Radial† | 15.3      | 0.5       | 5.4144 µg/L  | 5.4144 ppb  | 07:26:19 |
| 2 | K 766.490 Radial†  | 441.4     | 72.7      | 36.799 µg/L  | 36.799 ppb  | 07:25:58 |
| 2 | Mg 279.077 IEC†    | 7.4       | 1.5       | 19.521 µg/L  | 19.521 ppb  | 07:26:19 |
| 2 | Na 589.592 Radial† | 238.8     | 29.1      | 13.855 µg/L  | 13.855 ppb  | 07:25:58 |
| 2 | Sr 421.552†        | 192.9     | 76.6      | 0.4661 µg/L  | 0.4661 ppb  | 07:25:58 |
| 2 | Sc 361.383         | 1811429.7 | 1811429.7 | 99.467 %     |             | 07:27:28 |
| 2 | Y 371.029          | 1252326.4 | 1252326.4 | 99.458 %     |             | 07:27:28 |
| 2 | Ag 328.068†        | -527.6    | 7.1       | 0.0639 µg/L  | 0.0639 ppb  | 07:27:34 |
| 2 | As 188.979†        | -5.7      | -3.1      | -4.8336 µg/L | -4.8336 ppb | 07:27:54 |
| 2 | B 249.677†         | 334.1     | 26.8      | 1.3084 µg/L  | 1.3084 ppb  | 07:27:54 |
| 2 | Ba 233.527†        | 477659.5  | 480238.9  | 11240 µg/L   | 11240 ppb   | 07:27:28 |
| 2 | Be 313.107†        | -1461.8   | 66.0      | 0.0414 µg/L  | 0.0414 ppb  | 07:27:34 |
| 2 | Cd 226.502†        | -160.1    | 5.2       | 0.1326 µg/L  | 0.1326 ppb  | 07:27:54 |
| 2 | Co 228.616†        | -287.6    | -313.9    | -14.367 µg/L | -14.367 ppb | 07:27:54 |
| 2 | Cr 267.716†        | 89.0      | 29.5      | 0.6817 µg/L  | 0.6817 ppb  | 07:27:54 |
| 2 | Cu 324.752†        | 4468.6    | 223.9     | 1.5730 µg/L  | 1.5730 ppb  | 07:27:34 |
| 2 | Mn 257.610†        | -816.2    | -71.9     | -0.2370 µg/L | -0.2370 ppb | 07:27:54 |
| 2 | Mo 202.031†        | 1.8       | -8.0      | -0.8415 µg/L | -0.8415 ppb | 07:27:54 |
| 2 | Ni 231.604†        | 378.1     | 26.4      | 1.5785 µg/L  | 1.5785 ppb  | 07:27:54 |
| 2 | P 214.914†         | 294.0     | 8.6       | 14.484 µg/L  | 14.484 ppb  | 07:27:54 |
| 2 | Pb 220.353†        | 61.8      | 18.8      | 5.2600 µg/L  | 5.2600 ppb  | 07:27:54 |
| 2 | S 181.975 Axial†   | 18.1      | -3.8      | -12.410 µg/L | -12.410 ppb | 07:27:54 |
| 2 | Sb 206.836†        | 27.4      | 0.5       | 0.4546 µg/L  | 0.4546 ppb  | 07:27:54 |
| 2 | Se 196.026†        | 23.8      | -2.8      | -2.8107 µg/L | -2.8107 ppb | 07:27:54 |
| 2 | SiO2†              | 2882.2    | 49.7      | 9.3843 µg/L  | 9.3843 ppb  | 07:27:34 |
| 2 | Si 251.611†        | 470.6     | 51.7      | 3.6774 µg/L  | 3.6774 ppb  | 07:27:54 |
| 2 | Sn 189.927†        | -3.4      | -1.6      | -0.6803 µg/L | -0.6803 ppb | 07:27:54 |
| 2 | Ti 334.940†        | -600.1    | 104.1     | 0.2611 µg/L  | 0.2611 ppb  | 07:27:34 |
| 2 | Tl 190.801†        | -40.4     | -3.7      | -3.7878 µg/L | -3.7878 ppb | 07:27:54 |
| 2 | U 409.014†         | -13.2     | 44.6      | 4.2529 µg/L  | 4.2529 ppb  | 07:27:34 |
| 2 | V 292.402†         | 150.4     | 32.2      | 0.4064 µg/L  | 0.4064 ppb  | 07:27:34 |
| 2 | Zn 213.857†        | 653.3     | 24.4      | 0.5813 µg/L  | 0.5813 ppb  | 07:27:54 |
| 3 | Sc RADIAL          | 83573.3   | 83573.3   | 97.4 %       |             | 07:26:24 |
| 3 | Al 396.153Radial†  | -257.2    | -6.9      | -3.6318 µg/L | -3.6318 ppb | 07:26:24 |
| 3 | Ca 317.933Radial†  | 415.5     | 101.5     | 37.579 µg/L  | 37.579 ppb  | 07:26:45 |
| 3 | Fe 238.204 Radial† | 15.1      | 0.6       | 6.1460 µg/L  | 6.1460 ppb  | 07:26:45 |
| 3 | K 766.490 Radial†  | 475.1     | 114.1     | 57.735 µg/L  | 57.735 ppb  | 07:26:24 |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 3 | Mg 279.077 IEC†    | 7.8       | 2.1       | 26.519 µg/L  | 26.519 ppb  | 07:26:45 |
| 3 | Na 589.592 Radial† | 228.8     | 22.5      | 10.730 µg/L  | 10.730 ppb  | 07:26:24 |
| 3 | Sr 421.552†        | 231.1     | 118.9     | 0.7234 µg/L  | 0.7234 ppb  | 07:26:24 |
| 3 | Sc 361.383         | 1817874.2 | 1817874.2 | 99.821 %     |             | 07:28:00 |
| 3 | Y 371.029          | 1256285.9 | 1256285.9 | 99.773 %     |             | 07:28:00 |
| 3 | Ag 328.068†        | -658.0    | -121.7    | -1.0458 µg/L | -1.0458 ppb | 07:28:06 |
| 3 | As 188.979†        | -3.3      | -0.7      | -1.0933 µg/L | -1.0933 ppb | 07:28:26 |
| 3 | B 249.677†         | 338.1     | 29.7      | 1.4489 µg/L  | 1.4489 ppb  | 07:28:26 |
| 3 | Ba 233.527†        | 444910.8  | 445729.1  | 10433 µg/L   | 10433 ppb   | 07:28:00 |
| 3 | Be 313.107†        | -1597.7   | -65.0     | -0.0410 µg/L | -0.0410 ppb | 07:28:06 |
| 3 | Cd 226.502†        | -162.8    | 3.1       | 0.0788 µg/L  | 0.0788 ppb  | 07:28:26 |
| 3 | Co 228.616†        | -227.7    | -252.9    | -11.575 µg/L | -11.575 ppb | 07:28:26 |
| 3 | Cr 267.716†        | 94.0      | 34.1      | 0.7890 µg/L  | 0.7890 ppb  | 07:28:26 |
| 3 | Cu 324.752†        | 4461.5    | 200.8     | 1.4109 µg/L  | 1.4109 ppb  | 07:28:06 |
| 3 | Mn 257.610†        | -785.8    | -38.6     | -0.1282 µg/L | -0.1282 ppb | 07:28:26 |
| 3 | Mo 202.031†        | 19.1      | 9.3       | 0.9778 µg/L  | 0.9778 ppb  | 07:28:26 |
| 3 | Ni 231.604†        | 358.5     | 5.4       | 0.3347 µg/L  | 0.3347 ppb  | 07:28:26 |
| 3 | P 214.914†         | 289.6     | 3.1       | 5.1367 µg/L  | 5.1367 ppb  | 07:28:26 |
| 3 | Pb 220.353†        | 58.2      | 14.9      | 4.1763 µg/L  | 4.1763 ppb  | 07:28:26 |
| 3 | S 181.975 Axial†   | 24.2      | 2.3       | 7.4541 µg/L  | 7.4541 ppb  | 07:28:26 |
| 3 | Sb 206.836†        | 28.1      | 1.1       | 1.0729 µg/L  | 1.0729 ppb  | 07:28:26 |
| 3 | Se 196.026†        | 21.8      | -4.9      | -4.8640 µg/L | -4.8640 ppb | 07:28:26 |
| 3 | SiO2†              | 2815.1    | -27.9     | -5.2667 µg/L | -5.2667 ppb | 07:28:06 |
| 3 | Si 251.611†        | 474.0     | 53.3      | 3.7957 µg/L  | 3.7957 ppb  | 07:28:26 |
| 3 | Sn 189.927†        | -5.2      | -3.4      | -1.4230 µg/L | -1.4230 ppb | 07:28:26 |
| 3 | Ti 334.940†        | -603.9    | 102.4     | 0.2563 µg/L  | 0.2563 ppb  | 07:28:06 |
| 3 | Tl 190.801†        | -39.0     | -2.1      | -2.1300 µg/L | -2.1300 ppb | 07:28:26 |
| 3 | U 409.014†         | -31.6     | 26.2      | 2.4992 µg/L  | 2.4992 ppb  | 07:28:06 |
| 3 | V 292.402†         | 116.7     | -2.1      | -0.0161 µg/L | -0.0161 ppb | 07:28:06 |
| 3 | Zn 213.857†        | 691.5     | 60.3      | 1.4556 µg/L  | 1.4556 ppb  | 07:28:26 |

## Mean Data: LR2

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383         | 1817941.4                | 99.824 %     |        | 0.3594   |                    |          | 0.36%   |
| Sc RADIAL          | 84815.3                  | 98.8 %       |        | 1.43     |                    |          | 1.44%   |
| Y 371.029          | 1256273.2                | 99.772 %     |        | 0.3129   |                    |          | 0.31%   |
| Ag 328.068†        | -48.0                    | -0.4122 µg/L |        | 0.57140  | -0.4122 ppb        | 0.57140  | 138.63% |
| Al 396.153Radial†  | 4.0                      | 2.0870 µg/L  |        | 5.73823  | 2.0870 ppb         | 5.73823  | 274.95% |
| As 188.979†        | -1.6                     | -2.4658 µg/L |        | 2.05927  | -2.4658 ppb        | 2.05927  | 83.51%  |
| B 249.677†         | 24.3                     | 1.1935 µg/L  |        | 0.32822  | 1.1935 ppb         | 0.32822  | 27.50%  |
| Ba 233.527†        | 468206.4                 | 10959 µg/L   |        | 456.0    | 10959 ppb          | 456.0    | 4.16%   |
| Be 313.107†        | 12.3                     | 0.0076 µg/L  |        | 0.04317  | 0.0076 ppb         | 0.04317  | 566.22% |
| Ca 317.933Radial†  | 105.3                    | 38.986 µg/L  |        | 1.3973   | 38.986 ppb         | 1.3973   | 3.58%   |
| Cd 226.502†        | 2.6                      | 0.0674 µg/L  |        | 0.07166  | 0.0674 ppb         | 0.07166  | 106.38% |
| Co 228.616†        | -291.1                   | -13.322 µg/L |        | 1.5223   | -13.322 ppb        | 1.5223   | 11.43%  |
| Cr 267.716†        | 32.3                     | 0.7461 µg/L  |        | 0.05678  | 0.7461 ppb         | 0.05678  | 7.61%   |
| Cu 324.752†        | 232.8                    | 1.6337 µg/L  |        | 0.25859  | 1.6337 ppb         | 0.25859  | 15.83%  |
| Fe 238.204 Radial† | -0.3                     | -3.7698 µg/L |        | 16.54520 | -3.7698 ppb        | 16.54520 | 438.88% |
| K 766.490 Radial†  | 65.7                     | 33.244 µg/L  |        | 26.4483  | 33.244 ppb         | 26.4483  | 79.56%  |
| Mg 279.077 IEC†    | 3.6                      | 46.258 µg/L  |        | 40.4005  | 46.258 ppb         | 40.4005  | 87.34%  |
| Mn 257.610†        | -48.0                    | -0.1610 µg/L |        | 0.06608  | -0.1610 ppb        | 0.06608  | 41.05%  |
| Mo 202.031†        | 1.8                      | 0.1933 µg/L  |        | 0.93513  | 0.1933 ppb         | 0.93513  | 483.83% |
| Na 589.592 Radial† | 36.4                     | 17.359 µg/L  |        | 8.9142   | 17.359 ppb         | 8.9142   | 51.35%  |
| Ni 231.604†        | 13.3                     | 0.8017 µg/L  |        | 0.67731  | 0.8017 ppb         | 0.67731  | 84.49%  |
| P 214.914†         | 3.1                      | 5.1488 µg/L  |        | 9.32894  | 5.1488 ppb         | 9.32894  | 181.19% |
| Pb 220.353†        | 14.9                     | 4.1646 µg/L  |        | 1.10124  | 4.1646 ppb         | 1.10124  | 26.44%  |
| S 181.975 Axial†   | 0.2                      | 0.7820 µg/L  |        | 11.42476 | 0.7820 ppb         | 11.42476 | >999.9% |
| Sb 206.836†        | 1.8                      | 1.7215 µg/L  |        | 1.68739  | 1.7215 ppb         | 1.68739  | 98.02%  |
| Se 196.026†        | -4.1                     | -4.1089 µg/L |        | 1.12931  | -4.1089 ppb        | 1.12931  | 27.48%  |
| SiO2†              | 18.9                     | 3.5791 µg/L  |        | 7.78439  | 3.5791 ppb         | 7.78439  | 217.50% |
| Si 251.611†        | 47.7                     | 3.3923 µg/L  |        | 0.59908  | 3.3923 ppb         | 0.59908  | 17.66%  |
| Sn 189.927†        | 0.4                      | 0.1766 µg/L  |        | 2.15949  | 0.1766 ppb         | 2.15949  | >999.9% |
| Sr 421.552†        | 72.8                     | 0.4428 µg/L  |        | 0.29287  | 0.4428 ppb         | 0.29287  | 66.14%  |
| Ti 334.940†        | 130.2                    | 0.3248 µg/L  |        | 0.11448  | 0.3248 ppb         | 0.11448  | 35.24%  |
| Tl 190.801†        | -1.8                     | -1.8599 µg/L |        | 2.07615  | -1.8599 ppb        | 2.07615  | 111.62% |
| U 409.014†         | 25.6                     | 2.4371 µg/L  |        | 1.84760  | 2.4371 ppb         | 1.84760  | 75.81%  |
| V 292.402†         | 12.1                     | 0.1599 µg/L  |        | 0.21992  | 0.1599 ppb         | 0.21992  | 137.56% |
| Zn 213.857†        | 30.1                     | 0.7214 µg/L  |        | 0.67516  | 0.7214 ppb         | 0.67516  | 93.59%  |

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 07:28:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 87617.9       | 87617.9             | 102 %              |                    | 07:29:12      |
| 1     | Al 396.153Radial†  | 9721.3        | 9777.5              | 5079.6 µg/L        | 5079.6 ppb         | 07:29:12      |
| 1     | Ca 317.933Radial†  | 15030.3       | 14394.5             | 5330.6 µg/L        | 5330.6 ppb         | 07:29:12      |
| 1     | Fe 238.204 Radial† | 488.2         | 463.1               | 5283.0 µg/L        | 5283.0 ppb         | 07:29:32      |
| 1     | K 766.490 Radial†  | 10481.3       | 9890.9              | 5006.6 µg/L        | 5006.6 ppb         | 07:29:12      |
| 1     | Mg 279.077 IEC†    | 446.4         | 431.3               | 5471.4 µg/L        | 5471.4 ppb         | 07:29:32      |
| 1     | Na 589.592 Radial† | 22049.0       | 21380.9             | 10195 µg/L         | 10195 ppb          | 07:29:12      |
| 1     | Sr 421.552†        | 83869.8       | 82017.8             | 499.14 µg/L        | 499.14 ppb         | 07:29:12      |
| 1     | Sc 361.383         | 1842625.9     | 1842625.9           | 101.18 %           |                    | 07:30:35      |
| 1     | Y 371.029          | 1270084.2     | 1270084.2           | 100.87 %           |                    | 07:30:35      |
| 1     | Ag 328.068†        | 60878.6       | 60706.2             | 525.73 µg/L        | 525.73 ppb         | 07:30:41      |
| 1     | As 188.979†        | 371.4         | 369.7               | 565.92 µg/L        | 565.92 ppb         | 07:31:02      |
| 1     | B 249.677†         | 11215.7       | 10775.9             | 525.33 µg/L        | 525.33 ppb         | 07:30:41      |
| 1     | Ba 233.527†        | 23569.3       | 23313.8             | 546.65 µg/L        | 546.65 ppb         | 07:30:41      |
| 1     | Be 313.107†        | 871016.3      | 862394.8            | 542.40 µg/L        | 542.40 ppb         | 07:30:35      |
| 1     | Cd 226.502†        | 21944.8       | 21855.1             | 555.68 µg/L        | 555.68 ppb         | 07:30:41      |
| 1     | Co 228.616†        | 12034.1       | 11869.0             | 542.57 µg/L        | 542.57 ppb         | 07:31:02      |
| 1     | Cr 267.716†        | 24151.1       | 23809.5             | 551.08 µg/L        | 551.08 ppb         | 07:30:41      |
| 1     | Cu 324.752†        | 80055.8       | 74853.6             | 526.53 µg/L        | 526.53 ppb         | 07:30:41      |
| 1     | Mn 257.610†        | 165599.1      | 164416.7            | 539.76 µg/L        | 539.76 ppb         | 07:30:41      |
| 1     | Mo 202.031†        | 5469.7        | 5396.1              | 566.59 µg/L        | 566.59 ppb         | 07:31:02      |
| 1     | Ni 231.604†        | 9726.6        | 9259.4              | 547.56 µg/L        | 547.56 ppb         | 07:31:02      |
| 1     | P 214.914†         | 1982.4        | 1672.3              | 2802.3 µg/L        | 2802.3 ppb         | 07:31:02      |
| 1     | Pb 220.353†        | 2113.6        | 2045.6              | 574.38 µg/L        | 574.38 ppb         | 07:31:02      |
| 1     | S 181.975 Axial†   | 371.3         | 345.0               | 1138.7 µg/L        | 1138.7 ppb         | 07:31:02      |
| 1     | Sb 206.836†        | 619.6         | 585.4               | 552.87 µg/L        | 552.87 ppb         | 07:31:02      |
| 1     | Se 196.026†        | 593.9         | 560.2               | 566.93 µg/L        | 566.93 ppb         | 07:31:02      |
| 1     | SiO2†              | 33200.3       | 29965.1             | 5663.2 µg/L        | 5663.2 ppb         | 07:30:41      |
| 1     | Si 251.611†        | 38149.7       | 37283.4             | 2653.2 µg/L        | 2653.2 ppb         | 07:30:41      |
| 1     | Sn 189.927†        | 1397.8        | 1383.3              | 583.31 µg/L        | 583.31 ppb         | 07:31:02      |
| 1     | Ti 334.940†        | 209353.7      | 207619.8            | 522.37 µg/L        | 522.37 ppb         | 07:30:41      |
| 1     | Tl 190.801†        | 491.7         | 523.0               | 552.96 µg/L        | 552.96 ppb         | 07:31:02      |
| 1     | U 409.014†         | 5588.9        | 5581.6              | 531.64 µg/L        | 531.64 ppb         | 07:30:41      |
| 1     | V 292.402†         | 43103.2       | 42481.6             | 543.58 µg/L        | 543.58 ppb         | 07:30:41      |
| 1     | Zn 213.857†        | 23428.6       | 22523.0             | 541.95 µg/L        | 541.95 ppb         | 07:30:41      |
| 2     | Sc RADIAL          | 86984.9       | 86984.9             | 101 %              |                    | 07:29:38      |
| 2     | Al 396.153Radial†  | 9707.7        | 9833.4              | 5109.3 µg/L        | 5109.3 ppb         | 07:29:38      |
| 2     | Ca 317.933Radial†  | 14978.2       | 14450.1             | 5351.2 µg/L        | 5351.2 ppb         | 07:29:38      |
| 2     | Fe 238.204 Radial† | 487.5         | 465.9               | 5314.6 µg/L        | 5314.6 ppb         | 07:29:58      |
| 2     | K 766.490 Radial†  | 10494.7       | 9978.9              | 5051.2 µg/L        | 5051.2 ppb         | 07:29:38      |
| 2     | Mg 279.077 IEC†    | 440.8         | 428.9               | 5440.9 µg/L        | 5440.9 ppb         | 07:29:58      |
| 2     | Na 589.592 Radial† | 22001.4       | 21491.0             | 10248 µg/L         | 10248 ppb          | 07:29:38      |
| 2     | Sr 421.552†        | 83603.9       | 82353.2             | 501.18 µg/L        | 501.18 ppb         | 07:29:38      |
| 2     | Sc 361.383         | 1858225.0     | 1858225.0           | 102.04 %           |                    | 07:31:08      |
| 2     | Y 371.029          | 1285792.2     | 1285792.2           | 102.12 %           |                    | 07:31:08      |
| 2     | Ag 328.068†        | 60293.0       | 59627.1             | 516.38 µg/L        | 516.38 ppb         | 07:31:14      |
| 2     | As 188.979†        | 358.0         | 353.4               | 540.90 µg/L        | 540.90 ppb         | 07:31:35      |
| 2     | B 249.677†         | 11104.3       | 10573.6             | 515.40 µg/L        | 515.40 ppb         | 07:31:14      |
| 2     | Ba 233.527†        | 23331.4       | 22885.0             | 536.59 µg/L        | 536.59 ppb         | 07:31:14      |
| 2     | Be 313.107†        | 868542.1      | 852743.4            | 536.33 µg/L        | 536.33 ppb         | 07:31:08      |
| 2     | Cd 226.502†        | 21721.8       | 21454.5             | 545.46 µg/L        | 545.46 ppb         | 07:31:14      |
| 2     | Co 228.616†        | 11546.7       | 11291.5             | 516.14 µg/L        | 516.14 ppb         | 07:31:35      |
| 2     | Cr 267.716†        | 23886.8       | 23350.0             | 540.44 µg/L        | 540.44 ppb         | 07:31:14      |
| 2     | Cu 324.752†        | 79246.8       | 73396.5             | 516.30 µg/L        | 516.30 ppb         | 07:31:14      |
| 2     | Mn 257.610†        | 164112.2      | 161585.5            | 530.47 µg/L        | 530.47 ppb         | 07:31:14      |
| 2     | Mo 202.031†        | 5265.2        | 5150.3              | 540.79 µg/L        | 540.79 ppb         | 07:31:35      |
| 2     | Ni 231.604†        | 9349.5        | 8809.1              | 520.93 µg/L        | 520.93 ppb         | 07:31:35      |
| 2     | P 214.914†         | 1924.5        | 1599.1              | 2678.1 µg/L        | 2678.1 ppb         | 07:31:35      |
| 2     | Pb 220.353†        | 2039.3        | 1955.3              | 548.99 µg/L        | 548.99 ppb         | 07:31:35      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 356.6     | 327.5     | 1080.8 µg/L | 1080.8 ppb | 07:31:35 |
| 2 | Sb 206.836†        | 597.6     | 558.6     | 527.42 µg/L | 527.42 ppb | 07:31:35 |
| 2 | Se 196.026†        | 577.1     | 538.9     | 545.90 µg/L | 545.90 ppb | 07:31:35 |
| 2 | SiO2†              | 32965.0   | 29459.1   | 5567.5 µg/L | 5567.5 ppb | 07:31:14 |
| 2 | Si 251.611†        | 37827.8   | 36651.3   | 2608.2 µg/L | 2608.2 ppb | 07:31:14 |
| 2 | Sn 189.927†        | 1339.1    | 1314.2    | 554.20 µg/L | 554.20 ppb | 07:31:35 |
| 2 | Ti 334.940†        | 207037.8  | 203613.2  | 512.29 µg/L | 512.29 ppb | 07:31:14 |
| 2 | Tl 190.801†        | 472.7     | 500.3     | 529.10 µg/L | 529.10 ppb | 07:31:35 |
| 2 | U 409.014†         | 5538.9    | 5486.2    | 522.53 µg/L | 522.53 ppb | 07:31:14 |
| 2 | V 292.402†         | 42558.6   | 41590.2   | 532.05 µg/L | 532.05 ppb | 07:31:14 |
| 2 | Zn 213.857†        | 23134.6   | 22040.5   | 530.39 µg/L | 530.39 ppb | 07:31:14 |
| 3 | Sc RADIAL          | 86866.6   | 86866.6   | 101 %       |            | 07:30:04 |
| 3 | Al 396.153Radial†  | 9691.1    | 9830.1    | 5109.6 µg/L | 5109.6 ppb | 07:30:04 |
| 3 | Ca 317.933Radial†  | 15059.5   | 14550.6   | 5388.4 µg/L | 5388.4 ppb | 07:30:04 |
| 3 | Fe 238.204 Radial† | 488.1     | 467.2     | 5326.9 µg/L | 5326.9 ppb | 07:30:24 |
| 3 | K 766.490 Radial†  | 10538.4   | 10036.1   | 5080.1 µg/L | 5080.1 ppb | 07:30:04 |
| 3 | Mg 279.077 IEC†    | 444.7     | 433.4     | 5496.1 µg/L | 5496.1 ppb | 07:30:24 |
| 3 | Na 589.592 Radial† | 21970.2   | 21489.8   | 10247 µg/L  | 10247 ppb  | 07:30:04 |
| 3 | Sr 421.552†        | 83582.5   | 82444.3   | 501.73 µg/L | 501.73 ppb | 07:30:04 |
| 3 | Sc 361.383         | 1876772.7 | 1876772.7 | 103.05 %    |            | 07:31:41 |
| 3 | Y 371.029          | 1295248.2 | 1295248.2 | 102.87 %    |            | 07:31:41 |
| 3 | Ag 328.068†        | 55285.2   | 54183.8   | 469.10 µg/L | 469.10 ppb | 07:31:47 |
| 3 | As 188.979†        | 297.5     | 291.2     | 445.54 µg/L | 445.54 ppb | 07:32:07 |
| 3 | B 249.677†         | 10131.7   | 9522.3    | 463.81 µg/L | 463.81 ppb | 07:31:47 |
| 3 | Ba 233.527†        | 20639.3   | 20046.8   | 470.02 µg/L | 470.02 ppb | 07:31:47 |
| 3 | Be 313.107†        | 775268.1  | 753822.1  | 474.12 µg/L | 474.12 ppb | 07:31:41 |
| 3 | Cd 226.502†        | 19060.5   | 18661.6   | 474.35 µg/L | 474.35 ppb | 07:31:47 |
| 3 | Co 228.616†        | 9471.4    | 9165.8    | 418.94 µg/L | 418.94 ppb | 07:32:07 |
| 3 | Cr 267.716†        | 20053.5   | 19399.0   | 449.00 µg/L | 449.00 ppb | 07:31:47 |
| 3 | Cu 324.752†        | 69728.6   | 63392.9   | 446.07 µg/L | 446.07 ppb | 07:31:47 |
| 3 | Mn 257.610†        | 142798.6  | 139314.2  | 457.35 µg/L | 457.35 ppb | 07:31:47 |
| 3 | Mo 202.031†        | 4301.8    | 4164.5    | 437.32 µg/L | 437.32 ppb | 07:32:07 |
| 3 | Ni 231.604†        | 7737.3    | 7154.1    | 423.08 µg/L | 423.08 ppb | 07:32:07 |
| 3 | P 214.914†         | 1649.0    | 1313.1    | 2196.2 µg/L | 2196.2 ppb | 07:32:07 |
| 3 | Pb 220.353†        | 1720.4    | 1626.0    | 456.55 µg/L | 456.55 ppb | 07:32:07 |
| 3 | S 181.975 Axial†   | 308.1     | 277.0     | 914.36 µg/L | 914.36 ppb | 07:32:07 |
| 3 | Sb 206.836†        | 505.1     | 463.2     | 437.08 µg/L | 437.08 ppb | 07:32:07 |
| 3 | Se 196.026†        | 493.4     | 452.0     | 459.88 µg/L | 459.88 ppb | 07:32:07 |
| 3 | SiO2†              | 29871.9   | 26138.4   | 4939.9 µg/L | 4939.9 ppb | 07:31:47 |
| 3 | Si 251.611†        | 34052.7   | 32621.7   | 2321.4 µg/L | 2321.4 ppb | 07:31:47 |
| 3 | Sn 189.927†        | 1069.0    | 1039.1    | 438.31 µg/L | 438.31 ppb | 07:32:07 |
| 3 | Ti 334.940†        | 177246.0  | 172699.2  | 434.45 µg/L | 434.45 ppb | 07:31:47 |
| 3 | Tl 190.801†        | 408.0     | 433.0     | 457.86 µg/L | 457.86 ppb | 07:32:07 |
| 3 | U 409.014†         | 4753.0    | 4669.9    | 444.62 µg/L | 444.62 ppb | 07:31:47 |
| 3 | V 292.402†         | 36795.6   | 35585.8   | 454.87 µg/L | 454.87 ppb | 07:31:47 |
| 3 | Zn 213.857†        | 20245.7   | 19013.2   | 457.58 µg/L | 457.58 ppb | 07:31:47 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1859207.9                | 102.09 %           | 0.939    |                    |          | 0.92%  |
| Sc RADIAL  | 87156.5                  | 102 %              | 0.5      |                    |          | 0.46%  |
| Y 371.029  | 1283708.2                | 101.95 %           | 1.009    |                    |          | 0.99%  |
| Ag 328.068†  | 58172.4                  | 503.74 µg/L        | 30.361   | 503.74 ppb         | 30.361   | 6.03%  |
| QC value within limits for Ag 328.068 Recovery = 100.75%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9813.7                   | 5099.5 µg/L        | 17.24    | 5099.5 ppb         | 17.24    | 0.34%  |
| QC value within limits for Al 396.153Radial Recovery = 101.99% |                          |                    |          |                    |          |        |
| As 188.979†  | 338.1                    | 517.45 µg/L        | 63.518   | 517.45 ppb         | 63.518   | 12.28% |
| QC value within limits for As 188.979 Recovery = 103.49%       |                          |                    |          |                    |          |        |
| B 249.677†   | 10290.6                  | 501.51 µg/L        | 33.026   | 501.51 ppb         | 33.026   | 6.59%  |
| QC value within limits for B 249.677 Recovery = 100.30%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 22081.9                  | 517.75 µg/L        | 41.641   | 517.75 ppb         | 41.641   | 8.04%  |
| QC value within limits for Ba 233.527 Recovery = 103.55%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 822986.7                 | 517.62 µg/L        | 37.790   | 517.62 ppb         | 37.790   | 7.30%  |
| QC value within limits for Be 313.107 Recovery = 103.52%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 14465.1                  | 5356.8 µg/L        | 29.29    | 5356.8 ppb         | 29.29    | 0.55%  |
| QC value within limits for Ca 317.933Radial Recovery = 107.14% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 20657.0                  | 525.16 µg/L        | 44.303   | 525.16 ppb         | 44.303   | 8.44%  |
| QC value within limits for Cd 226.502 Recovery = 105.03%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 10775.4                  | 492.55 µg/L        | 65.107   | 492.55 ppb         | 65.107   | 13.22% |

|   |          |             |        |            |        |        |  |
|---|----------|-------------|--------|------------|--------|--------|--|
| QC value within limits for Co 228.616 Recovery = 98.51%         |          |             |        |            |        |        |  |
| Cr 267.716†   | 22186.2  | 513.51 µg/L | 56.115 | 513.51 ppb | 56.115 | 10.93% |  |
| QC value within limits for Cr 267.716 Recovery = 102.70%        |          |             |        |            |        |        |  |
| Cu 324.752†   | 70547.7  | 496.30 µg/L | 43.798 | 496.30 ppb | 43.798 | 8.82%  |  |
| QC value within limits for Cu 324.752 Recovery = 99.26%         |          |             |        |            |        |        |  |
| Fe 238.204 Radial†  | 465.4    | 5308.2 µg/L | 22.61  | 5308.2 ppb | 22.61  | 0.43%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = 106.16% |          |             |        |            |        |        |  |
| K 766.490 Radial†   | 9968.6   | 5046.0 µg/L | 37.02  | 5046.0 ppb | 37.02  | 0.73%  |  |
| QC value within limits for K 766.490 Radial Recovery = 100.92%  |          |             |        |            |        |        |  |
| Mg 279.077 IEC†   | 431.2    | 5469.5 µg/L | 27.62  | 5469.5 ppb | 27.62  | 0.51%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 109.39%    |          |             |        |            |        |        |  |
| Mn 257.610†   | 155105.4 | 509.19 µg/L | 45.141 | 509.19 ppb | 45.141 | 8.87%  |  |
| QC value within limits for Mn 257.610 Recovery = 101.84%        |          |             |        |            |        |        |  |
| Mo 202.031†   | 4903.6   | 514.90 µg/L | 68.413 | 514.90 ppb | 68.413 | 13.29% |  |
| QC value within limits for Mo 202.031 Recovery = 102.98%        |          |             |        |            |        |        |  |
| Na 589.592 Radial†  | 21453.9  | 10230 µg/L  | 30.2   | 10230 ppb  | 30.2   | 0.29%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 102.30% |          |             |        |            |        |        |  |
| Ni 231.604†   | 8407.6   | 497.19 µg/L | 65.549 | 497.19 ppb | 65.549 | 13.18% |  |
| QC value within limits for Ni 231.604 Recovery = 99.44%         |          |             |        |            |        |        |  |
| P 214.914†  | 1528.2   | 2558.9 µg/L | 320.20 | 2558.9 ppb | 320.20 | 12.51% |  |
| QC value within limits for P 214.914 Recovery = 102.36%         |          |             |        |            |        |        |  |
| Pb 220.353†   | 1875.6   | 526.64 µg/L | 62.012 | 526.64 ppb | 62.012 | 11.77% |  |
| QC value within limits for Pb 220.353 Recovery = 105.33%        |          |             |        |            |        |        |  |
| S 181.975 Axial†  | 316.5    | 1044.6 µg/L | 116.47 | 1044.6 ppb | 116.47 | 11.15% |  |
| QC value within limits for S 181.975 Axial Recovery = 104.46%   |          |             |        |            |        |        |  |
| Sb 206.836†   | 535.7    | 505.79 µg/L | 60.850 | 505.79 ppb | 60.850 | 12.03% |  |
| QC value within limits for Sb 206.836 Recovery = 101.16%        |          |             |        |            |        |        |  |
| Se 196.026†   | 517.0    | 524.24 µg/L | 56.716 | 524.24 ppb | 56.716 | 10.82% |  |
| QC value within limits for Se 196.026 Recovery = 104.85%        |          |             |        |            |        |        |  |
| SiO2†   | 28520.9  | 5390.2 µg/L | 392.87 | 5390.2 ppb | 392.87 | 7.29%  |  |
| QC value within limits for SiO2 Recovery = 100.80%              |          |             |        |            |        |        |  |
| Si 251.611†   | 35518.8  | 2527.6 µg/L | 179.95 | 2527.6 ppb | 179.95 | 7.12%  |  |
| QC value within limits for Si 251.611 Recovery = 101.10%        |          |             |        |            |        |        |  |
| Sn 189.927†   | 1245.5   | 525.28 µg/L | 76.704 | 525.28 ppb | 76.704 | 14.60% |  |
| QC value within limits for Sn 189.927 Recovery = 105.06%        |          |             |        |            |        |        |  |
| Sr 421.552†   | 82271.7  | 500.68 µg/L | 1.367  | 500.68 ppb | 1.367  | 0.27%  |  |
| QC value within limits for Sr 421.552 Recovery = 100.14%        |          |             |        |            |        |        |  |
| Ti 334.940†   | 194644.1 | 489.70 µg/L | 48.114 | 489.70 ppb | 48.114 | 9.83%  |  |
| QC value within limits for Ti 334.940 Recovery = 97.94%         |          |             |        |            |        |        |  |
| Tl 190.801†   | 485.4    | 513.31 µg/L | 49.475 | 513.31 ppb | 49.475 | 9.64%  |  |
| QC value within limits for Tl 190.801 Recovery = 102.66%        |          |             |        |            |        |        |  |
| U 409.014†  | 5245.9   | 499.60 µg/L | 47.826 | 499.60 ppb | 47.826 | 9.57%  |  |
| QC value within limits for U 409.014 Recovery = 99.92%          |          |             |        |            |        |        |  |
| V 292.402†  | 39885.9  | 510.17 µg/L | 48.237 | 510.17 ppb | 48.237 | 9.46%  |  |
| QC value within limits for V 292.402 Recovery = 102.03%         |          |             |        |            |        |        |  |
| Zn 213.857†   | 21192.2  | 509.97 µg/L | 45.744 | 509.97 ppb | 45.744 | 8.97%  |  |
| QC value within limits for Zn 213.857 Recovery = 101.99%        |          |             |        |            |        |        |  |

All analyte(s) passed QC.



Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 07:32:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84431.9          | 84431.9                | 98.4 %                |                       | 07:32:50         |
| 1     | Al 396.153Radial†  | -264.0           | -11.1                  | -5.8102 µg/L          | -5.8102 ppb           | 07:32:50         |
| 1     | Ca 317.933Radial†  | 335.8            | 16.1                   | 5.9540 µg/L           | 5.9540 ppb            | 07:33:11         |
| 1     | Fe 238.204 Radial† | 17.1             | 2.4                    | 27.442 µg/L           | 27.442 ppb            | 07:33:11         |
| 1     | K 766.490 Radial†  | 482.8            | 116.9                  | 59.185 µg/L           | 59.185 ppb            | 07:32:50         |
| 1     | Mg 279.077 IEC†    | 12.0             | 6.2                    | 79.003 µg/L           | 79.003 ppb            | 07:33:11         |
| 1     | Na 589.592 Radial† | 258.8            | 50.6                   | 24.146 µg/L           | 24.146 ppb            | 07:32:50         |
| 1     | Sr 421.552†        | 207.6            | 92.5                   | 0.5630 µg/L           | 0.5630 ppb            | 07:32:50         |
| 1     | Sc 361.383         | 1831236.8        | 1831236.8              | 100.55 %              |                       | 07:34:13         |
| 1     | Y 371.029          | 1267996.5        | 1267996.5              | 100.70 %              |                       | 07:34:13         |
| 1     | Ag 328.068†        | -555.7           | -15.1                  | -0.1233 µg/L          | -0.1233 ppb           | 07:34:18         |
| 1     | As 188.979†        | -0.4             | 2.2                    | 3.3445 µg/L           | 3.3445 ppb            | 07:34:39         |
| 1     | B 249.677†         | 342.3            | 31.4                   | 1.5204 µg/L           | 1.5204 ppb            | 07:34:39         |
| 1     | Ba 233.527†        | 6.6              | 25.9                   | 0.6073 µg/L           | 0.6073 ppb            | 07:34:39         |
| 1     | Be 313.107†        | -1513.4          | 30.5                   | 0.0191 µg/L           | 0.0191 ppb            | 07:34:18         |
| 1     | Cd 226.502†        | -163.7           | 3.4                    | 0.0826 µg/L           | 0.0826 ppb            | 07:34:39         |
| 1     | Co 228.616†        | 28.3             | 3.4                    | 0.1537 µg/L           | 0.1537 ppb            | 07:34:39         |
| 1     | Cr 267.716†        | 76.5             | 16.1                   | 0.3728 µg/L           | 0.3728 ppb            | 07:34:39         |
| 1     | Cu 324.752†        | 4303.7           | 11.3                   | 0.0847 µg/L           | 0.0847 ppb            | 07:34:18         |
| 1     | Mn 257.610†        | -814.1           | -61.0                  | -0.2040 µg/L          | -0.2040 ppb           | 07:34:39         |
| 1     | Mo 202.031†        | 18.4             | 8.5                    | 0.8947 µg/L           | 0.8947 ppb            | 07:34:39         |
| 1     | Ni 231.604†        | 363.0            | 7.2                    | 0.4267 µg/L           | 0.4267 ppb            | 07:34:39         |
| 1     | P 214.914†         | 296.1            | 7.4                    | 12.689 µg/L           | 12.689 ppb            | 07:34:39         |
| 1     | Pb 220.353†        | 50.7             | 7.1                    | 1.9930 µg/L           | 1.9930 ppb            | 07:34:39         |
| 1     | S 181.975 Axial†   | 26.4             | 4.3                    | 14.060 µg/L           | 14.060 ppb            | 07:34:39         |
| 1     | Sb 206.836†        | 27.1             | -0.0                   | -0.0331 µg/L          | -0.0331 ppb           | 07:34:39         |
| 1     | Se 196.026†        | 16.6             | -10.2                  | -10.067 µg/L          | -10.067 ppb           | 07:34:39         |
| 1     | SiO2†              | 2872.8           | 9.0                    | 1.6968 µg/L           | 1.6968 ppb            | 07:34:18         |
| 1     | Si 251.611†        | 469.6            | 45.5                   | 3.2411 µg/L           | 3.2411 ppb            | 07:34:39         |
| 1     | Sn 189.927†        | 3.0              | 4.8                    | 2.0131 µg/L           | 2.0131 ppb            | 07:34:39         |
| 1     | Ti 334.940†        | -564.4           | 146.2                  | 0.3618 µg/L           | 0.3618 ppb            | 07:34:18         |
| 1     | Tl 190.801†        | -36.0            | 1.2                    | 1.2188 µg/L           | 1.2188 ppb            | 07:34:39         |
| 1     | U 409.014†         | -38.6            | 19.5                   | 1.8533 µg/L           | 1.8533 ppb            | 07:34:18         |
| 1     | V 292.402†         | 176.7            | 56.8                   | 0.7240 µg/L           | 0.7240 ppb            | 07:34:18         |
| 1     | Zn 213.857†        | 632.0            | -3.8                   | -0.1008 µg/L          | -0.1008 ppb           | 07:34:39         |
| 2     | Sc RADIAL          | 83858.6          | 83858.6                | 97.7 %                |                       | 07:33:16         |
| 2     | Al 396.153Radial†  | -224.8           | 27.1                   | 14.102 µg/L           | 14.102 ppb            | 07:33:16         |
| 2     | Ca 317.933Radial†  | 339.5            | 22.3                   | 8.2404 µg/L           | 8.2404 ppb            | 07:33:37         |
| 2     | Fe 238.204 Radial† | 14.6             | -0.1                   | -0.6210 µg/L          | -0.6210 ppb           | 07:33:37         |
| 2     | K 766.490 Radial†  | 428.7            | 64.9                   | 32.867 µg/L           | 32.867 ppb            | 07:33:16         |
| 2     | Mg 279.077 IEC†    | 10.8             | 5.1                    | 64.595 µg/L           | 64.595 ppb            | 07:33:37         |
| 2     | Na 589.592 Radial† | 229.6            | 22.6                   | 10.762 µg/L           | 10.762 ppb            | 07:33:16         |
| 2     | Sr 421.552†        | 177.9            | 63.6                   | 0.3869 µg/L           | 0.3869 ppb            | 07:33:16         |
| 2     | Sc 361.383         | 1831490.7        | 1831490.7              | 100.57 %              |                       | 07:34:45         |
| 2     | Y 371.029          | 1265104.5        | 1265104.5              | 100.47 %              |                       | 07:34:45         |
| 2     | Ag 328.068†        | -531.7           | 8.8                    | 0.0757 µg/L           | 0.0757 ppb            | 07:34:50         |
| 2     | As 188.979†        | -1.2             | 1.4                    | 2.1878 µg/L           | 2.1878 ppb            | 07:35:11         |
| 2     | B 249.677†         | 337.8            | 26.8                   | 1.3123 µg/L           | 1.3123 ppb            | 07:35:11         |
| 2     | Ba 233.527†        | 11.1             | 30.3                   | 0.7091 µg/L           | 0.7091 ppb            | 07:35:11         |
| 2     | Be 313.107†        | -1506.8          | 37.3                   | 0.0233 µg/L           | 0.0233 ppb            | 07:34:50         |
| 2     | Cd 226.502†        | -170.7           | -3.6                   | -0.0911 µg/L          | -0.0911 ppb           | 07:35:11         |
| 2     | Co 228.616†        | 28.1             | 3.2                    | 0.1450 µg/L           | 0.1450 ppb            | 07:35:11         |
| 2     | Cr 267.716†        | 81.4             | 20.9                   | 0.4839 µg/L           | 0.4839 ppb            | 07:35:11         |
| 2     | Cu 324.752†        | 4363.7           | 70.3                   | 0.4936 µg/L           | 0.4936 ppb            | 07:34:50         |
| 2     | Mn 257.610†        | -805.6           | -52.4                  | -0.1764 µg/L          | -0.1764 ppb           | 07:35:11         |
| 2     | Mo 202.031†        | 14.6             | 4.7                    | 0.4952 µg/L           | 0.4952 ppb            | 07:35:11         |
| 2     | Ni 231.604†        | 357.5            | 1.8                    | 0.1036 µg/L           | 0.1036 ppb            | 07:35:11         |
| 2     | P 214.914†         | 291.2            | 2.6                    | 4.3201 µg/L           | 4.3201 ppb            | 07:35:11         |
| 2     | Pb 220.353†        | 58.2             | 14.5                   | 4.0547 µg/L           | 4.0547 ppb            | 07:35:11         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 24.3      | 2.2       | 7.1353 µg/L  | 7.1353 ppb  | 07:35:11 |
| 2 | Sb 206.836†        | 28.6      | 1.4       | 1.3532 µg/L  | 1.3532 ppb  | 07:35:11 |
| 2 | Se 196.026†        | 24.3      | -2.5      | -2.5627 µg/L | -2.5627 ppb | 07:35:11 |
| 2 | SiO2†              | 2858.4    | -5.8      | -1.0878 µg/L | -1.0878 ppb | 07:34:50 |
| 2 | Si 251.611†        | 474.0     | 49.8      | 3.5447 µg/L  | 3.5447 ppb  | 07:35:11 |
| 2 | Sn 189.927†        | -1.5      | 0.3       | 0.1432 µg/L  | 0.1432 ppb  | 07:35:11 |
| 2 | Ti 334.940†        | -559.3    | 151.3     | 0.3759 µg/L  | 0.3759 ppb  | 07:34:50 |
| 2 | Tl 190.801†        | -34.4     | 2.8       | 2.9571 µg/L  | 2.9571 ppb  | 07:35:11 |
| 2 | U 409.014†         | -28.6     | 29.4      | 2.8060 µg/L  | 2.8060 ppb  | 07:34:50 |
| 2 | V 292.402†         | 121.7     | 2.0       | 0.0336 µg/L  | 0.0336 ppb  | 07:34:50 |
| 2 | Zn 213.857†        | 641.5     | 5.5       | 0.1276 µg/L  | 0.1276 ppb  | 07:35:11 |
| 3 | Sc RADIAL          | 84437.9   | 84437.9   | 98.4 %       |             | 07:33:42 |
| 3 | Al 396.153Radial†  | -266.0    | -13.1     | -6.8399 µg/L | -6.8399 ppb | 07:33:42 |
| 3 | Ca 317.933Radial†  | 339.3     | 19.7      | 7.2844 µg/L  | 7.2844 ppb  | 07:34:03 |
| 3 | Fe 238.204 Radial† | 17.6      | 3.0       | 33.699 µg/L  | 33.699 ppb  | 07:34:03 |
| 3 | K 766.490 Radial†  | 431.4     | 64.7      | 32.727 µg/L  | 32.727 ppb  | 07:33:42 |
| 3 | Mg 279.077 IEC†    | 7.1       | 1.3       | 16.017 µg/L  | 16.017 ppb  | 07:34:03 |
| 3 | Na 589.592 Radial† | 265.9     | 57.8      | 27.576 µg/L  | 27.576 ppb  | 07:33:42 |
| 3 | Sr 421.552†        | 155.5     | 39.6      | 0.2410 µg/L  | 0.2410 ppb  | 07:33:42 |
| 3 | Sc 361.383         | 1844408.7 | 1844408.7 | 101.28 %     |             | 07:35:17 |
| 3 | Y 371.029          | 1274921.3 | 1274921.3 | 101.25 %     |             | 07:35:17 |
| 3 | Ag 328.068†        | -598.1    | -53.1     | -0.4528 µg/L | -0.4528 ppb | 07:35:22 |
| 3 | As 188.979†        | -3.8      | -1.2      | -1.8228 µg/L | -1.8228 ppb | 07:35:43 |
| 3 | B 249.677†         | 348.9     | 35.4      | 1.7154 µg/L  | 1.7154 ppb  | 07:35:43 |
| 3 | Ba 233.527†        | -7.7      | 11.6      | 0.2726 µg/L  | 0.2726 ppb  | 07:35:43 |
| 3 | Be 313.107†        | -1564.6   | -9.3      | -0.0060 µg/L | -0.0060 ppb | 07:35:22 |
| 3 | Cd 226.502†        | -177.3    | -8.8      | -0.2274 µg/L | -0.2274 ppb | 07:35:43 |
| 3 | Co 228.616†        | 38.0      | 12.7      | 0.5820 µg/L  | 0.5820 ppb  | 07:35:43 |
| 3 | Cr 267.716†        | 83.8      | 22.7      | 0.5248 µg/L  | 0.5248 ppb  | 07:35:43 |
| 3 | Cu 324.752†        | 4354.1    | 30.5      | 0.2204 µg/L  | 0.2204 ppb  | 07:35:22 |
| 3 | Mn 257.610†        | -791.2    | -32.6     | -0.1061 µg/L | -0.1061 ppb | 07:35:43 |
| 3 | Mo 202.031†        | 12.9      | 2.9       | 0.3082 µg/L  | 0.3082 ppb  | 07:35:43 |
| 3 | Ni 231.604†        | 373.8     | 15.3      | 0.9043 µg/L  | 0.9043 ppb  | 07:35:43 |
| 3 | P 214.914†         | 303.2     | 12.4      | 21.081 µg/L  | 21.081 ppb  | 07:35:43 |
| 3 | Pb 220.353†        | 50.9      | 6.9       | 1.9412 µg/L  | 1.9412 ppb  | 07:35:43 |
| 3 | S 181.975 Axial†   | 25.6      | 3.3       | 10.791 µg/L  | 10.791 ppb  | 07:35:43 |
| 3 | Sb 206.836†        | 32.1      | 4.7       | 4.3730 µg/L  | 4.3730 ppb  | 07:35:43 |
| 3 | Se 196.026†        | 12.0      | -14.9     | -14.627 µg/L | -14.627 ppb | 07:35:43 |
| 3 | SiO2†              | 2846.3    | -37.6     | -7.0987 µg/L | -7.0987 ppb | 07:35:22 |
| 3 | Si 251.611†        | 476.1     | 48.6      | 3.4564 µg/L  | 3.4564 ppb  | 07:35:43 |
| 3 | Sn 189.927†        | 2.1       | 3.9       | 1.6388 µg/L  | 1.6388 ppb  | 07:35:43 |
| 3 | Ti 334.940†        | -601.8    | 113.2     | 0.2839 µg/L  | 0.2839 ppb  | 07:35:22 |
| 3 | Tl 190.801†        | -37.1     | 0.4       | 0.4470 µg/L  | 0.4470 ppb  | 07:35:43 |
| 3 | U 409.014†         | -9.5      | 48.5      | 4.6223 µg/L  | 4.6223 ppb  | 07:35:22 |
| 3 | V 292.402†         | 131.9     | 11.2      | 0.1445 µg/L  | 0.1445 ppb  | 07:35:22 |
| 3 | Zn 213.857†        | 681.8     | 40.8      | 0.9824 µg/L  | 0.9824 ppb  | 07:35:43 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1835712.1                | 100.80 %           | 0.414    |                    |          | 0.41%   |
| Sc RADIAL   | 84242.8                  | 98.2 %             | 0.39     |                    |          | 0.39%   |
| Y 371.029   | 1269340.8                | 100.81 %           | 0.401    |                    |          | 0.40%   |
| Ag 328.068†   | -19.8                    | -0.1668 µg/L       | 0.26690  | -0.1668 ppb        | 0.26690  | 160.00% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 1.0                      | 0.4838 µg/L        | 11.80456 | 0.4838 ppb         | 11.80456 | >999.9% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 0.8                      | 1.2365 µg/L        | 2.71181  | 1.2365 ppb         | 2.71181  | 219.31% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 31.2                     | 1.5161 µg/L        | 0.20157  | 1.5161 ppb         | 0.20157  | 13.30%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 22.6                     | 0.5297 µg/L        | 0.22840  | 0.5297 ppb         | 0.22840  | 43.12%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 19.5                     | 0.0121 µg/L        | 0.01581  | 0.0121 ppb         | 0.01581  | 130.30% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 19.3                     | 7.1596 µg/L        | 1.14833  | 7.1596 ppb         | 1.14833  | 16.04%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -3.0                     | -0.0786 µg/L       | 0.15539  | -0.0786 ppb        | 0.15539  | 197.67% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 6.4                      | 0.2935 µg/L        | 0.24982  | 0.2935 ppb         | 0.24982  | 85.11%  |

|                    |  |                           |         |             |         |         |
|--------------------|--|---------------------------|---------|-------------|---------|---------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |         |             |         |         |
|                    | 19.9   | 0.4605 µg/L               | 0.07865 | 0.4605 ppb  | 0.07865 | 17.08%  |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |         |             |         |         |
|                    | 37.4   | 0.2662 µg/L               | 0.20831 | 0.2662 ppb  | 0.20831 | 78.24%  |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |         |             |         |         |
|                    | 1.8  | 20.174 µg/L               | 18.2784 | 20.174 ppb  | 18.2784 | 90.61%  |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |         |             |         |         |
|                    | 82.2   | 41.593 µg/L               | 15.2351 | 41.593 ppb  | 15.2351 | 36.63%  |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |         |             |         |         |
|                    | 4.2  | 53.205 µg/L               | 33.0012 | 53.205 ppb  | 33.0012 | 62.03%  |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |         |             |         |         |
|                    | -48.7  | -0.1622 µg/L              | 0.05048 | -0.1622 ppb | 0.05048 | 31.13%  |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |         |             |         |         |
|                    | 5.4  | 0.5660 µg/L               | 0.29957 | 0.5660 ppb  | 0.29957 | 52.92%  |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |         |             |         |         |
|                    | 43.7   | 20.828 µg/L               | 8.8845  | 20.828 ppb  | 8.8845  | 42.66%  |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |         |             |         |         |
|                    | 8.1  | 0.4782 µg/L               | 0.40286 | 0.4782 ppb  | 0.40286 | 84.25%  |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |         |             |         |         |
|                    | 7.5  | 12.697 µg/L               | 8.3806  | 12.697 ppb  | 8.3806  | 66.00%  |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |         |             |         |         |
|                    | 9.5  | 2.6630 µg/L               | 1.20559 | 2.6630 ppb  | 1.20559 | 45.27%  |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |         |             |         |         |
|                    | 3.2  | 10.662 µg/L               | 3.4643  | 10.662 ppb  | 3.4643  | 32.49%  |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |         |             |         |         |
|                    | 2.0  | 1.8977 µg/L               | 2.25293 | 1.8977 ppb  | 2.25293 | 118.72% |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |         |             |         |         |
|                    | -9.2   | -9.0857 µg/L              | 6.09180 | -9.0857 ppb | 6.09180 | 67.05%  |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |         |             |         |         |
|                    | -11.4  | -2.1632 µg/L              | 4.49530 | -2.1632 ppb | 4.49530 | 207.80% |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |         |             |         |         |
|                    | 48.0   | 3.4141 µg/L               | 0.15618 | 3.4141 ppb  | 0.15618 | 4.57%   |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |         |             |         |         |
|                    | 3.0  | 1.2650 µg/L               | 0.98937 | 1.2650 ppb  | 0.98937 | 78.21%  |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |         |             |         |         |
|                    | 65.2   | 0.3970 µg/L               | 0.16124 | 0.3970 ppb  | 0.16124 | 40.61%  |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |         |             |         |         |
|                    | 136.9  | 0.3405 µg/L               | 0.04953 | 0.3405 ppb  | 0.04953 | 14.55%  |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |         |             |         |         |
|                    | 1.5  | 1.5410 µg/L               | 1.28570 | 1.5410 ppb  | 1.28570 | 83.43%  |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |         |             |         |         |
|                    | 32.5   | 3.0938 µg/L               | 1.40674 | 3.0938 ppb  | 1.40674 | 45.47%  |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |         |             |         |         |
|                    | 23.3   | 0.3007 µg/L               | 0.37077 | 0.3007 ppb  | 0.37077 | 123.30% |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |         |             |         |         |
|                    | 14.2   | 0.3364 µg/L               | 0.57100 | 0.3364 ppb  | 0.57100 | 169.75% |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |         |             |         |         |

All analyte(s) passed QC.

Sequence No.: 13  
 Sample ID: 247103002|954664|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:  
 User canceled analysis.

Autosampler Location: 308  
 Date Collected: 3/11/2010 08:08:02  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Analysis Begun

Start Time: 3/11/2010 08:10:45 Plasma On Time: 3/6/2010 19:06:21  
 Logged In Analyst: optima Technique: ICP Continuous  
 Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031110A.sif  
 Batch ID:  
 Results Data Set: 031110  
 Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 11 Autosampler Location: 7  
 Sample ID: CCV Date Collected: 3/11/2010 08:10:46  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|-------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88138.4       | 88138.4             | 103 %       |              |                    | 08:11:24      |
| 1     | Al 396.153Radial†  | 9458.6        | 9465.6              | 4917.4 µg/L |              | 4917.4 ppb         | 08:11:24      |
| 1     | Ca 317.933Radial†  | 14558.9       | 13848.6             | 5128.5 µg/L |              | 5128.5 ppb         | 08:11:24      |
| 1     | Fe 238.204 Radial† | 471.2         | 443.7               | 5062.4 µg/L |              | 5062.4 ppb         | 08:11:44      |
| 1     | K 766.490 Radial†  | 10222.7       | 9578.5              | 4848.5 µg/L |              | 4848.5 ppb         | 08:11:24      |
| 1     | Mg 279.077 IEC†    | 429.8         | 412.5               | 5233.7 µg/L |              | 5233.7 ppb         | 08:11:44      |
| 1     | Na 589.592 Radial† | 21444.0       | 20664.3             | 9853.7 µg/L |              | 9853.7 ppb         | 08:11:24      |
| 1     | Sr 421.552†        | 82082.4       | 79792.6             | 485.60 µg/L |              | 485.60 ppb         | 08:11:24      |
| 1     | Sc 361.383         | 1822082.8     | 1822082.8           | 100.05 %    |              |                    | 08:12:48      |
| 1     | Y 371.029          | 1254252.5     | 1254252.5           | 99.611 %    |              |                    | 08:12:48      |
| 1     | Ag 328.068†        | 59263.8       | 59770.5             | 517.63 µg/L |              | 517.63 ppb         | 08:12:54      |
| 1     | As 188.979†        | 358.2         | 360.6               | 551.99 µg/L |              | 551.99 ppb         | 08:13:14      |
| 1     | B 249.677†         | 10953.4       | 10638.6             | 518.72 µg/L |              | 518.72 ppb         | 08:12:54      |
| 1     | Ba 233.527†        | 23034.1       | 23041.4             | 540.26 µg/L |              | 540.26 ppb         | 08:12:54      |
| 1     | Be 313.107†        | 845445.8      | 846543.2            | 532.42 µg/L |              | 532.42 ppb         | 08:12:48      |
| 1     | Cd 226.502†        | 21280.8       | 21436.0             | 545.05 µg/L |              | 545.05 ppb         | 08:12:54      |
| 1     | Co 228.616†        | 11935.4       | 11904.4             | 544.19 µg/L |              | 544.19 ppb         | 08:12:54      |
| 1     | Cr 267.716†        | 23592.8       | 23520.6             | 544.39 µg/L |              | 544.39 ppb         | 08:12:54      |
| 1     | Cu 324.752†        | 78270.1       | 73960.9             | 520.22 µg/L |              | 520.22 ppb         | 08:12:54      |
| 1     | Mn 257.610†        | 162204.0      | 162868.6            | 534.68 µg/L |              | 534.68 ppb         | 08:12:48      |
| 1     | Mo 202.031†        | 5302.3        | 5289.8              | 555.42 µg/L |              | 555.42 ppb         | 08:13:14      |
| 1     | Ni 231.604†        | 9613.3        | 9254.5              | 547.26 µg/L |              | 547.26 ppb         | 08:12:54      |
| 1     | P 214.914†         | 1922.0        | 1634.0              | 2737.6 µg/L |              | 2737.6 ppb         | 08:13:14      |
| 1     | Pb 220.353†        | 2018.2        | 1973.8              | 554.20 µg/L |              | 554.20 ppb         | 08:13:14      |
| 1     | S 181.975 Axial†   | 346.8         | 324.7               | 1071.6 µg/L |              | 1071.6 ppb         | 08:13:14      |
| 1     | Sb 206.836†        | 598.9         | 571.6               | 539.77 µg/L |              | 539.77 ppb         | 08:13:14      |
| 1     | Se 196.026†        | 570.6         | 543.6               | 549.96 µg/L |              | 549.96 ppb         | 08:13:14      |
| 1     | SiO2†              | 32661.8       | 29796.9             | 5631.4 µg/L |              | 5631.4 ppb         | 08:12:54      |
| 1     | Si 251.611†        | 37602.3       | 37161.3             | 2644.5 µg/L |              | 2644.5 ppb         | 08:12:54      |
| 1     | Sn 189.927†        | 1345.0        | 1346.1              | 567.61 µg/L |              | 567.61 ppb         | 08:13:14      |
| 1     | Ti 334.940†        | 207044.0      | 207644.1            | 522.45 µg/L |              | 522.45 ppb         | 08:12:48      |
| 1     | Tl 190.801†        | 480.7         | 517.4               | 547.08 µg/L |              | 547.08 ppb         | 08:13:14      |
| 1     | U 409.014†         | 5438.8        | 5493.8              | 523.31 µg/L |              | 523.31 ppb         | 08:12:54      |
| 1     | V 292.402†         | 42091.3       | 41950.6             | 536.78 µg/L |              | 536.78 ppb         | 08:12:54      |
| 1     | Zn 213.857†        | 22897.9       | 22253.7             | 535.46 µg/L |              | 535.46 ppb         | 08:12:54      |
| 2     | Sc RADIAL          | 87985.5       | 87985.5             | 103 %       |              |                    | 08:11:50      |
| 2     | Al 396.153Radial†  | 9525.9        | 9547.2              | 4960.2 µg/L |              | 4960.2 ppb         | 08:11:50      |
| 2     | Ca 317.933Radial†  | 14687.7       | 13998.9             | 5184.1 µg/L |              | 5184.1 ppb         | 08:11:50      |
| 2     | Fe 238.204 Radial† | 473.6         | 447.0               | 5099.1 µg/L |              | 5099.1 ppb         | 08:12:11      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | K 766.490 Radial†  | 10376.5   | 9745.8    | 4933.2 µg/L | 4933.2 ppb | 08:11:50 |
| 2 | Mg 279.077 IEC†    | 427.8     | 411.3     | 5217.8 µg/L | 5217.8 ppb | 08:12:11 |
| 2 | Na 589.592 Radial† | 21647.6   | 20899.1   | 9965.6 µg/L | 9965.6 ppb | 08:11:50 |
| 2 | Sr 421.552†        | 82770.6   | 80602.6   | 490.53 µg/L | 490.53 ppb | 08:11:50 |
| 2 | Sc 361.383         | 1820479.9 | 1820479.9 | 99.964 %    |            | 08:13:21 |
| 2 | Y 371.029          | 1251305.5 | 1251305.5 | 99.377 %    |            | 08:13:21 |
| 2 | Ag 328.068†        | 59273.1   | 59832.1   | 518.16 µg/L | 518.16 ppb | 08:13:27 |
| 2 | As 188.979†        | 352.2     | 354.9     | 543.33 µg/L | 543.33 ppb | 08:13:48 |
| 2 | B 249.677†         | 10984.4   | 10679.3   | 520.69 µg/L | 520.69 ppb | 08:13:27 |
| 2 | Ba 233.527†        | 22945.7   | 22973.3   | 538.67 µg/L | 538.67 ppb | 08:13:27 |
| 2 | Be 313.107†        | 849899.8  | 851742.9  | 535.69 µg/L | 535.69 ppb | 08:13:21 |
| 2 | Cd 226.502†        | 21233.4   | 21407.3   | 544.31 µg/L | 544.31 ppb | 08:13:27 |
| 2 | Co 228.616†        | 11893.7   | 11873.2   | 542.74 µg/L | 542.74 ppb | 08:13:27 |
| 2 | Cr 267.716†        | 23511.8   | 23460.3   | 543.00 µg/L | 543.00 ppb | 08:13:27 |
| 2 | Cu 324.752†        | 78259.7   | 74019.4   | 520.63 µg/L | 520.63 ppb | 08:13:27 |
| 2 | Mn 257.610†        | 163096.6  | 163904.2  | 538.09 µg/L | 538.09 ppb | 08:13:21 |
| 2 | Mo 202.031†        | 5170.1    | 5162.2    | 542.03 µg/L | 542.03 ppb | 08:13:48 |
| 2 | Ni 231.604†        | 9577.9    | 9227.6    | 545.67 µg/L | 545.67 ppb | 08:13:27 |
| 2 | P 214.914†         | 1884.4    | 1598.1    | 2676.0 µg/L | 2676.0 ppb | 08:13:48 |
| 2 | Pb 220.353†        | 1995.8    | 1953.1    | 548.38 µg/L | 548.38 ppb | 08:13:48 |
| 2 | S 181.975 Axial†   | 347.5     | 325.7     | 1075.0 µg/L | 1075.0 ppb | 08:13:48 |
| 2 | Sb 206.836†        | 583.5     | 556.7     | 525.61 µg/L | 525.61 ppb | 08:13:48 |
| 2 | Se 196.026†        | 562.0     | 535.4     | 542.00 µg/L | 542.00 ppb | 08:13:48 |
| 2 | SiO2†              | 32647.9   | 29811.8   | 5634.2 µg/L | 5634.2 ppb | 08:13:27 |
| 2 | Si 251.611†        | 37582.4   | 37174.5   | 2645.4 µg/L | 2645.4 ppb | 08:13:27 |
| 2 | Sn 189.927†        | 1298.1    | 1300.3    | 548.35 µg/L | 548.35 ppb | 08:13:48 |
| 2 | Ti 334.940†        | 208334.3  | 209117.1  | 526.16 µg/L | 526.16 ppb | 08:13:21 |
| 2 | Tl 190.801†        | 472.9     | 510.1     | 539.44 µg/L | 539.44 ppb | 08:13:48 |
| 2 | U 409.014†         | 5409.8    | 5469.6    | 520.98 µg/L | 520.98 ppb | 08:13:27 |
| 2 | V 292.402†         | 42114.8   | 42011.0   | 537.44 µg/L | 537.44 ppb | 08:13:27 |
| 2 | Zn 213.857†        | 22800.8   | 22176.7   | 533.60 µg/L | 533.60 ppb | 08:13:27 |
| 3 | Sc RADIAL          | 86653.1   | 86653.1   | 101 %       |            | 08:12:16 |
| 3 | Al 396.153Radial†  | 9451.7    | 9616.5    | 4998.4 µg/L | 4998.4 ppb | 08:12:16 |
| 3 | Ca 317.933Radial†  | 14510.5   | 14043.6   | 5200.7 µg/L | 5200.7 ppb | 08:12:16 |
| 3 | Fe 238.204 Radial† | 479.1     | 459.4     | 5239.4 µg/L | 5239.4 ppb | 08:12:37 |
| 3 | K 766.490 Radial†  | 10308.2   | 9833.8    | 4977.7 µg/L | 4977.7 ppb | 08:12:16 |
| 3 | Mg 279.077 IEC†    | 426.9     | 416.8     | 5285.5 µg/L | 5285.5 ppb | 08:12:37 |
| 3 | Na 589.592 Radial† | 21495.4   | 21073.1   | 10049 µg/L  | 10049 ppb  | 08:12:16 |
| 3 | Sr 421.552†        | 82083.1   | 81163.0   | 493.94 µg/L | 493.94 ppb | 08:12:16 |
| 3 | Sc 361.383         | 1811158.1 | 1811158.1 | 99.452 %    |            | 08:13:55 |
| 3 | Y 371.029          | 1243973.4 | 1243973.4 | 98.795 %    |            | 08:13:55 |
| 3 | Ag 328.068†        | 54218.3   | 55054.5   | 476.63 µg/L | 476.63 ppb | 08:14:00 |
| 3 | As 188.979†        | 287.8     | 292.0     | 446.69 µg/L | 446.69 ppb | 08:14:21 |
| 3 | B 249.677†         | 9973.7    | 9719.6    | 473.52 µg/L | 473.52 ppb | 08:14:00 |
| 3 | Ba 233.527†        | 20127.3   | 20257.5   | 474.97 µg/L | 474.97 ppb | 08:14:00 |
| 3 | Be 313.107†        | 763281.6  | 769023.3  | 483.67 µg/L | 483.67 ppb | 08:13:55 |
| 3 | Cd 226.502†        | 18497.6   | 18765.7   | 477.05 µg/L | 477.05 ppb | 08:14:00 |
| 3 | Co 228.616†        | 10258.2   | 10290.0   | 470.31 µg/L | 470.31 ppb | 08:14:00 |
| 3 | Cr 267.716†        | 19693.5   | 19742.0   | 456.94 µg/L | 456.94 ppb | 08:14:00 |
| 3 | Cu 324.752†        | 68236.3   | 64343.7   | 452.73 µg/L | 452.73 ppb | 08:14:00 |
| 3 | Mn 257.610†        | 147335.7  | 148896.2  | 488.82 µg/L | 488.82 ppb | 08:13:55 |
| 3 | Mo 202.031†        | 4156.2    | 4169.3    | 437.82 µg/L | 437.82 ppb | 08:14:21 |
| 3 | Ni 231.604†        | 8262.3    | 7954.1    | 470.37 µg/L | 470.37 ppb | 08:14:00 |
| 3 | P 214.914†         | 1603.3    | 1325.2    | 2216.0 µg/L | 2216.0 ppb | 08:14:21 |
| 3 | Pb 220.353†        | 1673.9    | 1639.7    | 460.38 µg/L | 460.38 ppb | 08:14:21 |
| 3 | S 181.975 Axial†   | 303.1     | 282.8     | 933.45 µg/L | 933.45 ppb | 08:14:21 |
| 3 | Sb 206.836†        | 495.5     | 471.2     | 444.55 µg/L | 444.55 ppb | 08:14:21 |
| 3 | Se 196.026†        | 482.2     | 458.1     | 465.86 µg/L | 465.86 ppb | 08:14:21 |
| 3 | SiO2†              | 29463.3   | 26777.6   | 5060.8 µg/L | 5060.8 ppb | 08:14:00 |
| 3 | Si 251.611†        | 33627.3   | 33391.1   | 2376.2 µg/L | 2376.2 ppb | 08:14:00 |
| 3 | Sn 189.927†        | 1039.5    | 1047.0    | 441.63 µg/L | 441.63 ppb | 08:14:21 |
| 3 | Ti 334.940†        | 185711.6  | 187442.4  | 471.58 µg/L | 471.58 ppb | 08:13:55 |
| 3 | Tl 190.801†        | 407.8     | 447.0     | 472.91 µg/L | 472.91 ppb | 08:14:21 |
| 3 | U 409.014†         | 4568.3    | 4651.3    | 442.87 µg/L | 442.87 ppb | 08:14:00 |
| 3 | V 292.402†         | 36185.1   | 36265.5   | 463.52 µg/L | 463.52 ppb | 08:14:00 |
| 3 | Zn 213.857†        | 19853.4   | 19330.4   | 465.06 µg/L | 465.06 ppb | 08:14:00 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|

|   |           |             |        |            |        |        |
|---|-----------|-------------|--------|------------|--------|--------|
| Sc 361.383  | 1817906.9 | 99.823 %    | 0.3239 |            |        | 0.32%  |
| Sc RADIAL   | 87592.3   | 102 %       | 1.0    |            |        | 0.93%  |
| Y 371.029   | 1249843.8 | 99.261 %    | 0.4204 |            |        | 0.42%  |
| Ag 328.068†   | 58219.0   | 504.14 µg/L | 23.826 | 504.14 ppb | 23.826 | 4.73%  |
| QC value within limits for Ag 328.068 Recovery = 100.83%        |           |             |        |            |        |        |
| Al 396.153Radial†   | 9543.1    | 4958.7 µg/L | 40.53  | 4958.7 ppb | 40.53  | 0.82%  |
| QC value within limits for Al 396.153Radial Recovery = 99.17%   |           |             |        |            |        |        |
| As 188.979†   | 335.8     | 514.00 µg/L | 58.452 | 514.00 ppb | 58.452 | 11.37% |
| QC value within limits for As 188.979 Recovery = 102.80%        |           |             |        |            |        |        |
| B 249.677†  | 10345.8   | 504.31 µg/L | 26.681 | 504.31 ppb | 26.681 | 5.29%  |
| QC value within limits for B 249.677 Recovery = 100.86%         |           |             |        |            |        |        |
| Ba 233.527†   | 22090.7   | 517.97 µg/L | 37.244 | 517.97 ppb | 37.244 | 7.19%  |
| QC value within limits for Ba 233.527 Recovery = 103.59%        |           |             |        |            |        |        |
| Be 313.107†   | 822436.5  | 517.26 µg/L | 29.138 | 517.26 ppb | 29.138 | 5.63%  |
| QC value within limits for Be 313.107 Recovery = 103.45%        |           |             |        |            |        |        |
| Ca 317.933Radial†   | 13963.7   | 5171.1 µg/L | 37.84  | 5171.1 ppb | 37.84  | 0.73%  |
| QC value within limits for Ca 317.933Radial Recovery = 103.42%  |           |             |        |            |        |        |
| Cd 226.502†   | 20536.3   | 522.14 µg/L | 39.046 | 522.14 ppb | 39.046 | 7.48%  |
| QC value within limits for Cd 226.502 Recovery = 104.43%        |           |             |        |            |        |        |
| Co 228.616†   | 11355.9   | 519.08 µg/L | 42.244 | 519.08 ppb | 42.244 | 8.14%  |
| QC value within limits for Co 228.616 Recovery = 103.82%        |           |             |        |            |        |        |
| Cr 267.716†   | 22241.0   | 514.78 µg/L | 50.091 | 514.78 ppb | 50.091 | 9.73%  |
| QC value within limits for Cr 267.716 Recovery = 102.96%        |           |             |        |            |        |        |
| Cu 324.752†   | 70774.6   | 497.86 µg/L | 39.085 | 497.86 ppb | 39.085 | 7.85%  |
| QC value within limits for Cu 324.752 Recovery = 99.57%         |           |             |        |            |        |        |
| Fe 238.204 Radial†  | 450.0     | 5133.6 µg/L | 93.44  | 5133.6 ppb | 93.44  | 1.82%  |
| QC value within limits for Fe 238.204 Radial Recovery = 102.67% |           |             |        |            |        |        |
| K 766.490 Radial†   | 9719.4    | 4919.8 µg/L | 65.64  | 4919.8 ppb | 65.64  | 1.33%  |
| QC value within limits for K 766.490 Radial Recovery = 98.40%   |           |             |        |            |        |        |
| Mg 279.077 IEC†   | 413.5     | 5245.6 µg/L | 35.41  | 5245.6 ppb | 35.41  | 0.68%  |
| QC value within limits for Mg 279.077 IEC Recovery = 104.91%    |           |             |        |            |        |        |
| Mn 257.610†   | 158556.4  | 520.53 µg/L | 27.517 | 520.53 ppb | 27.517 | 5.29%  |
| QC value within limits for Mn 257.610 Recovery = 104.11%        |           |             |        |            |        |        |
| Mo 202.031†   | 4873.7    | 511.75 µg/L | 64.381 | 511.75 ppb | 64.381 | 12.58% |
| QC value within limits for Mo 202.031 Recovery = 102.35%        |           |             |        |            |        |        |
| Na 589.592 Radial†  | 20878.9   | 9955.9 µg/L | 97.82  | 9955.9 ppb | 97.82  | 0.98%  |
| QC value within limits for Na 589.592 Radial Recovery = 99.56%  |           |             |        |            |        |        |
| Ni 231.604†   | 8812.1    | 521.10 µg/L | 43.942 | 521.10 ppb | 43.942 | 8.43%  |
| QC value within limits for Ni 231.604 Recovery = 104.22%        |           |             |        |            |        |        |
| P 214.914†  | 1519.1    | 2543.2 µg/L | 285.02 | 2543.2 ppb | 285.02 | 11.21% |
| QC value within limits for P 214.914 Recovery = 101.73%         |           |             |        |            |        |        |
| Pb 220.353†   | 1855.5    | 520.99 µg/L | 52.567 | 520.99 ppb | 52.567 | 10.09% |
| QC value within limits for Pb 220.353 Recovery = 104.20%        |           |             |        |            |        |        |
| S 181.975 Axial†  | 311.1     | 1026.7 µg/L | 80.75  | 1026.7 ppb | 80.75  | 7.87%  |
| QC value within limits for S 181.975 Axial Recovery = 102.67%   |           |             |        |            |        |        |
| Sb 206.836†   | 533.2     | 503.31 µg/L | 51.381 | 503.31 ppb | 51.381 | 10.21% |
| QC value within limits for Sb 206.836 Recovery = 100.66%        |           |             |        |            |        |        |
| Se 196.026†   | 512.4     | 519.27 µg/L | 46.428 | 519.27 ppb | 46.428 | 8.94%  |
| QC value within limits for Se 196.026 Recovery = 103.85%        |           |             |        |            |        |        |
| SiO2†   | 28795.4   | 5442.1 µg/L | 330.26 | 5442.1 ppb | 330.26 | 6.07%  |
| QC value within limits for SiO2 Recovery = 101.77%              |           |             |        |            |        |        |
| Si 251.611†   | 35909.0   | 2555.4 µg/L | 155.17 | 2555.4 ppb | 155.17 | 6.07%  |
| QC value within limits for Si 251.611 Recovery = 102.21%        |           |             |        |            |        |        |
| Sn 189.927†   | 1231.1    | 519.20 µg/L | 67.859 | 519.20 ppb | 67.859 | 13.07% |
| QC value within limits for Sn 189.927 Recovery = 103.84%        |           |             |        |            |        |        |
| Sr 421.552†   | 80519.4   | 490.02 µg/L | 4.193  | 490.02 ppb | 4.193  | 0.86%  |
| QC value within limits for Sr 421.552 Recovery = 98.00%         |           |             |        |            |        |        |
| Ti 334.940†   | 201401.2  | 506.73 µg/L | 30.494 | 506.73 ppb | 30.494 | 6.02%  |
| QC value within limits for Ti 334.940 Recovery = 101.35%        |           |             |        |            |        |        |
| Tl 190.801†   | 491.5     | 519.81 µg/L | 40.800 | 519.81 ppb | 40.800 | 7.85%  |
| QC value within limits for Tl 190.801 Recovery = 103.96%        |           |             |        |            |        |        |
| U 409.014†  | 5204.9    | 495.72 µg/L | 45.784 | 495.72 ppb | 45.784 | 9.24%  |
| QC value within limits for U 409.014 Recovery = 99.14%          |           |             |        |            |        |        |
| V 292.402†  | 40075.7   | 512.58 µg/L | 42.490 | 512.58 ppb | 42.490 | 8.29%  |
| QC value within limits for V 292.402 Recovery = 102.52%         |           |             |        |            |        |        |
| Zn 213.857†   | 21253.6   | 511.37 µg/L | 40.119 | 511.37 ppb | 40.119 | 7.85%  |
| QC value within limits for Zn 213.857 Recovery = 102.27%        |           |             |        |            |        |        |
| All analyte(s) passed QC.                                       |           |             |        |            |        |        |

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 08:14:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 83881.4       | 83881.4             | 97.8 %             |                    | 08:15:03      |
| 1     | Al 396.153Radial†  | -237.8        | 13.9                | 7.2388 µg/L        | 7.2388 ppb         | 08:15:03      |
| 1     | Ca 317.933Radial†  | 338.8         | 21.4                | 7.9170 µg/L        | 7.9170 ppb         | 08:15:24      |
| 1     | Fe 238.204 Radial† | 16.2          | 1.6                 | 18.027 µg/L        | 18.027 ppb         | 08:15:24      |
| 1     | K 766.490 Radial†  | 412.6         | 48.3                | 24.462 µg/L        | 24.462 ppb         | 08:15:03      |
| 1     | Mg 279.077 IEC†    | 11.9          | 6.2                 | 78.304 µg/L        | 78.304 ppb         | 08:15:24      |
| 1     | Na 589.592 Radial† | 239.7         | 32.8                | 15.646 µg/L        | 15.646 ppb         | 08:15:03      |
| 1     | Sr 421.552†        | 165.1         | 50.5                | 0.3070 µg/L        | 0.3070 ppb         | 08:15:03      |
| 1     | Sc 361.383         | 1796260.9     | 1796260.9           | 98.634 %           |                    | 08:16:25      |
| 1     | Y 371.029          | 1242622.6     | 1242622.6           | 98.688 %           |                    | 08:16:25      |
| 1     | Ag 328.068†        | -532.6        | -2.5                | -0.0185 µg/L       | -0.0185 ppb        | 08:16:31      |
| 1     | As 188.979†        | -1.5          | 1.1                 | 1.6544 µg/L        | 1.6544 ppb         | 08:16:51      |
| 1     | B 249.677†         | 340.0         | 35.7                | 1.7375 µg/L        | 1.7375 ppb         | 08:16:51      |
| 1     | Ba 233.527†        | -18.9         | 0.1                 | 0.0025 µg/L        | 0.0025 ppb         | 08:16:51      |
| 1     | Be 313.107†        | -1600.2       | -86.8               | -0.0546 µg/L       | -0.0546 ppb        | 08:16:31      |
| 1     | Cd 226.502†        | -167.7        | -3.9                | -0.1000 µg/L       | -0.1000 ppb        | 08:16:51      |
| 1     | Co 228.616†        | 19.2          | -5.4                | -0.2446 µg/L       | -0.2446 ppb        | 08:16:51      |
| 1     | Cr 267.716†        | 88.2          | 29.4                | 0.6809 µg/L        | 0.6809 ppb         | 08:16:51      |
| 1     | Cu 324.752†        | 4196.7        | -13.8               | -0.0937 µg/L       | -0.0937 ppb        | 08:16:31      |
| 1     | Mn 257.610†        | -801.1        | -63.6               | -0.2130 µg/L       | -0.2130 ppb        | 08:16:51      |
| 1     | Mo 202.031†        | 18.1          | 8.5                 | 0.8925 µg/L        | 0.8925 ppb         | 08:16:51      |
| 1     | Ni 231.604†        | 350.7         | 1.8                 | 0.1061 µg/L        | 0.1061 ppb         | 08:16:51      |
| 1     | P 214.914†         | 288.2         | 5.2                 | 8.8645 µg/L        | 8.8645 ppb         | 08:16:51      |
| 1     | Pb 220.353†        | 54.4          | 11.7                | 3.2930 µg/L        | 3.2930 ppb         | 08:16:51      |
| 1     | S 181.975 Axial†   | 24.3          | 2.7                 | 8.7868 µg/L        | 8.7868 ppb         | 08:16:51      |
| 1     | Sb 206.836†        | 33.6          | 7.1                 | 6.6482 µg/L        | 6.6482 ppb         | 08:16:51      |
| 1     | Se 196.026†        | 25.2          | -1.2                | -1.1401 µg/L       | -1.1401 ppb        | 08:16:51      |
| 1     | SiO2†              | 2829.9        | 21.1                | 3.9840 µg/L        | 3.9840 ppb         | 08:16:31      |
| 1     | Si 251.611†        | 477.4         | 62.5                | 4.4503 µg/L        | 4.4503 ppb         | 08:16:51      |
| 1     | Sn 189.927†        | 0.9           | 2.7                 | 1.1565 µg/L        | 1.1565 ppb         | 08:16:51      |
| 1     | Ti 334.940†        | -664.3        | 33.9                | 0.0793 µg/L        | 0.0793 ppb         | 08:16:31      |
| 1     | Tl 190.801†        | -37.1         | -0.6                | -0.6382 µg/L       | -0.6382 ppb        | 08:16:51      |
| 1     | U 409.014†         | -19.5         | 38.0                | 3.6282 µg/L        | 3.6282 ppb         | 08:16:31      |
| 1     | V 292.402†         | 137.1         | 20.0                | 0.2621 µg/L        | 0.2621 ppb         | 08:16:31      |
| 1     | Zn 213.857†        | 624.1         | 0.4                 | 0.0029 µg/L        | 0.0029 ppb         | 08:16:51      |
| 2     | Sc RADIAL          | 83476.8       | 83476.8             | 97.3 %             |                    | 08:15:29      |
| 2     | Al 396.153Radial†  | -292.3        | -43.3               | -22.561 µg/L       | -22.561 ppb        | 08:15:29      |
| 2     | Ca 317.933Radial†  | 326.9         | 10.9                | 4.0288 µg/L        | 4.0288 ppb         | 08:15:49      |
| 2     | Fe 238.204 Radial† | 14.8          | 0.2                 | 2.5646 µg/L        | 2.5646 ppb         | 08:15:49      |
| 2     | K 766.490 Radial†  | 430.5         | 68.8                | 34.820 µg/L        | 34.820 ppb         | 08:15:29      |
| 2     | Mg 279.077 IEC†    | 6.9           | 1.1                 | 14.577 µg/L        | 14.577 ppb         | 08:15:49      |
| 2     | Na 589.592 Radial† | 201.9         | -4.9                | -2.3213 µg/L       | -2.3213 ppb        | 08:15:29      |
| 2     | Sr 421.552†        | 180.4         | 66.9                | 0.4073 µg/L        | 0.4073 ppb         | 08:15:29      |
| 2     | Sc 361.383         | 1790573.2     | 1790573.2           | 98.322 %           |                    | 08:16:57      |
| 2     | Y 371.029          | 1238357.5     | 1238357.5           | 98.349 %           |                    | 08:16:57      |
| 2     | Ag 328.068†        | -555.0        | -27.0               | -0.2319 µg/L       | -0.2319 ppb        | 08:17:03      |
| 2     | As 188.979†        | -2.5          | 0.0                 | 0.0261 µg/L        | 0.0261 ppb         | 08:17:24      |
| 2     | B 249.677†         | 318.9         | 15.2                | 0.7458 µg/L        | 0.7458 ppb         | 08:17:24      |
| 2     | Ba 233.527†        | -19.8         | -0.8                | -0.0197 µg/L       | -0.0197 ppb        | 08:17:24      |
| 2     | Be 313.107†        | -1638.4       | -130.8              | -0.0824 µg/L       | -0.0824 ppb        | 08:17:03      |
| 2     | Cd 226.502†        | -172.9        | -9.7                | -0.2468 µg/L       | -0.2468 ppb        | 08:17:24      |
| 2     | Co 228.616†        | 35.5          | 11.3                | 0.5201 µg/L        | 0.5201 ppb         | 08:17:24      |
| 2     | Cr 267.716†        | 91.5          | 33.1                | 0.7654 µg/L        | 0.7654 ppb         | 08:17:24      |
| 2     | Cu 324.752†        | 4226.9        | 30.4                | 0.2137 µg/L        | 0.2137 ppb         | 08:17:03      |
| 2     | Mn 257.610†        | -779.7        | -44.4               | -0.1466 µg/L       | -0.1466 ppb        | 08:17:24      |
| 2     | Mo 202.031†        | 19.9          | 10.4                | 1.0946 µg/L        | 1.0946 ppb         | 08:17:24      |
| 2     | Ni 231.604†        | 353.8         | 6.0                 | 0.3573 µg/L        | 0.3573 ppb         | 08:17:24      |
| 2     | P 214.914†         | 287.4         | 5.3                 | 8.9431 µg/L        | 8.9431 ppb         | 08:17:24      |
| 2     | Pb 220.353†        | 54.3          | 11.9                | 3.3394 µg/L        | 3.3394 ppb         | 08:17:24      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 24.5      | 2.9       | 9.6697 µg/L  | 9.6697 ppb  | 08:17:24 |
| 2 | Sb 206.836†        | 27.6      | 1.0       | 0.9790 µg/L  | 0.9790 ppb  | 08:17:24 |
| 2 | Se 196.026†        | 22.2      | -4.1      | -4.0958 µg/L | -4.0958 ppb | 08:17:24 |
| 2 | SiO2†              | 2872.4    | 73.4      | 13.877 µg/L  | 13.877 ppb  | 08:17:03 |
| 2 | Si 251.611†        | 487.8     | 74.6      | 5.3098 µg/L  | 5.3098 ppb  | 08:17:24 |
| 2 | Sn 189.927†        | 0.7       | 2.5       | 1.0642 µg/L  | 1.0642 ppb  | 08:17:24 |
| 2 | Ti 334.940†        | -642.7    | 53.7      | 0.1342 µg/L  | 0.1342 ppb  | 08:17:03 |
| 2 | Tl 190.801†        | -36.1     | 0.3       | 0.2876 µg/L  | 0.2876 ppb  | 08:17:24 |
| 2 | U 409.014†         | -53.8     | 3.1       | 0.2990 µg/L  | 0.2990 ppb  | 08:17:03 |
| 2 | V 292.402†         | 119.3     | 2.4       | 0.0403 µg/L  | 0.0403 ppb  | 08:17:03 |
| 2 | Zn 213.857†        | 635.8     | 14.2      | 0.3417 µg/L  | 0.3417 ppb  | 08:17:24 |
| 3 | Sc RADIAL          | 83301.7   | 83301.7   | 97.1 %       |             | 08:15:55 |
| 3 | Al 396.153Radial†  | -283.3    | -34.6     | -18.064 µg/L | -18.064 ppb | 08:15:55 |
| 3 | Ca 317.933Radial†  | 336.2     | 21.2      | 7.8431 µg/L  | 7.8431 ppb  | 08:16:15 |
| 3 | Fe 238.204 Radial† | 16.0      | 1.5       | 16.962 µg/L  | 16.962 ppb  | 08:16:15 |
| 3 | K 766.490 Radial†  | 388.3     | 26.2      | 13.264 µg/L  | 13.264 ppb  | 08:15:55 |
| 3 | Mg 279.077 IEC†    | 11.9      | 6.3       | 79.565 µg/L  | 79.565 ppb  | 08:16:15 |
| 3 | Na 589.592 Radial† | 183.9     | -22.9     | -10.932 µg/L | -10.932 ppb | 08:15:55 |
| 3 | Sr 421.552†        | 200.6     | 88.2      | 0.5366 µg/L  | 0.5366 ppb  | 08:15:55 |
| 3 | Sc 361.383         | 1794513.3 | 1794513.3 | 98.538 %     |             | 08:17:30 |
| 3 | Y 371.029          | 1237948.8 | 1237948.8 | 98.317 %     |             | 08:17:30 |
| 3 | Ag 328.068†        | -588.3    | -59.6     | -0.5143 µg/L | -0.5143 ppb | 08:17:35 |
| 3 | As 188.979†        | -1.6      | 1.0       | 1.4651 µg/L  | 1.4651 ppb  | 08:17:56 |
| 3 | B 249.677†         | 309.3     | 4.9       | 0.2289 µg/L  | 0.2289 ppb  | 08:17:56 |
| 3 | Ba 233.527†        | -13.8     | 5.2       | 0.1218 µg/L  | 0.1218 ppb  | 08:17:56 |
| 3 | Be 313.107†        | -1663.1   | -152.2    | -0.0959 µg/L | -0.0959 ppb | 08:17:35 |
| 3 | Cd 226.502†        | -166.9    | -3.2      | -0.0827 µg/L | -0.0827 ppb | 08:17:56 |
| 3 | Co 228.616†        | 27.8      | 3.4       | 0.1559 µg/L  | 0.1559 ppb  | 08:17:56 |
| 3 | Cr 267.716†        | 68.3      | 9.3       | 0.2155 µg/L  | 0.2155 ppb  | 08:17:56 |
| 3 | Cu 324.752†        | 4210.2    | 4.0       | 0.0315 µg/L  | 0.0315 ppb  | 08:17:35 |
| 3 | Mn 257.610†        | -775.3    | -38.2     | -0.1297 µg/L | -0.1297 ppb | 08:17:56 |
| 3 | Mo 202.031†        | 19.6      | 10.1      | 1.0579 µg/L  | 1.0579 ppb  | 08:17:56 |
| 3 | Ni 231.604†        | 353.3     | 4.8       | 0.2824 µg/L  | 0.2824 ppb  | 08:17:56 |
| 3 | P 214.914†         | 293.2     | 10.6      | 18.048 µg/L  | 18.048 ppb  | 08:17:56 |
| 3 | Pb 220.353†        | 50.4      | 7.8       | 2.1781 µg/L  | 2.1781 ppb  | 08:17:56 |
| 3 | S 181.975 Axial†   | 22.9      | 1.3       | 4.2284 µg/L  | 4.2284 ppb  | 08:17:56 |
| 3 | Sb 206.836†        | 31.9      | 5.4       | 5.0601 µg/L  | 5.0601 ppb  | 08:17:56 |
| 3 | Se 196.026†        | 13.1      | -13.4     | -13.315 µg/L | -13.315 ppb | 08:17:56 |
| 3 | SiO2†              | 2850.8    | 45.1      | 8.5283 µg/L  | 8.5283 ppb  | 08:17:35 |
| 3 | Si 251.611†        | 489.7     | 75.5      | 5.3697 µg/L  | 5.3697 ppb  | 08:17:56 |
| 3 | Sn 189.927†        | 7.3       | 9.3       | 3.8988 µg/L  | 3.8988 ppb  | 08:17:56 |
| 3 | Ti 334.940†        | -591.3    | 107.4     | 0.2642 µg/L  | 0.2642 ppb  | 08:17:35 |
| 3 | Tl 190.801†        | -33.2     | 3.3       | 3.4553 µg/L  | 3.4553 ppb  | 08:17:56 |
| 3 | U 409.014†         | -23.0     | 34.5      | 3.2907 µg/L  | 3.2907 ppb  | 08:17:35 |
| 3 | V 292.402†         | 77.6      | -40.3     | -0.5016 µg/L | -0.5016 ppb | 08:17:35 |
| 3 | Zn 213.857†        | 672.1     | 49.6      | 1.1962 µg/L  | 1.1962 ppb  | 08:17:56 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1793782.5                | 98.498 %           | 0.1600   |                    |          | 0.16%   |
| Sc RADIAL   | 83553.3                  | 97.4 %             | 0.35     |                    |          | 0.36%   |
| Y 371.029   | 1239643.0                | 98.451 %           | 0.2056   |                    |          | 0.21%   |
| Ag 328.068†   | -29.7                    | -0.2549 µg/L       | 0.24873  | -0.2549 ppb        | 0.24873  | 97.58%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -21.3                    | -11.129 µg/L       | 16.0649  | -11.129 ppb        | 16.0649  | 144.35% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 0.7                      | 1.0485 µg/L        | 0.89050  | 1.0485 ppb         | 0.89050  | 84.93%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 18.6                     | 0.9041 µg/L        | 0.76663  | 0.9041 ppb         | 0.76663  | 84.80%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 1.5                      | 0.0348 µg/L        | 0.07612  | 0.0348 ppb         | 0.07612  | 218.50% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -123.3                   | -0.0776 µg/L       | 0.02101  | -0.0776 ppb        | 0.02101  | 27.07%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 17.8                     | 6.5963 µg/L        | 2.22383  | 6.5963 ppb         | 2.22383  | 33.71%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -5.6                     | -0.1432 µg/L       | 0.09018  | -0.1432 ppb        | 0.09018  | 62.98%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 3.1                      | 0.1438 µg/L        | 0.38252  | 0.1438 ppb         | 0.38252  | 266.00% |



|                    |  |                           |          |             |          |         |
|--------------------|--|---------------------------|----------|-------------|----------|---------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |          |         |
|                    | 23.9   | 0.5539 µg/L               | 0.29613  | 0.5539 ppb  | 0.29613  | 53.46%  |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |          |         |
|                    | 6.9  | 0.0505 µg/L               | 0.15462  | 0.0505 ppb  | 0.15462  | 306.14% |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |          |         |
|                    | 1.1  | 12.518 µg/L               | 8.6363   | 12.518 ppb  | 8.6363   | 68.99%  |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |          |         |
|                    | 47.8   | 24.182 µg/L               | 10.7809  | 24.182 ppb  | 10.7809  | 44.58%  |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |          |         |
|                    | 4.5  | 57.482 µg/L               | 37.1623  | 57.482 ppb  | 37.1623  | 64.65%  |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |          |         |
|                    | -48.7  | -0.1631 µg/L              | 0.04402  | -0.1631 ppb | 0.04402  | 26.99%  |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |          |         |
|                    | 9.7  | 1.0150 µg/L               | 0.10764  | 1.0150 ppb  | 0.10764  | 10.60%  |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |          |         |
|                    | 1.7  | 0.7974 µg/L               | 13.56043 | 0.7974 ppb  | 13.56043 | >999.9% |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |          |         |
|                    | 4.2  | 0.2486 µg/L               | 0.12898  | 0.2486 ppb  | 0.12898  | 51.88%  |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |          |         |
|                    | 7.0  | 11.952 µg/L               | 5.2797   | 11.952 ppb  | 5.2797   | 44.17%  |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |          |         |
|                    | 10.5   | 2.9368 µg/L               | 0.65752  | 2.9368 ppb  | 0.65752  | 22.39%  |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |          |         |
|                    | 2.3  | 7.5617 µg/L               | 2.92021  | 7.5617 ppb  | 2.92021  | 38.62%  |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |          |         |
|                    | 4.5  | 4.2291 µg/L               | 2.92451  | 4.2291 ppb  | 2.92451  | 69.15%  |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |          |         |
|                    | -6.2   | -6.1837 µg/L              | 6.35046  | -6.1837 ppb | 6.35046  | 102.70% |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |          |         |
|                    | 46.5   | 8.7963 µg/L               | 4.95173  | 8.7963 ppb  | 4.95173  | 56.29%  |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |          |         |
|                    | 70.9   | 5.0432 µg/L               | 0.51438  | 5.0432 ppb  | 0.51438  | 10.20%  |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |          |         |
|                    | 4.8  | 2.0399 µg/L               | 1.61055  | 2.0399 ppb  | 1.61055  | 78.95%  |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |          |         |
|                    | 68.5   | 0.4170 µg/L               | 0.11509  | 0.4170 ppb  | 0.11509  | 27.60%  |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |          |         |
|                    | 65.0   | 0.1592 µg/L               | 0.09496  | 0.1592 ppb  | 0.09496  | 59.65%  |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |          |         |
|                    | 1.0  | 1.0349 µg/L               | 2.14664  | 1.0349 ppb  | 2.14664  | 207.43% |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |          |         |
|                    | 25.2   | 2.4060 µg/L               | 1.83248  | 2.4060 ppb  | 1.83248  | 76.16%  |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |          |         |
|                    | -6.0   | -0.0664 µg/L              | 0.39284  | -0.0664 ppb | 0.39284  | 591.75% |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |          |         |
|                    | 21.4   | 0.5136 µg/L               | 0.61492  | 0.5136 ppb  | 0.61492  | 119.73% |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 08:44:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86166.7          | 86166.7                | 100 %                 |                       | 08:44:40         |
| 1     | Al 396.153Radial†  | 9548.1           | 9765.4                 | 5073.7 µg/L           | 5073.7 ppb            | 08:44:40         |
| 1     | Ca 317.933Radial†  | 14435.4          | 14049.9                | 5203.0 µg/L           | 5203.0 ppb            | 08:44:40         |
| 1     | Fe 238.204 Radial† | 472.6            | 455.7                  | 5198.1 µg/L           | 5198.1 ppb            | 08:45:01         |
| 1     | K 766.490 Radial†  | 10188.4          | 9772.2                 | 4946.5 µg/L           | 4946.5 ppb            | 08:44:40         |
| 1     | Mg 279.077 IEC†    | 427.8            | 420.1                  | 5329.9 µg/L           | 5329.9 ppb            | 08:45:01         |
| 1     | Na 589.592 Radial† | 21504.8          | 21202.6                | 10110 µg/L            | 10110 ppb             | 08:44:40         |
| 1     | Sr 421.552†        | 82125.0          | 81663.4                | 496.98 µg/L           | 496.98 ppb            | 08:44:40         |
| 1     | Sc 361.383         | 1825878.4        | 1825878.4              | 100.26 %              |                       | 08:46:04         |
| 1     | Y 371.029          | 1257972.2        | 1257972.2              | 99.907 %              |                       | 08:46:04         |
| 1     | Ag 328.068†        | 58275.0          | 58661.2                | 508.04 µg/L           | 508.04 ppb            | 08:46:10         |
| 1     | As 188.979†        | 353.4            | 355.0                  | 543.42 µg/L           | 543.42 ppb            | 08:46:30         |
| 1     | B 249.677†         | 10765.3          | 10428.3                | 508.34 µg/L           | 508.34 ppb            | 08:46:10         |
| 1     | Ba 233.527†        | 22525.8          | 22486.6                | 527.26 µg/L           | 527.26 ppb            | 08:46:10         |
| 1     | Be 313.107†        | 834213.4         | 833583.4               | 524.27 µg/L           | 524.27 ppb            | 08:46:04         |
| 1     | Cd 226.502†        | 20859.9          | 20972.0                | 533.22 µg/L           | 533.22 ppb            | 08:46:10         |
| 1     | Co 228.616†        | 11660.4          | 11605.3                | 530.51 µg/L           | 530.51 ppb            | 08:46:10         |
| 1     | Cr 267.716†        | 23107.7          | 22987.7                | 532.06 µg/L           | 532.06 ppb            | 08:46:10         |
| 1     | Cu 324.752†        | 76917.8          | 72449.5                | 509.63 µg/L           | 509.63 ppb            | 08:46:10         |
| 1     | Mn 257.610†        | 160437.5         | 160769.7               | 527.79 µg/L           | 527.79 ppb            | 08:46:04         |
| 1     | Mo 202.031†        | 5228.2           | 5204.8                 | 546.51 µg/L           | 546.51 ppb            | 08:46:30         |
| 1     | Ni 231.604†        | 9396.2           | 9018.0                 | 533.28 µg/L           | 533.28 ppb            | 08:46:10         |
| 1     | P 214.914†         | 1891.8           | 1599.9                 | 2680.2 µg/L           | 2680.2 ppb            | 08:46:30         |
| 1     | Pb 220.353†        | 1997.4           | 1948.9                 | 547.25 µg/L           | 547.25 ppb            | 08:46:30         |
| 1     | S 181.975 Axial†   | 347.2            | 324.3                  | 1070.4 µg/L           | 1070.4 ppb            | 08:46:30         |
| 1     | Sb 206.836†        | 589.7            | 561.2                  | 529.98 µg/L           | 529.98 ppb            | 08:46:30         |
| 1     | Se 196.026†        | 562.6            | 534.4                  | 541.23 µg/L           | 541.23 ppb            | 08:46:30         |
| 1     | SiO2†              | 32454.3          | 29522.0                | 5579.4 µg/L           | 5579.4 ppb            | 08:46:10         |
| 1     | Si 251.611†        | 37282.7          | 36764.4                | 2616.2 µg/L           | 2616.2 ppb            | 08:46:10         |
| 1     | Sn 189.927†        | 1316.4           | 1314.7                 | 554.41 µg/L           | 554.41 ppb            | 08:46:30         |
| 1     | Ti 334.940†        | 204876.5         | 205052.0               | 515.92 µg/L           | 515.92 ppb            | 08:46:04         |
| 1     | Tl 190.801†        | 467.7            | 503.5                  | 532.43 µg/L           | 532.43 ppb            | 08:46:30         |
| 1     | U 409.014†         | 5336.6           | 5380.7                 | 512.48 µg/L           | 512.48 ppb            | 08:46:10         |
| 1     | V 292.402†         | 41418.9          | 41192.4                | 527.04 µg/L           | 527.04 ppb            | 08:46:10         |
| 1     | Zn 213.857†        | 22470.6          | 21779.9                | 524.05 µg/L           | 524.05 ppb            | 08:46:10         |
| 2     | Sc RADIAL          | 85970.9          | 85970.9                | 100 %                 |                       | 08:45:06         |
| 2     | Al 396.153Radial†  | 9390.2           | 9629.5                 | 5003.2 µg/L           | 5003.2 ppb            | 08:45:06         |
| 2     | Ca 317.933Radial†  | 14292.8          | 13940.3                | 5162.5 µg/L           | 5162.5 ppb            | 08:45:06         |
| 2     | Fe 238.204 Radial† | 477.0            | 461.1                  | 5260.2 µg/L           | 5260.2 ppb            | 08:45:27         |
| 2     | K 766.490 Radial†  | 10166.8          | 9773.7                 | 4947.3 µg/L           | 4947.3 ppb            | 08:45:06         |
| 2     | Mg 279.077 IEC†    | 430.2            | 423.5                  | 5372.1 µg/L           | 5372.1 ppb            | 08:45:27         |
| 2     | Na 589.592 Radial† | 21205.9          | 20953.1                | 9991.3 µg/L           | 9991.3 ppb            | 08:45:06         |
| 2     | Sr 421.552†        | 81205.4          | 80932.0                | 492.53 µg/L           | 492.53 ppb            | 08:45:06         |
| 2     | Sc 361.383         | 1816290.9        | 1816290.9              | 99.734 %              |                       | 08:46:37         |
| 2     | Y 371.029          | 1250506.1        | 1250506.1              | 99.314 %              |                       | 08:46:37         |
| 2     | Ag 328.068†        | 58332.1          | 59025.3                | 511.18 µg/L           | 511.18 ppb            | 08:46:43         |
| 2     | As 188.979†        | 347.0            | 350.5                  | 536.52 µg/L           | 536.52 ppb            | 08:47:03         |
| 2     | B 249.677†         | 10731.2          | 10450.7                | 509.40 µg/L           | 509.40 ppb            | 08:46:43         |
| 2     | Ba 233.527†        | 22509.7          | 22589.1                | 529.66 µg/L           | 529.66 ppb            | 08:46:43         |
| 2     | Be 313.107†        | 830585.3         | 834337.7               | 524.75 µg/L           | 524.75 ppb            | 08:46:37         |
| 2     | Cd 226.502†        | 20801.3          | 21023.0                | 534.51 µg/L           | 534.51 ppb            | 08:46:43         |
| 2     | Co 228.616†        | 11691.7          | 11698.1                | 534.74 µg/L           | 534.74 ppb            | 08:46:43         |
| 2     | Cr 267.716†        | 23066.9          | 23068.4                | 533.93 µg/L           | 533.93 ppb            | 08:46:43         |
| 2     | Cu 324.752†        | 77031.3          | 72968.2                | 513.28 µg/L           | 513.28 ppb            | 08:46:43         |
| 2     | Mn 257.610†        | 159909.6         | 161085.1               | 528.83 µg/L           | 528.83 ppb            | 08:46:37         |
| 2     | Mo 202.031†        | 5080.6           | 5084.3                 | 533.86 µg/L           | 533.86 ppb            | 08:47:03         |
| 2     | Ni 231.604†        | 9362.6           | 9033.8                 | 534.21 µg/L           | 534.21 ppb            | 08:46:43         |
| 2     | P 214.914†         | 1855.8           | 1573.8                 | 2635.1 µg/L           | 2635.1 ppb            | 08:47:03         |
| 2     | Pb 220.353†        | 1962.1           | 1924.0                 | 540.22 µg/L           | 540.22 ppb            | 08:47:03         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 339.1     | 318.0     | 1049.7 µg/L | 1049.7 ppb | 08:47:03 |
| 2 | Sb 206.836†        | 569.9     | 544.4     | 514.05 µg/L | 514.05 ppb | 08:47:03 |
| 2 | Se 196.026†        | 555.6     | 530.4     | 537.37 µg/L | 537.37 ppb | 08:47:03 |
| 2 | SiO2†              | 32587.1   | 29826.1   | 5636.9 µg/L | 5636.9 ppb | 08:46:43 |
| 2 | Si 251.611†        | 37559.5   | 37238.2   | 2649.9 µg/L | 2649.9 ppb | 08:46:43 |
| 2 | Sn 189.927†        | 1272.8    | 1277.9    | 538.91 µg/L | 538.91 ppb | 08:47:03 |
| 2 | Ti 334.940†        | 204050.2  | 205302.2  | 516.54 µg/L | 516.54 ppb | 08:46:37 |
| 2 | Tl 190.801†        | 466.8     | 505.1     | 534.12 µg/L | 534.12 ppb | 08:47:03 |
| 2 | U 409.014†         | 5299.4    | 5371.4    | 511.59 µg/L | 511.59 ppb | 08:46:43 |
| 2 | V 292.402†         | 41261.2   | 41252.4   | 527.70 µg/L | 527.70 ppb | 08:46:43 |
| 2 | Zn 213.857†        | 22459.9   | 21887.4   | 526.64 µg/L | 526.64 ppb | 08:46:43 |
| 3 | SC RADIAL          | 86621.7   | 86621.7   | 101 %       |            | 08:45:32 |
| 3 | Al 396.153Radial†  | 9402.3    | 9571.1    | 4974.9 µg/L | 4974.9 ppb | 08:45:32 |
| 3 | Ca 317.933Radial†  | 14364.5   | 13904.2   | 5149.1 µg/L | 5149.1 ppb | 08:45:32 |
| 3 | Fe 238.204 Radial† | 474.4     | 455.0     | 5188.5 µg/L | 5188.5 ppb | 08:45:52 |
| 3 | K 766.490 Radial†  | 10100.2   | 9631.4    | 4875.3 µg/L | 4875.3 ppb | 08:45:32 |
| 3 | Mg 279.077 IEC†    | 427.3     | 417.3     | 5292.6 µg/L | 5292.6 ppb | 08:45:52 |
| 3 | Na 589.592 Radial† | 21375.7   | 20962.2   | 9995.7 µg/L | 9995.7 ppb | 08:45:32 |
| 3 | Sr 421.552†        | 81346.7   | 80462.9   | 489.68 µg/L | 489.68 ppb | 08:45:32 |
| 3 | Sc 361.383         | 1824939.8 | 1824939.8 | 100.21 %    |            | 08:47:11 |
| 3 | Y 371.029          | 1255989.7 | 1255989.7 | 99.749 %    |            | 08:47:11 |
| 3 | Ag 328.068†        | 53626.8   | 54052.6   | 467.95 µg/L | 467.95 ppb | 08:47:16 |
| 3 | As 188.979†        | 281.0     | 283.0     | 432.93 µg/L | 432.93 ppb | 08:47:37 |
| 3 | B 249.677†         | 9811.8    | 9482.2    | 461.92 µg/L | 461.92 ppb | 08:47:16 |
| 3 | Ba 233.527†        | 19840.6   | 19818.5   | 464.68 µg/L | 464.68 ppb | 08:47:16 |
| 3 | Be 313.107†        | 752980.7  | 752947.9  | 473.56 µg/L | 473.56 ppb | 08:47:11 |
| 3 | Cd 226.502†        | 18274.4   | 18402.5   | 467.81 µg/L | 467.81 ppb | 08:47:16 |
| 3 | Co 228.616†        | 10118.1   | 10072.2   | 460.35 µg/L | 460.35 ppb | 08:47:16 |
| 3 | Cr 267.716†        | 19327.4   | 19227.2   | 445.03 µg/L | 445.03 ppb | 08:47:16 |
| 3 | Cu 324.752†        | 67592.6   | 63183.2   | 444.57 µg/L | 444.57 ppb | 08:47:16 |
| 3 | Mn 257.610†        | 145619.1  | 146064.4  | 479.51 µg/L | 479.51 ppb | 08:47:11 |
| 3 | Mo 202.031†        | 4099.3    | 4080.9    | 428.54 µg/L | 428.54 ppb | 08:47:37 |
| 3 | Ni 231.604†        | 8175.7    | 7804.9    | 461.55 µg/L | 461.55 ppb | 08:47:16 |
| 3 | P 214.914†         | 1578.4    | 1288.1    | 2153.5 µg/L | 2153.5 ppb | 08:47:37 |
| 3 | Pb 220.353†        | 1625.4    | 1578.6    | 443.24 µg/L | 443.24 ppb | 08:47:37 |
| 3 | S 181.975 Axial†   | 295.7     | 273.1     | 901.53 µg/L | 901.53 ppb | 08:47:37 |
| 3 | Sb 206.836†        | 483.4     | 455.4     | 429.68 µg/L | 429.68 ppb | 08:47:37 |
| 3 | Se 196.026†        | 481.1     | 453.4     | 460.95 µg/L | 460.95 ppb | 08:47:37 |
| 3 | SiO2†              | 29629.6   | 26719.9   | 5049.8 µg/L | 5049.8 ppb | 08:47:16 |
| 3 | Si 251.611†        | 33754.5   | 33262.7   | 2367.0 µg/L | 2367.0 ppb | 08:47:16 |
| 3 | Sn 189.927†        | 1007.9    | 1007.6    | 425.02 µg/L | 425.02 ppb | 08:47:37 |
| 3 | Ti 334.940†        | 183649.2  | 183974.1  | 462.85 µg/L | 462.85 ppb | 08:47:11 |
| 3 | Tl 190.801†        | 400.7     | 436.8     | 462.15 µg/L | 462.15 ppb | 08:47:37 |
| 3 | U 409.014†         | 4582.1    | 4630.4    | 440.88 µg/L | 440.88 ppb | 08:47:16 |
| 3 | V 292.402†         | 35662.6   | 35469.4   | 453.34 µg/L | 453.34 ppb | 08:47:16 |
| 3 | Zn 213.857†        | 19675.1   | 19001.7   | 457.15 µg/L | 457.15 ppb | 08:47:16 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1822369.7                | 100.07 %           | 0.290    |                    |          | 0.29%  |
| Sc RADIAL  | 86253.1                  | 101 %              | 0.4      |                    |          | 0.39%  |
| Y 371.029  | 1254822.7                | 99.657 %           | 0.3071   |                    |          | 0.31%  |
| Ag 328.068†  | 57246.4                  | 495.72 µg/L        | 24.104   | 495.72 ppb         | 24.104   | 4.86%  |
| QC value within limits for Ag 328.068 Recovery = 99.14%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9655.3                   | 5017.3 µg/L        | 50.86    | 5017.3 ppb         | 50.86    | 1.01%  |
| QC value within limits for Al 396.153Radial Recovery = 100.35% |                          |                    |          |                    |          |        |
| As 188.979†  | 329.5                    | 504.29 µg/L        | 61.896   | 504.29 ppb         | 61.896   | 12.27% |
| QC value within limits for As 188.979 Recovery = 100.86%       |                          |                    |          |                    |          |        |
| B 249.677†   | 10120.4                  | 493.22 µg/L        | 27.114   | 493.22 ppb         | 27.114   | 5.50%  |
| QC value within limits for B 249.677 Recovery = 98.64%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21631.4                  | 507.20 µg/L        | 36.842   | 507.20 ppb         | 36.842   | 7.26%  |
| QC value within limits for Ba 233.527 Recovery = 101.44%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 806956.4                 | 507.53 µg/L        | 29.417   | 507.53 ppb         | 29.417   | 5.80%  |
| QC value within limits for Be 313.107 Recovery = 101.51%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13964.8                  | 5171.5 µg/L        | 28.10    | 5171.5 ppb         | 28.10    | 0.54%  |
| QC value within limits for Ca 317.933Radial Recovery = 103.43% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 20132.5                  | 511.85 µg/L        | 38.141   | 511.85 ppb         | 38.141   | 7.45%  |
| QC value within limits for Cd 226.502 Recovery = 102.37%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11125.2                  | 508.53 µg/L        | 41.780   | 508.53 ppb         | 41.780   | 8.22%  |

|  |                    |             |        |            |
|--|--------------------|-------------|--------|------------|
| QC value within limits for Co 228.616        | Recovery = 101.71% |             |        |            |
| Cr 267.716†                                  | 21761.1            | 503.67 µg/L | 50.796 | 503.67 ppb |
| QC value within limits for Cr 267.716        | Recovery = 100.73% |             |        |            |
| Cu 324.752†                                  | 69533.6            | 489.16 µg/L | 38.660 | 489.16 ppb |
| QC value within limits for Cu 324.752        | Recovery = 97.83%  |             |        |            |
| Fe 238.204 Radial†                           | 457.3              | 5215.6 µg/L | 38.93  | 5215.6 ppb |
| QC value within limits for Fe 238.204 Radial | Recovery = 104.31% |             |        |            |
| K 766.490 Radial†                            | 9725.8             | 4923.0 µg/L | 41.35  | 4923.0 ppb |
| QC value within limits for K 766.490 Radial  | Recovery = 98.46%  |             |        |            |
| Mg 279.077 IEC†                              | 420.3              | 5331.6 µg/L | 39.76  | 5331.6 ppb |
| QC value within limits for Mg 279.077 IEC    | Recovery = 106.63% |             |        |            |
| Mn 257.610†                                  | 155973.1           | 512.05 µg/L | 28.178 | 512.05 ppb |
| QC value within limits for Mn 257.610        | Recovery = 102.41% |             |        |            |
| Mo 202.031†                                  | 4790.0             | 502.97 µg/L | 64.765 | 502.97 ppb |
| QC value within limits for Mo 202.031        | Recovery = 100.59% |             |        |            |
| Na 589.592 Radial†                           | 21039.3            | 10032 µg/L  | 67.5   | 10032 ppb  |
| QC value within limits for Na 589.592 Radial | Recovery = 100.32% |             |        |            |
| Ni 231.604†                                  | 8618.9             | 509.68 µg/L | 41.685 | 509.68 ppb |
| QC value within limits for Ni 231.604        | Recovery = 101.94% |             |        |            |
| P 214.914†                                   | 1487.3             | 2489.6 µg/L | 291.97 | 2489.6 ppb |
| QC value within limits for P 214.914         | Recovery = 99.58%  |             |        |            |
| Pb 220.353†                                  | 1817.2             | 510.23 µg/L | 58.127 | 510.23 ppb |
| QC value within limits for Pb 220.353        | Recovery = 102.05% |             |        |            |
| S 181.975 Axial†                             | 305.2              | 1007.2 µg/L | 92.12  | 1007.2 ppb |
| QC value within limits for S 181.975 Axial   | Recovery = 100.72% |             |        |            |
| Sb 206.836†                                  | 520.3              | 491.24 µg/L | 53.900 | 491.24 ppb |
| QC value within limits for Sb 206.836        | Recovery = 98.25%  |             |        |            |
| Se 196.026†                                  | 506.1              | 513.19 µg/L | 45.276 | 513.19 ppb |
| QC value within limits for Se 196.026        | Recovery = 102.64% |             |        |            |
| SiO2†  | 28689.3            | 5422.1 µg/L | 323.62 | 5422.1 ppb |
| QC value within limits for SiO2              | Recovery = 101.39% |             |        |            |
| Si 251.611†                                  | 35755.1            | 2544.4 µg/L | 154.52 | 2544.4 ppb |
| QC value within limits for Si 251.611        | Recovery = 101.78% |             |        |            |
| Sn 189.927†                                  | 1200.1             | 506.11 µg/L | 70.658 | 506.11 ppb |
| QC value within limits for Sn 189.927        | Recovery = 101.22% |             |        |            |
| Sr 421.552†                                  | 81019.4            | 493.06 µg/L | 3.682  | 493.06 ppb |
| QC value within limits for Sr 421.552        | Recovery = 98.61%  |             |        |            |
| Ti 334.940†                                  | 198109.5           | 498.44 µg/L | 30.820 | 498.44 ppb |
| QC value within limits for Ti 334.940        | Recovery = 99.69%  |             |        |            |
| Tl 190.801†                                  | 481.8              | 509.57 µg/L | 41.074 | 509.57 ppb |
| QC value within limits for Tl 190.801        | Recovery = 101.91% |             |        |            |
| U 409.014†                                   | 5127.5             | 488.32 µg/L | 41.083 | 488.32 ppb |
| QC value within limits for U 409.014         | Recovery = 97.66%  |             |        |            |
| V 292.402†                                   | 39304.7            | 502.69 µg/L | 42.746 | 502.69 ppb |
| QC value within limits for V 292.402         | Recovery = 100.54% |             |        |            |
| Zn 213.857†                                  | 20889.7            | 502.61 µg/L | 39.392 | 502.61 ppb |
| QC value within limits for Zn 213.857        | Recovery = 100.52% |             |        |            |

All analyte(s) passed QC.

Sequence No.: 21  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/11/2010 08:47:47  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84653.3          | 84653.3                | 98.7 %                |                       | 08:48:19         |
| 1     | Al 396.153Radial†  | -263.5           | -9.9                   | -5.1943 µg/L          | -5.1943 ppb           | 08:48:19         |
| 1     | Ca 317.933Radial†  | 337.7            | 17.1                   | 6.3396 µg/L           | 6.3396 ppb            | 08:48:40         |
| 1     | Fe 238.204 Radial† | 15.6             | 0.9                    | 9.8782 µg/L           | 9.8782 ppb            | 08:48:40         |
| 1     | K 766.490 Radial†  | 404.7            | 36.5                   | 18.493 µg/L           | 18.493 ppb            | 08:48:19         |
| 1     | Mg 279.077 IEC†    | 6.5              | 0.7                    | 8.7455 µg/L           | 8.7455 ppb            | 08:48:40         |
| 1     | Na 589.592 Radial† | 221.7            | 12.3                   | 5.8821 µg/L           | 5.8821 ppb            | 08:48:19         |
| 1     | Sr 421.552†        | 174.8            | 58.8                   | 0.3576 µg/L           | 0.3576 ppb            | 08:48:19         |
| 1     | Sc 361.383         | 1792072.4        | 1792072.4              | 98.404 %              |                       | 08:49:42         |
| 1     | Y 371.029          | 1236915.0        | 1236915.0              | 98.235 %              |                       | 08:49:42         |
| 1     | Ag 328.068†        | -516.4           | 12.7                   | 0.1073 µg/L           | 0.1073 ppb            | 08:49:47         |
| 1     | As 188.979†        | -0.6             | 2.0                    | 3.0252 µg/L           | 3.0252 ppb            | 08:50:08         |
| 1     | B 249.677†         | 318.1            | 14.2                   | 0.6909 µg/L           | 0.6909 ppb            | 08:50:08         |
| 1     | Ba 233.527†        | -20.4            | -1.4                   | -0.0337 µg/L          | -0.0337 ppb           | 08:50:08         |
| 1     | Be 313.107†        | -1472.5          | 39.2                   | 0.0246 µg/L           | 0.0246 ppb            | 08:49:47         |
| 1     | Cd 226.502†        | -167.2           | -3.7                   | -0.0946 µg/L          | -0.0946 ppb           | 08:50:08         |
| 1     | Co 228.616†        | 32.4             | 8.1                    | 0.3701 µg/L           | 0.3701 ppb            | 08:50:08         |
| 1     | Cr 267.716†        | 72.2             | 13.3                   | 0.3080 µg/L           | 0.3080 ppb            | 08:50:08         |
| 1     | Cu 324.752†        | 4166.6           | -34.5                  | -0.2401 µg/L          | -0.2401 ppb           | 08:49:47         |
| 1     | Mn 257.610†        | -704.3           | 32.9                   | 0.1081 µg/L           | 0.1081 ppb            | 08:50:08         |
| 1     | Mo 202.031†        | 19.5             | 10.0                   | 1.0527 µg/L           | 1.0527 ppb            | 08:50:08         |
| 1     | Ni 231.604†        | 352.3            | 4.3                    | 0.2517 µg/L           | 0.2517 ppb            | 08:50:08         |
| 1     | P 214.914†         | 287.5            | 5.1                    | 8.8026 µg/L           | 8.8026 ppb            | 08:50:08         |
| 1     | Pb 220.353†        | 47.0             | 4.4                    | 1.2429 µg/L           | 1.2429 ppb            | 08:50:08         |
| 1     | S 181.975 Axial†   | 27.4             | 5.8                    | 19.243 µg/L           | 19.243 ppb            | 08:50:08         |
| 1     | Sb 206.836†        | 31.4             | 4.9                    | 4.5938 µg/L           | 4.5938 ppb            | 08:50:08         |
| 1     | Se 196.026†        | 13.2             | -13.3                  | -13.171 µg/L          | -13.171 ppb           | 08:50:08         |
| 1     | SiO2†              | 2930.6           | 130.2                  | 24.598 µg/L           | 24.598 ppb            | 08:49:47         |
| 1     | Si 251.611†        | 632.5            | 221.2                  | 15.743 µg/L           | 15.743 ppb            | 08:50:08         |
| 1     | Sn 189.927†        | 0.7              | 2.5                    | 1.0557 µg/L           | 1.0557 ppb            | 08:50:08         |
| 1     | Ti 334.940†        | -598.5           | 99.3                   | 0.2493 µg/L           | 0.2493 ppb            | 08:49:47         |
| 1     | Tl 190.801†        | -38.4            | -2.0                   | -2.1352 µg/L          | -2.1352 ppb           | 08:50:08         |
| 1     | U 409.014†         | 6.5              | 64.5                   | 6.1510 µg/L           | 6.1510 ppb            | 08:49:47         |
| 1     | V 292.402†         | 88.4             | -29.1                  | -0.3560 µg/L          | -0.3560 ppb           | 08:49:47         |
| 1     | Zn 213.857†        | 628.0            | 5.8                    | 0.1377 µg/L           | 0.1377 ppb            | 08:50:08         |
| 2     | Sc RADIAL          | 85390.5          | 85390.5                | 99.5 %                |                       | 08:48:45         |
| 2     | Al 396.153Radial†  | -224.1           | 32.0                   | 16.641 µg/L           | 16.641 ppb            | 08:48:45         |
| 2     | Ca 317.933Radial†  | 344.4            | 20.9                   | 7.7409 µg/L           | 7.7409 ppb            | 08:49:06         |
| 2     | Fe 238.204 Radial† | 15.8             | 0.9                    | 10.134 µg/L           | 10.134 ppb            | 08:49:06         |
| 2     | K 766.490 Radial†  | 410.2            | 38.5                   | 19.465 µg/L           | 19.465 ppb            | 08:48:45         |
| 2     | Mg 279.077 IEC†    | 9.6              | 3.7                    | 46.408 µg/L           | 46.408 ppb            | 08:49:06         |
| 2     | Na 589.592 Radial† | 250.9            | 39.7                   | 18.926 µg/L           | 18.926 ppb            | 08:48:45         |
| 2     | Sr 421.552†        | 192.4            | 74.8                   | 0.4555 µg/L           | 0.4555 ppb            | 08:48:45         |
| 2     | Sc 361.383         | 1814167.0        | 1814167.0              | 99.617 %              |                       | 08:50:14         |
| 2     | Y 371.029          | 1252281.6        | 1252281.6              | 99.455 %              |                       | 08:50:14         |
| 2     | Ag 328.068†        | -519.4           | 16.0                   | 0.1328 µg/L           | 0.1328 ppb            | 08:50:19         |
| 2     | As 188.979†        | -0.2             | 2.3                    | 3.5866 µg/L           | 3.5866 ppb            | 08:50:40         |
| 2     | B 249.677†         | 329.6            | 21.8                   | 1.0633 µg/L           | 1.0633 ppb            | 08:50:40         |
| 2     | Ba 233.527†        | -21.0            | -1.8                   | -0.0426 µg/L          | -0.0426 ppb           | 08:50:40         |
| 2     | Be 313.107†        | -1598.3          | -68.8                  | -0.0434 µg/L          | -0.0434 ppb           | 08:50:19         |
| 2     | Cd 226.502†        | -170.0           | -4.5                   | -0.1150 µg/L          | -0.1150 ppb           | 08:50:40         |
| 2     | Co 228.616†        | 29.5             | 4.8                    | 0.2181 µg/L           | 0.2181 ppb            | 08:50:40         |
| 2     | Cr 267.716†        | 71.7             | 12.0                   | 0.2764 µg/L           | 0.2764 ppb            | 08:50:40         |
| 2     | Cu 324.752†        | 4226.6           | -25.9                  | -0.1797 µg/L          | -0.1797 ppb           | 08:50:19         |
| 2     | Mn 257.610†        | -745.4           | 0.4                    | -0.0014 µg/L          | -0.0014 ppb           | 08:50:40         |
| 2     | Mo 202.031†        | 11.4             | 1.6                    | 0.1661 µg/L           | 0.1661 ppb            | 08:50:40         |
| 2     | Ni 231.604†        | 356.7            | 4.3                    | 0.2523 µg/L           | 0.2523 ppb            | 08:50:40         |
| 2     | P 214.914†         | 284.0            | -1.9                   | -3.2692 µg/L          | -3.2692 ppb           | 08:50:40         |
| 2     | Pb 220.353†        | 55.7             | 12.6                   | 3.5368 µg/L           | 3.5368 ppb            | 08:50:40         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 26.1      | 4.2       | 13.928 µg/L  | 13.928 ppb  | 08:50:40 |
| 2 | Sb 206.836†        | 28.7      | 1.8       | 1.7102 µg/L  | 1.7102 ppb  | 08:50:40 |
| 2 | Se 196.026†        | 32.8      | 6.2       | 6.1019 µg/L  | 6.1019 ppb  | 08:50:40 |
| 2 | SiO2†              | 2968.5    | 131.9     | 24.932 µg/L  | 24.932 ppb  | 08:50:19 |
| 2 | Si 251.611†        | 630.5     | 211.4     | 15.047 µg/L  | 15.047 ppb  | 08:50:40 |
| 2 | Sn 189.927†        | -0.5      | 1.3       | 0.5593 µg/L  | 0.5593 ppb  | 08:50:40 |
| 2 | Ti 334.940†        | -575.6    | 129.6     | 0.3229 µg/L  | 0.3229 ppb  | 08:50:19 |
| 2 | Tl 190.801†        | -37.4     | -0.6      | -0.6081 µg/L | -0.6081 ppb | 08:50:40 |
| 2 | U 409.014†         | -74.0     | -16.5     | -1.5727 µg/L | -1.5727 ppb | 08:50:19 |
| 2 | V 292.402†         | 47.9      | -70.9     | -0.8997 µg/L | -0.8997 ppb | 08:50:19 |
| 2 | Zn 213.857†        | 630.7     | 0.7       | 0.0125 µg/L  | 0.0125 ppb  | 08:50:40 |
| 3 | Sc RADIAL          | 85666.8   | 85666.8   | 99.8 %       |             | 08:49:11 |
| 3 | Al 396.153Radial†  | -238.5    | 18.3      | 9.5033 µg/L  | 9.5033 ppb  | 08:49:11 |
| 3 | Ca 317.933Radial†  | 332.7     | 8.1       | 3.0008 µg/L  | 3.0008 ppb  | 08:49:32 |
| 3 | Fe 238.204 Radial† | 15.1      | 0.1       | 1.4129 µg/L  | 1.4129 ppb  | 08:49:32 |
| 3 | K 766.490 Radial†  | 405.7     | 32.6      | 16.514 µg/L  | 16.514 ppb  | 08:49:11 |
| 3 | Mg 279.077 IEC†    | 14.4      | 8.5       | 107.94 µg/L  | 107.94 ppb  | 08:49:32 |
| 3 | Na 589.592 Radial† | 248.6     | 36.6      | 17.460 µg/L  | 17.460 ppb  | 08:49:11 |
| 3 | Sr 421.552†        | 172.9     | 54.7      | 0.3330 µg/L  | 0.3330 ppb  | 08:49:11 |
| 3 | Sc 361.383         | 1801940.9 | 1801940.9 | 98.946 %     |             | 08:50:46 |
| 3 | Y 371.029          | 1242262.6 | 1242262.6 | 98.659 %     |             | 08:50:46 |
| 3 | Ag 328.068†        | -561.2    | -29.7     | -0.2589 µg/L | -0.2589 ppb | 08:50:52 |
| 3 | As 188.979†        | -1.5      | 1.1       | 1.6612 µg/L  | 1.6612 ppb  | 08:51:12 |
| 3 | B 249.677†         | 329.1     | 23.6      | 1.1525 µg/L  | 1.1525 ppb  | 08:51:12 |
| 3 | Ba 233.527†        | -19.3     | -0.2      | -0.0063 µg/L | -0.0063 ppb | 08:51:12 |
| 3 | Be 313.107†        | -1590.2   | -71.5     | -0.0452 µg/L | -0.0452 ppb | 08:50:52 |
| 3 | Cd 226.502†        | -162.7    | 1.7       | 0.0433 µg/L  | 0.0433 ppb  | 08:51:12 |
| 3 | Co 228.616†        | 23.6      | -1.0      | -0.0443 µg/L | -0.0443 ppb | 08:51:12 |
| 3 | Cr 267.716†        | 85.8      | 26.7      | 0.6162 µg/L  | 0.6162 ppb  | 08:51:12 |
| 3 | Cu 324.752†        | 4227.5    | 3.8       | 0.0273 µg/L  | 0.0273 ppb  | 08:50:52 |
| 3 | Mn 257.610†        | -743.7    | -3.0      | -0.0171 µg/L | -0.0171 ppb | 08:51:12 |
| 3 | Mo 202.031†        | 14.6      | 4.9       | 0.5141 µg/L  | 0.5141 ppb  | 08:51:12 |
| 3 | Ni 231.604†        | 350.8     | 0.8       | 0.0477 µg/L  | 0.0477 ppb  | 08:51:12 |
| 3 | P 214.914†         | 290.9     | 7.0       | 11.864 µg/L  | 11.864 ppb  | 08:51:12 |
| 3 | Pb 220.353†        | 44.7      | 1.9       | 0.5164 µg/L  | 0.5164 ppb  | 08:51:12 |
| 3 | S 181.975 Axial†   | 27.7      | 6.0       | 19.828 µg/L  | 19.828 ppb  | 08:51:12 |
| 3 | Sb 206.836†        | 30.0      | 3.3       | 3.0982 µg/L  | 3.0982 ppb  | 08:51:12 |
| 3 | Se 196.026†        | 26.2      | -0.3      | -0.3694 µg/L | -0.3694 ppb | 08:51:12 |
| 3 | SiO2†              | 3006.8    | 190.8     | 36.067 µg/L  | 36.067 ppb  | 08:50:52 |
| 3 | Si 251.611†        | 633.7     | 218.9     | 15.581 µg/L  | 15.581 ppb  | 08:51:12 |
| 3 | Sn 189.927†        | 0.1       | 1.8       | 0.7795 µg/L  | 0.7795 ppb  | 08:51:12 |
| 3 | Ti 334.940†        | -552.6    | 148.9     | 0.3665 µg/L  | 0.3665 ppb  | 08:50:52 |
| 3 | Tl 190.801†        | -32.0     | 4.7       | 4.9379 µg/L  | 4.9379 ppb  | 08:51:12 |
| 3 | U 409.014†         | 11.4      | 69.3      | 6.6173 µg/L  | 6.6173 ppb  | 08:50:52 |
| 3 | V 292.402†         | 69.2      | -49.0     | -0.6094 µg/L | -0.6094 ppb | 08:50:52 |
| 3 | Zn 213.857†        | 659.3     | 33.9      | 0.8145 µg/L  | 0.8145 ppb  | 08:51:12 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1802726.8                | 98.989 %           | 0.6078   |                    |          | 0.61%   |
| Sc RADIAL   | 85236.8                  | 99.3 %             | 0.61     |                    |          | 0.61%   |
| Y 371.029   | 1243819.7                | 98.783 %           | 0.6195   |                    |          | 0.63%   |
| Ag 328.068†   | -0.3                     | -0.0063 µg/L       | 0.21915  | -0.0063 ppb        | 0.21915  | >999.9% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 13.4                     | 6.9835 µg/L        | 11.13378 | 6.9835 ppb         | 11.13378 | 159.43% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 1.8                      | 2.7577 µg/L        | 0.99016  | 2.7577 ppb         | 0.99016  | 35.91%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 19.9                     | 0.9689 µg/L        | 0.24486  | 0.9689 ppb         | 0.24486  | 25.27%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -1.1                     | -0.0275 µg/L       | 0.01892  | -0.0275 ppb        | 0.01892  | 68.74%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -33.7                    | -0.0213 µg/L       | 0.03977  | -0.0213 ppb        | 0.03977  | 186.39% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 15.4                     | 5.6938 µg/L        | 2.43516  | 5.6938 ppb         | 2.43516  | 42.77%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -2.2                     | -0.0554 µg/L       | 0.08612  | -0.0554 ppb        | 0.08612  | 155.41% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 4.0                      | 0.1813 µg/L        | 0.20965  | 0.1813 ppb         | 0.20965  | 115.65% |

|                    |  |                           |         |             |
|--------------------|--|---------------------------|---------|-------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |         |             |
|                    | 17.3   | 0.4002 µg/L               | 0.18772 | 0.4002 ppb  |
|                    |  |                           | 0.18772 | 46.91%      |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |         |             |
|                    | -18.8  | -0.1309 µg/L              | 0.14023 | -0.1309 ppb |
|                    |  |                           | 0.14023 | 107.17%     |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |         |             |
|                    | 0.6  | 7.1417 µg/L               | 4.96297 | 7.1417 ppb  |
|                    |  |                           | 4.96297 | 69.49%      |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |         |             |
|                    | 35.9   | 18.158 µg/L               | 1.5035  | 18.158 ppb  |
|                    |  |                           | 1.5035  | 8.28%       |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |         |             |
|                    | 4.3  | 54.363 µg/L               | 50.0721 | 54.363 ppb  |
|                    |  |                           | 50.0721 | 92.11%      |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |         |             |
|                    | 10.1   | 0.0299 µg/L               | 0.06821 | 0.0299 ppb  |
|                    |  |                           | 0.06821 | 228.16%     |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |         |             |
|                    | 5.5  | 0.5776 µg/L               | 0.44670 | 0.5776 ppb  |
|                    |  |                           | 0.44670 | 77.34%      |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |         |             |
|                    | 29.5   | 14.089 µg/L               | 7.1455  | 14.089 ppb  |
|                    |  |                           | 7.1455  | 50.71%      |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |         |             |
|                    | 3.1  | 0.1839 µg/L               | 0.11791 | 0.1839 ppb  |
|                    |  |                           | 0.11791 | 64.12%      |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |         |             |
|                    | 3.4  | 5.7991 µg/L               | 8.00117 | 5.7991 ppb  |
|                    |  |                           | 8.00117 | 137.97%     |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |         |             |
|                    | 6.3  | 1.7653 µg/L               | 1.57653 | 1.7653 ppb  |
|                    |  |                           | 1.57653 | 89.30%      |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |         |             |
|                    | 5.4  | 17.666 µg/L               | 3.2507  | 17.666 ppb  |
|                    |  |                           | 3.2507  | 18.40%      |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |         |             |
|                    | 3.3  | 3.1341 µg/L               | 1.44213 | 3.1341 ppb  |
|                    |  |                           | 1.44213 | 46.01%      |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |         |             |
|                    | -2.5   | -2.4797 µg/L              | 9.80843 | -2.4797 ppb |
|                    |  |                           | 9.80843 | 395.55%     |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |         |             |
|                    | 151.0  | 28.532 µg/L               | 6.5276  | 28.532 ppb  |
|                    |  |                           | 6.5276  | 22.88%      |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |         |             |
|                    | 217.2  | 15.457 µg/L               | 0.3641  | 15.457 ppb  |
|                    |  |                           | 0.3641  | 2.36%       |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |         |             |
|                    | 1.9  | 0.7981 µg/L               | 0.24871 | 0.7981 ppb  |
|                    |  |                           | 0.24871 | 31.16%      |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |         |             |
|                    | 62.8   | 0.3821 µg/L               | 0.06478 | 0.3821 ppb  |
|                    |  |                           | 0.06478 | 16.96%      |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |         |             |
|                    | 125.9  | 0.3129 µg/L               | 0.05922 | 0.3129 ppb  |
|                    |  |                           | 0.05922 | 18.93%      |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |         |             |
|                    | 0.7  | 0.7315 µg/L               | 3.72195 | 0.7315 ppb  |
|                    |  |                           | 3.72195 | 508.79%     |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |         |             |
|                    | 39.1   | 3.7319 µg/L               | 4.59977 | 3.7319 ppb  |
|                    |  |                           | 4.59977 | 123.26%     |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |         |             |
|                    | -49.7  | -0.6217 µg/L              | 0.27210 | -0.6217 ppb |
|                    |  |                           | 0.27210 | 43.77%      |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |         |             |
|                    | 13.4   | 0.3216 µg/L               | 0.43146 | 0.3216 ppb  |
|                    |  |                           | 0.43146 | 134.17%     |

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 09:17:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86412.4          | 86412.4                | 101 %                 |                       | 09:17:55         |
| 1     | Al 396.153Radial†  | 9332.9           | 9524.7                 | 4948.4 µg/L           | 4948.4 ppb            | 09:17:55         |
| 1     | Ca 317.933Radial†  | 14139.2          | 13715.0                | 5079.0 µg/L           | 5079.0 ppb            | 09:17:55         |
| 1     | Fe 238.204 Radial† | 455.0            | 436.8                  | 4983.3 µg/L           | 4983.3 ppb            | 09:18:16         |
| 1     | K 766.490 Radial†  | 10097.2          | 9652.7                 | 4886.0 µg/L           | 4886.0 ppb            | 09:17:55         |
| 1     | Mg 279.077 IEC†    | 410.4            | 401.5                  | 5094.6 µg/L           | 5094.6 ppb            | 09:18:16         |
| 1     | Na 589.592 Radial† | 20780.0          | 20421.9                | 9738.1 µg/L           | 9738.1 ppb            | 09:17:55         |
| 1     | Sr 421.552†        | 79772.6          | 79095.0                | 481.35 µg/L           | 481.35 ppb            | 09:17:55         |
| 1     | Sc 361.383         | 1821140.9        | 1821140.9              | 100.00 %              |                       | 09:19:19         |
| 1     | Y 371.029          | 1255482.5        | 1255482.5              | 99.709 %              |                       | 09:19:19         |
| 1     | Ag 328.068†        | 57939.8          | 58477.2                | 506.41 µg/L           | 506.41 ppb            | 09:19:25         |
| 1     | As 188.979†        | 354.6            | 357.1                  | 546.74 µg/L           | 546.74 ppb            | 09:19:45         |
| 1     | B 249.677†         | 10632.3          | 10323.2                | 503.30 µg/L           | 503.30 ppb            | 09:19:25         |
| 1     | Ba 233.527†        | 22277.4          | 22296.7                | 522.80 µg/L           | 522.80 ppb            | 09:19:25         |
| 1     | Be 313.107†        | 825395.3         | 826929.9               | 520.09 µg/L           | 520.09 ppb            | 09:19:19         |
| 1     | Cd 226.502†        | 20600.9          | 20767.0                | 528.03 µg/L           | 528.03 ppb            | 09:19:25         |
| 1     | Co 228.616†        | 11518.8          | 11494.0                | 525.42 µg/L           | 525.42 ppb            | 09:19:25         |
| 1     | Cr 267.716†        | 22854.0          | 22793.9                | 527.57 µg/L           | 527.57 ppb            | 09:19:25         |
| 1     | Cu 324.752†        | 76315.2          | 72046.4                | 506.76 µg/L           | 506.76 ppb            | 09:19:25         |
| 1     | Mn 257.610†        | 159130.3         | 159878.8               | 524.87 µg/L           | 524.87 ppb            | 09:19:19         |
| 1     | Mo 202.031†        | 5174.1           | 5164.3                 | 542.24 µg/L           | 542.24 ppb            | 09:19:45         |
| 1     | Ni 231.604†        | 9266.0           | 8912.2                 | 527.02 µg/L           | 527.02 ppb            | 09:19:25         |
| 1     | P 214.914†         | 1875.0           | 1588.0                 | 2660.3 µg/L           | 2660.3 ppb            | 09:19:45         |
| 1     | Pb 220.353†        | 1979.5           | 1936.1                 | 543.65 µg/L           | 543.65 ppb            | 09:19:45         |
| 1     | S 181.975 Axial†   | 346.9            | 324.9                  | 1072.4 µg/L           | 1072.4 ppb            | 09:19:45         |
| 1     | Sb 206.836†        | 586.0            | 559.0                  | 527.98 µg/L           | 527.98 ppb            | 09:19:45         |
| 1     | Se 196.026†        | 565.5            | 538.8                  | 545.05 µg/L           | 545.05 ppb            | 09:19:45         |
| 1     | SiO2†              | 32352.8          | 29504.7                | 5576.2 µg/L           | 5576.2 ppb            | 09:19:25         |
| 1     | Si 251.611†        | 37177.8          | 36756.3                | 2615.6 µg/L           | 2615.6 ppb            | 09:19:25         |
| 1     | Sn 189.927†        | 1303.8           | 1305.6                 | 550.56 µg/L           | 550.56 ppb            | 09:19:45         |
| 1     | Ti 334.940†        | 202786.4         | 203493.5               | 512.01 µg/L           | 512.01 ppb            | 09:19:19         |
| 1     | Tl 190.801†        | 459.1            | 496.1                  | 524.64 µg/L           | 524.64 ppb            | 09:19:45         |
| 1     | U 409.014†         | 5270.4           | 5328.2                 | 507.51 µg/L           | 507.51 ppb            | 09:19:25         |
| 1     | V 292.402†         | 40954.2          | 40835.1                | 522.51 µg/L           | 522.51 ppb            | 09:19:25         |
| 1     | Zn 213.857†        | 22214.7          | 21582.3                | 519.31 µg/L           | 519.31 ppb            | 09:19:25         |
| 2     | Sc RADIAL          | 86459.2          | 86459.2                | 101 %                 |                       | 09:18:21         |
| 2     | Al 396.153Radial†  | 9373.3           | 9559.7                 | 4967.0 µg/L           | 4967.0 ppb            | 09:18:21         |
| 2     | Ca 317.933Radial†  | 14196.4          | 13764.1                | 5097.2 µg/L           | 5097.2 ppb            | 09:18:21         |
| 2     | Fe 238.204 Radial† | 459.0            | 440.6                  | 5026.1 µg/L           | 5026.1 ppb            | 09:18:42         |
| 2     | K 766.490 Radial†  | 10229.9          | 9779.0                 | 4949.9 µg/L           | 4949.9 ppb            | 09:18:21         |
| 2     | Mg 279.077 IEC†    | 418.0            | 408.9                  | 5187.5 µg/L           | 5187.5 ppb            | 09:18:42         |
| 2     | Na 589.592 Radial† | 20829.3          | 20459.7                | 9756.1 µg/L           | 9756.1 ppb            | 09:18:21         |
| 2     | Sr 421.552†        | 79992.5          | 79270.5                | 482.42 µg/L           | 482.42 ppb            | 09:18:21         |
| 2     | Sc 361.383         | 1817743.1        | 1817743.1              | 99.814 %              |                       | 09:19:53         |
| 2     | Y 371.029          | 1253864.5        | 1253864.5              | 99.581 %              |                       | 09:19:53         |
| 2     | Ag 328.068†        | 57890.4          | 58536.0                | 506.92 µg/L           | 506.92 ppb            | 09:19:58         |
| 2     | As 188.979†        | 339.0            | 342.2                  | 523.86 µg/L           | 523.86 ppb            | 09:20:19         |
| 2     | B 249.677†         | 10663.2          | 10374.0                | 505.76 µg/L           | 505.76 ppb            | 09:19:58         |
| 2     | Ba 233.527†        | 22239.3          | 22300.1                | 522.88 µg/L           | 522.88 ppb            | 09:19:58         |
| 2     | Be 313.107†        | 822357.4         | 825429.1               | 519.14 µg/L           | 519.14 ppb            | 09:19:53         |
| 2     | Cd 226.502†        | 20592.6          | 20797.3                | 528.79 µg/L           | 528.79 ppb            | 09:19:58         |
| 2     | Co 228.616†        | 11541.4          | 11538.2                | 527.43 µg/L           | 527.43 ppb            | 09:19:58         |
| 2     | Cr 267.716†        | 22787.3          | 22769.8                | 527.02 µg/L           | 527.02 ppb            | 09:19:58         |
| 2     | Cu 324.752†        | 76186.7          | 72060.3                | 506.87 µg/L           | 506.87 ppb            | 09:19:58         |
| 2     | Mn 257.610†        | 158350.5         | 159395.0               | 523.28 µg/L           | 523.28 ppb            | 09:19:53         |
| 2     | Mo 202.031†        | 5028.6           | 5028.1                 | 527.96 µg/L           | 527.96 ppb            | 09:20:19         |
| 2     | Ni 231.604†        | 9248.6           | 8912.1                 | 527.01 µg/L           | 527.01 ppb            | 09:19:58         |
| 2     | P 214.914†         | 1844.8           | 1561.2                 | 2614.4 µg/L           | 2614.4 ppb            | 09:20:19         |
| 2     | Pb 220.353†        | 1937.4           | 1897.6                 | 532.81 µg/L           | 532.81 ppb            | 09:20:19         |



|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 340.6     | 319.3     | 1053.8 µg/L | 1053.8 ppb | 09:20:19 |
| 2 | Sb 206.836†        | 580.9     | 555.0     | 523.91 µg/L | 523.91 ppb | 09:20:19 |
| 2 | Se 196.026†        | 551.5     | 525.8     | 532.24 µg/L | 532.24 ppb | 09:20:19 |
| 2 | SiO2†              | 32280.0   | 29492.3   | 5573.8 µg/L | 5573.8 ppb | 09:19:58 |
| 2 | Si 251.611†        | 37239.2   | 36887.3   | 2625.0 µg/L | 2625.0 ppb | 09:19:58 |
| 2 | Sn 189.927†        | 1256.6    | 1260.8    | 531.66 µg/L | 531.66 ppb | 09:20:19 |
| 2 | Ti 334.940†        | 202153.9  | 203239.0  | 511.36 µg/L | 511.36 ppb | 09:19:53 |
| 2 | Tl 190.801†        | 462.9     | 500.8     | 529.53 µg/L | 529.53 ppb | 09:20:19 |
| 2 | U 409.014†         | 5248.6    | 5316.3    | 506.37 µg/L | 506.37 ppb | 09:19:58 |
| 2 | V 292.402†         | 40875.4   | 40832.8   | 522.36 µg/L | 522.36 ppb | 09:19:58 |
| 2 | Zn 213.857†        | 22173.6   | 21582.6   | 519.31 µg/L | 519.31 ppb | 09:19:58 |
| 3 | Sc RADIAL          | 86179.6   | 86179.6   | 100 %       |            | 09:18:47 |
| 3 | Al 396.153Radial†  | 9385.2    | 9601.8    | 4991.1 µg/L | 4991.1 ppb | 09:18:47 |
| 3 | Ca 317.933Radial†  | 14254.0   | 13867.2   | 5135.4 µg/L | 5135.4 ppb | 09:18:47 |
| 3 | Fe 238.204 Radial† | 461.8     | 444.8     | 5072.8 µg/L | 5072.8 ppb | 09:19:07 |
| 3 | K 766.490 Radial†  | 10285.8   | 9867.5    | 4994.8 µg/L | 4994.8 ppb | 09:18:47 |
| 3 | Mg 279.077 IEC†    | 420.8     | 413.0     | 5237.8 µg/L | 5237.8 ppb | 09:19:07 |
| 3 | Na 589.592 Radial† | 20889.5   | 20586.7   | 9816.6 µg/L | 9816.6 ppb | 09:18:47 |
| 3 | Sr 421.552†        | 80156.2   | 79691.0   | 484.98 µg/L | 484.98 ppb | 09:18:47 |
| 3 | Sc 361.383         | 1830230.8 | 1830230.8 | 100.50 %    |            | 09:20:26 |
| 3 | Y 371.029          | 1261288.3 | 1261288.3 | 100.17 %    |            | 09:20:26 |
| 3 | Ag 328.068†        | 52980.0   | 53254.3   | 461.02 µg/L | 461.02 ppb | 09:20:32 |
| 3 | As 188.979†        | 279.3     | 280.4     | 429.07 µg/L | 429.07 ppb | 09:20:52 |
| 3 | B 249.677†         | 9707.4    | 9350.1    | 455.50 µg/L | 455.50 ppb | 09:20:32 |
| 3 | Ba 233.527†        | 19530.5   | 19452.8   | 456.10 µg/L | 456.10 ppb | 09:20:32 |
| 3 | Be 313.107†        | 743741.7  | 741582.5  | 466.41 µg/L | 466.41 ppb | 09:20:26 |
| 3 | Cd 226.502†        | 17930.0   | 18007.1   | 457.76 µg/L | 457.76 ppb | 09:20:32 |
| 3 | Co 228.616†        | 9928.8    | 9854.7    | 450.40 µg/L | 450.40 ppb | 09:20:32 |
| 3 | Cr 267.716†        | 19035.8   | 18881.2   | 437.02 µg/L | 437.02 ppb | 09:20:32 |
| 3 | Cu 324.752†        | 66502.0   | 61903.0   | 435.56 µg/L | 435.56 ppb | 09:20:32 |
| 3 | Mn 257.610†        | 144072.8  | 144105.7  | 473.08 µg/L | 473.08 ppb | 09:20:26 |
| 3 | Mo 202.031†        | 4012.1    | 3982.4    | 418.19 µg/L | 418.19 ppb | 09:20:52 |
| 3 | Ni 231.604†        | 8084.8    | 7690.8    | 454.81 µg/L | 454.81 ppb | 09:20:32 |
| 3 | P 214.914†         | 1557.4    | 1262.6    | 2111.0 µg/L | 2111.0 ppb | 09:20:52 |
| 3 | Pb 220.353†        | 1615.6    | 1564.2    | 439.18 µg/L | 439.18 ppb | 09:20:52 |
| 3 | S 181.975 Axial†   | 289.4     | 266.0     | 877.86 µg/L | 877.86 ppb | 09:20:52 |
| 3 | Sb 206.836†        | 472.9     | 443.6     | 418.51 µg/L | 418.51 ppb | 09:20:52 |
| 3 | Se 196.026†        | 465.7     | 436.6     | 444.09 µg/L | 444.09 ppb | 09:20:52 |
| 3 | SiO2†              | 29285.8   | 26292.3   | 4969.0 µg/L | 4969.0 ppb | 09:20:32 |
| 3 | Si 251.611†        | 33369.3   | 32782.0   | 2332.8 µg/L | 2332.8 ppb | 09:20:32 |
| 3 | Sn 189.927†        | 996.2     | 993.1     | 418.89 µg/L | 418.89 ppb | 09:20:52 |
| 3 | Ti 334.940†        | 181262.8  | 181069.8  | 455.54 µg/L | 455.54 ppb | 09:20:26 |
| 3 | Tl 190.801†        | 402.3     | 437.3     | 462.52 µg/L | 462.52 ppb | 09:20:52 |
| 3 | U 409.014†         | 4528.0    | 4563.4    | 434.50 µg/L | 434.50 ppb | 09:20:32 |
| 3 | V 292.402†         | 35066.7   | 34773.5   | 444.43 µg/L | 444.43 ppb | 09:20:32 |
| 3 | Zn 213.857†        | 19285.1   | 18556.9   | 446.42 µg/L | 446.42 ppb | 09:20:32 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1823038.3                | 100.10 %           | 0.355    |                    |          | 0.35%  |
| Sc RADIAL  | 86350.4                  | 101 %              | 0.2      |                    |          | 0.17%  |
| Y 371.029  | 1256878.4                | 99.820 %           | 0.3100   |                    |          | 0.31%  |
| Ag 328.068†  | 56755.8                  | 491.45 µg/L        | 26.354   | 491.45 ppb         | 26.354   | 5.36%  |
| QC value within limits for Ag 328.068 Recovery = 98.29%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9562.1                   | 4968.9 µg/L        | 21.41    | 4968.9 ppb         | 21.41    | 0.43%  |
| QC value within limits for Al 396.153Radial Recovery = 99.38%  |                          |                    |          |                    |          |        |
| As 188.979†  | 326.6                    | 499.89 µg/L        | 62.394   | 499.89 ppb         | 62.394   | 12.48% |
| QC value within limits for As 188.979 Recovery = 99.98%        |                          |                    |          |                    |          |        |
| B 249.677†   | 10015.8                  | 488.19 µg/L        | 28.336   | 488.19 ppb         | 28.336   | 5.80%  |
| QC value within limits for B 249.677 Recovery = 97.64%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21349.8                  | 500.60 µg/L        | 38.534   | 500.60 ppb         | 38.534   | 7.70%  |
| QC value within limits for Ba 233.527 Recovery = 100.12%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 797980.5                 | 501.88 µg/L        | 30.721   | 501.88 ppb         | 30.721   | 6.12%  |
| QC value within limits for Be 313.107 Recovery = 100.38%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13782.1                  | 5103.8 µg/L        | 28.77    | 5103.8 ppb         | 28.77    | 0.56%  |
| QC value within limits for Ca 317.933Radial Recovery = 102.08% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19857.1                  | 504.86 µg/L        | 40.788   | 504.86 ppb         | 40.788   | 8.08%  |
| QC value within limits for Cd 226.502 Recovery = 100.97%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 10962.3                  | 501.08 µg/L        | 43.902   | 501.08 ppb         | 43.902   | 8.76%  |

|   |          |             |        |            |        |        |  |
|---|----------|-------------|--------|------------|--------|--------|--|
| QC value within limits for Co 228.616 Recovery = 100.22%        |          |             |        |            |        |        |  |
| Cr 267.716†   | 21481.6  | 497.20 µg/L | 52.121 | 497.20 ppb | 52.121 | 10.48% |  |
| QC value within limits for Cr 267.716 Recovery = 99.44%         |          |             |        |            |        |        |  |
| Cu 324.752†   | 68669.9  | 483.06 µg/L | 41.137 | 483.06 ppb | 41.137 | 8.52%  |  |
| QC value within limits for Cu 324.752 Recovery = 96.61%         |          |             |        |            |        |        |  |
| Fe 238.204 Radial†  | 440.7    | 5027.4 µg/L | 44.79  | 5027.4 ppb | 44.79  | 0.89%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = 100.55% |          |             |        |            |        |        |  |
| K 766.490 Radial†   | 9766.4   | 4943.6 µg/L | 54.66  | 4943.6 ppb | 54.66  | 1.11%  |  |
| QC value within limits for K 766.490 Radial Recovery = 98.87%   |          |             |        |            |        |        |  |
| Mg 279.077 IEC†   | 407.8    | 5173.3 µg/L | 72.66  | 5173.3 ppb | 72.66  | 1.40%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 103.47%    |          |             |        |            |        |        |  |
| Mn 257.610†   | 154459.8 | 507.08 µg/L | 29.453 | 507.08 ppb | 29.453 | 5.81%  |  |
| QC value within limits for Mn 257.610 Recovery = 101.42%        |          |             |        |            |        |        |  |
| Mo 202.031†   | 4724.9   | 496.13 µg/L | 67.875 | 496.13 ppb | 67.875 | 13.68% |  |
| QC value within limits for Mo 202.031 Recovery = 99.23%         |          |             |        |            |        |        |  |
| Na 589.592 Radial†  | 20489.5  | 9770.3 µg/L | 41.16  | 9770.3 ppb | 41.16  | 0.42%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 97.70%  |          |             |        |            |        |        |  |
| Ni 231.604†   | 8505.0   | 502.94 µg/L | 41.689 | 502.94 ppb | 41.689 | 8.29%  |  |
| QC value within limits for Ni 231.604 Recovery = 100.59%        |          |             |        |            |        |        |  |
| P 214.914†  | 1470.6   | 2461.9 µg/L | 304.75 | 2461.9 ppb | 304.75 | 12.38% |  |
| QC value within limits for P 214.914 Recovery = 98.48%          |          |             |        |            |        |        |  |
| Pb 220.353†   | 1799.3   | 505.22 µg/L | 57.442 | 505.22 ppb | 57.442 | 11.37% |  |
| QC value within limits for Pb 220.353 Recovery = 101.04%        |          |             |        |            |        |        |  |
| S 181.975 Axial†  | 303.4    | 1001.4 µg/L | 107.37 | 1001.4 ppb | 107.37 | 10.72% |  |
| QC value within limits for S 181.975 Axial Recovery = 100.14%   |          |             |        |            |        |        |  |
| Sb 206.836†   | 519.2    | 490.13 µg/L | 62.060 | 490.13 ppb | 62.060 | 12.66% |  |
| QC value within limits for Sb 206.836 Recovery = 98.03%         |          |             |        |            |        |        |  |
| Se 196.026†   | 500.4    | 507.13 µg/L | 54.964 | 507.13 ppb | 54.964 | 10.84% |  |
| QC value within limits for Se 196.026 Recovery = 101.43%        |          |             |        |            |        |        |  |
| SiO2†   | 28429.8  | 5373.0 µg/L | 349.85 | 5373.0 ppb | 349.85 | 6.51%  |  |
| QC value within limits for SiO2 Recovery = 100.48%              |          |             |        |            |        |        |  |
| Si 251.611†   | 35475.2  | 2524.5 µg/L | 166.04 | 2524.5 ppb | 166.04 | 6.58%  |  |
| QC value within limits for Si 251.611 Recovery = 100.98%        |          |             |        |            |        |        |  |
| Sn 189.927†   | 1186.5   | 500.37 µg/L | 71.195 | 500.37 ppb | 71.195 | 14.23% |  |
| QC value within limits for Sn 189.927 Recovery = 100.07%        |          |             |        |            |        |        |  |
| Sr 421.552†   | 79352.2  | 482.92 µg/L | 1.864  | 482.92 ppb | 1.864  | 0.39%  |  |
| QC value within limits for Sr 421.552 Recovery = 96.58%         |          |             |        |            |        |        |  |
| Ti 334.940†   | 195934.1 | 492.97 µg/L | 32.415 | 492.97 ppb | 32.415 | 6.58%  |  |
| QC value within limits for Ti 334.940 Recovery = 98.59%         |          |             |        |            |        |        |  |
| Tl 190.801†   | 478.0    | 505.56 µg/L | 37.358 | 505.56 ppb | 37.358 | 7.39%  |  |
| QC value within limits for Tl 190.801 Recovery = 101.11%        |          |             |        |            |        |        |  |
| U 409.014†  | 5069.3   | 482.79 µg/L | 41.827 | 482.79 ppb | 41.827 | 8.66%  |  |
| QC value within limits for U 409.014 Recovery = 96.56%          |          |             |        |            |        |        |  |
| V 292.402†  | 38813.8  | 496.43 µg/L | 45.033 | 496.43 ppb | 45.033 | 9.07%  |  |
| QC value within limits for V 292.402 Recovery = 99.29%          |          |             |        |            |        |        |  |
| Zn 213.857†   | 20573.9  | 495.02 µg/L | 42.083 | 495.02 ppb | 42.083 | 8.50%  |  |
| QC value within limits for Zn 213.857 Recovery = 99.00%         |          |             |        |            |        |        |  |

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 09:21:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87124.0          | 87124.0                | 102 %                 |                       | 09:21:34         |
| 1     | Al 396.153Radial†  | -254.1           | 6.9                    | 3.6004 µg/L           | 3.6004 ppb            | 09:21:34         |
| 1     | Ca 317.933Radial†  | 346.7            | 16.3                   | 6.0341 µg/L           | 6.0341 ppb            | 09:21:55         |
| 1     | Fe 238.204 Radial† | 15.3             | 0.1                    | 0.8794 µg/L           | 0.8794 ppb            | 09:21:55         |
| 1     | K 766.490 Radial†  | 378.9            | -0.5                   | -0.2763 µg/L          | -0.2763 ppb           | 09:21:34         |
| 1     | Mg 279.077 IEC†    | 12.8             | 6.6                    | 84.171 µg/L           | 84.171 ppb            | 09:21:55         |
| 1     | Na 589.592 Radial† | 261.0            | 44.7                   | 21.298 µg/L           | 21.298 ppb            | 09:21:34         |
| 1     | Sr 421.552†        | 144.3            | 23.6                   | 0.1439 µg/L           | 0.1439 ppb            | 09:21:34         |
| 1     | Sc 361.383         | 1869418.8        | 1869418.8              | 102.65 %              |                       | 09:22:57         |
| 1     | Y 371.029          | 1292310.7        | 1292310.7              | 102.63 %              |                       | 09:22:57         |
| 1     | Ag 328.068†        | -568.5           | -16.4                  | -0.1379 µg/L          | -0.1379 ppb           | 09:23:02         |
| 1     | As 188.979†        | -2.0             | 0.6                    | 0.9582 µg/L           | 0.9582 ppb            | 09:23:23         |
| 1     | B 249.677†         | 306.4            | -10.6                  | -0.5203 µg/L          | -0.5203 ppb           | 09:23:23         |
| 1     | Ba 233.527†        | -21.0            | -1.2                   | -0.0267 µg/L          | -0.0267 ppb           | 09:23:23         |
| 1     | Be 313.107†        | -1437.7          | 135.0                  | 0.0848 µg/L           | 0.0848 ppb            | 09:23:02         |
| 1     | Cd 226.502†        | -168.3           | 2.2                    | 0.0563 µg/L           | 0.0563 ppb            | 09:23:23         |
| 1     | Co 228.616†        | 24.3             | -1.1                   | -0.0533 µg/L          | -0.0533 ppb           | 09:23:23         |
| 1     | Cr 267.716†        | 64.0             | 2.3                    | 0.0543 µg/L           | 0.0543 ppb            | 09:23:23         |
| 1     | Cu 324.752†        | 4161.7           | -214.5                 | -1.5056 µg/L          | -1.5056 ppb           | 09:23:02         |
| 1     | Mn 257.610†        | -743.2           | 24.6                   | 0.0752 µg/L           | 0.0752 ppb            | 09:23:23         |
| 1     | Mo 202.031†        | 9.4              | -0.7                   | -0.0726 µg/L          | -0.0726 ppb           | 09:23:23         |
| 1     | Ni 231.604†        | 360.4            | -2.6                   | -0.1563 µg/L          | -0.1563 ppb           | 09:23:23         |
| 1     | P 214.914†         | 291.9            | -2.6                   | -4.3497 µg/L          | -4.3497 ppb           | 09:23:23         |
| 1     | Pb 220.353†        | 53.9             | 9.2                    | 2.5739 µg/L           | 2.5739 ppb            | 09:23:23         |
| 1     | S 181.975 Axial†   | 26.2             | 3.6                    | 11.815 µg/L           | 11.815 ppb            | 09:23:23         |
| 1     | Sb 206.836†        | 26.0             | -1.7                   | -1.6032 µg/L          | -1.6032 ppb           | 09:23:23         |
| 1     | Se 196.026†        | 21.6             | -5.7                   | -5.7044 µg/L          | -5.7044 ppb           | 09:23:23         |
| 1     | SiO2†              | 2985.7           | 60.6                   | 11.458 µg/L           | 11.458 ppb            | 09:23:02         |
| 1     | Si 251.611†        | 642.1            | 204.0                  | 14.517 µg/L           | 14.517 ppb            | 09:23:23         |
| 1     | Sn 189.927†        | -2.9             | -1.0                   | -0.4140 µg/L          | -0.4140 ppb           | 09:23:23         |
| 1     | Ti 334.940†        | -606.4           | 116.7                  | 0.2873 µg/L           | 0.2873 ppb            | 09:23:02         |
| 1     | Tl 190.801†        | -31.2            | 6.6                    | 6.9620 µg/L           | 6.9620 ppb            | 09:23:23         |
| 1     | U 409.014†         | -57.9            | 1.5                    | 0.1392 µg/L           | 0.1392 ppb            | 09:23:02         |
| 1     | V 292.402†         | 154.7            | 31.7                   | 0.4013 µg/L           | 0.4013 ppb            | 09:23:02         |
| 1     | Zn 213.857†        | 617.2            | -31.1                  | -0.7554 µg/L          | -0.7554 ppb           | 09:23:23         |
| 2     | Sc RADIAL          | 87522.5          | 87522.5                | 102 %                 |                       | 09:22:00         |
| 2     | Al 396.153Radial†  | -285.3           | -22.6                  | -11.762 µg/L          | -11.762 ppb           | 09:22:00         |
| 2     | Ca 317.933Radial†  | 355.6            | 23.4                   | 8.6825 µg/L           | 8.6825 ppb            | 09:22:21         |
| 2     | Fe 238.204 Radial† | 19.3             | 3.9                    | 44.478 µg/L           | 44.478 ppb            | 09:22:21         |
| 2     | K 766.490 Radial†  | 424.9            | 42.9                   | 21.712 µg/L           | 21.712 ppb            | 09:22:00         |
| 2     | Mg 279.077 IEC†    | 10.8             | 4.6                    | 58.377 µg/L           | 58.377 ppb            | 09:22:21         |
| 2     | Na 589.592 Radial† | 273.9            | 56.1                   | 26.774 µg/L           | 26.774 ppb            | 09:22:00         |
| 2     | Sr 421.552†        | 145.3            | 24.0                   | 0.1463 µg/L           | 0.1463 ppb            | 09:22:00         |
| 2     | Sc 361.383         | 1870554.0        | 1870554.0              | 102.71 %              |                       | 09:23:29         |
| 2     | Y 371.029          | 1288569.2        | 1288569.2              | 102.34 %              |                       | 09:23:29         |
| 2     | Ag 328.068†        | -545.5           | 6.3                    | 0.0511 µg/L           | 0.0511 ppb            | 09:23:34         |
| 2     | As 188.979†        | -5.9             | -3.2                   | -4.8963 µg/L          | -4.8963 ppb           | 09:23:55         |
| 2     | B 249.677†         | 307.0            | -10.2                  | -0.5213 µg/L          | -0.5213 ppb           | 09:23:55         |
| 2     | Ba 233.527†        | -5.3             | 14.2                   | 0.3297 µg/L           | 0.3297 ppb            | 09:23:55         |
| 2     | Be 313.107†        | -1565.8          | 11.1                   | 0.0069 µg/L           | 0.0069 ppb            | 09:23:34         |
| 2     | Cd 226.502†        | -168.0           | 2.6                    | 0.0610 µg/L           | 0.0610 ppb            | 09:23:55         |
| 2     | Co 228.616†        | 26.5             | 1.0                    | 0.0459 µg/L           | 0.0459 ppb            | 09:23:55         |
| 2     | Cr 267.716†        | 74.3             | 12.4                   | 0.2851 µg/L           | 0.2851 ppb            | 09:23:55         |
| 2     | Cu 324.752†        | 4204.7           | -175.0                 | -1.2204 µg/L          | -1.2204 ppb           | 09:23:34         |
| 2     | Mn 257.610†        | -725.2           | 42.6                   | 0.1385 µg/L           | 0.1385 ppb            | 09:23:55         |
| 2     | Mo 202.031†        | 14.7             | 4.5                    | 0.4738 µg/L           | 0.4738 ppb            | 09:23:55         |
| 2     | Ni 231.604†        | 352.1            | -10.9                  | -0.6472 µg/L          | -0.6472 ppb           | 09:23:55         |
| 2     | P 214.914†         | 293.2            | -1.6                   | -2.5723 µg/L          | -2.5723 ppb           | 09:23:55         |
| 2     | Pb 220.353†        | 51.6             | 6.9                    | 1.9387 µg/L           | 1.9387 ppb            | 09:23:55         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 26.4      | 3.7       | 12.173 µg/L  | 12.173 ppb  | 09:23:55 |
| 2 | Sb 206.836†        | 29.0      | 1.2       | 1.1770 µg/L  | 1.1770 ppb  | 09:23:55 |
| 2 | Se 196.026†        | 17.9      | -9.3      | -9.1471 µg/L | -9.1471 ppb | 09:23:55 |
| 2 | SiO2†              | 3012.9    | 85.3      | 16.126 µg/L  | 16.126 ppb  | 09:23:34 |
| 2 | Si 251.611†        | 675.5     | 236.1     | 16.804 µg/L  | 16.804 ppb  | 09:23:55 |
| 2 | Sn 189.927†        | 0.4       | 2.2       | 0.9243 µg/L  | 0.9243 ppb  | 09:23:55 |
| 2 | Ti 334.940†        | -620.1    | 103.7     | 0.2565 µg/L  | 0.2565 ppb  | 09:23:34 |
| 2 | Tl 190.801†        | -37.6     | 0.4       | 0.4337 µg/L  | 0.4337 ppb  | 09:23:55 |
| 2 | U 409.014†         | -68.5     | -8.8      | -0.8450 µg/L | -0.8450 ppb | 09:23:34 |
| 2 | V 292.402†         | 39.1      | -80.9     | -1.0308 µg/L | -1.0308 ppb | 09:23:34 |
| 2 | Zn 213.857†        | 615.4     | -33.2     | -0.8054 µg/L | -0.8054 ppb | 09:23:55 |
| 3 | Sc RADIAL          | 87909.4   | 87909.4   | 102 %        |             | 09:22:26 |
| 3 | Al 396.153Radial†  | -255.4    | 7.9       | 4.1112 µg/L  | 4.1112 ppb  | 09:22:26 |
| 3 | Ca 317.933Radial†  | 346.6     | 13.2      | 4.8738 µg/L  | 4.8738 ppb  | 09:22:47 |
| 3 | Fe 238.204 Radial† | 16.5      | 1.1       | 12.430 µg/L  | 12.430 ppb  | 09:22:47 |
| 3 | K 766.490 Radial†  | 410.3     | 26.8      | 13.548 µg/L  | 13.548 ppb  | 09:22:26 |
| 3 | Mg 279.077 IEC†    | 10.9      | 4.7       | 60.026 µg/L  | 60.026 ppb  | 09:22:47 |
| 3 | Na 589.592 Radial† | 166.5     | -49.8     | -23.758 µg/L | -23.758 ppb | 09:22:26 |
| 3 | Sr 421.552†        | 193.4     | 70.3      | 0.4277 µg/L  | 0.4277 ppb  | 09:22:26 |
| 3 | Sc 361.383         | 1865068.1 | 1865068.1 | 102.41 %     |             | 09:24:01 |
| 3 | Y 371.029          | 1287204.0 | 1287204.0 | 102.23 %     |             | 09:24:01 |
| 3 | Ag 328.068†        | -561.0    | -10.3     | -0.0893 µg/L | -0.0893 ppb | 09:24:07 |
| 3 | As 188.979†        | -2.6      | 0.1       | 0.1000 µg/L  | 0.1000 ppb  | 09:24:27 |
| 3 | B 249.677†         | 306.2     | -10.0     | -0.4971 µg/L | -0.4971 ppb | 09:24:27 |
| 3 | Ba 233.527†        | -17.9     | 1.8       | 0.0418 µg/L  | 0.0418 ppb  | 09:24:27 |
| 3 | Be 313.107†        | -1560.8   | 11.5      | 0.0072 µg/L  | 0.0072 ppb  | 09:24:07 |
| 3 | Cd 226.502†        | -161.2    | 8.8       | 0.2211 µg/L  | 0.2211 ppb  | 09:24:27 |
| 3 | Co 228.616†        | 30.3      | 4.8       | 0.2176 µg/L  | 0.2176 ppb  | 09:24:27 |
| 3 | Cr 267.716†        | 77.1      | 15.3      | 0.3530 µg/L  | 0.3530 ppb  | 09:24:27 |
| 3 | Cu 324.752†        | 4206.5    | -161.3    | -1.1300 µg/L | -1.1300 ppb | 09:24:07 |
| 3 | Mn 257.610†        | -700.6    | 64.6      | 0.2086 µg/L  | 0.2086 ppb  | 09:24:27 |
| 3 | Mo 202.031†        | 12.1      | 2.0       | 0.2055 µg/L  | 0.2055 ppb  | 09:24:27 |
| 3 | Ni 231.604†        | 357.7     | -4.5      | -0.2690 µg/L | -0.2690 ppb | 09:24:27 |
| 3 | P 214.914†         | 295.7     | 1.7       | 3.1054 µg/L  | 3.1054 ppb  | 09:24:27 |
| 3 | Pb 220.353†        | 44.5      | 0.0       | 0.0126 µg/L  | 0.0126 ppb  | 09:24:27 |
| 3 | S 181.975 Axial†   | 25.4      | 2.8       | 9.1803 µg/L  | 9.1803 ppb  | 09:24:27 |
| 3 | Sb 206.836†        | 29.3      | 1.6       | 1.4775 µg/L  | 1.4775 ppb  | 09:24:27 |
| 3 | Se 196.026†        | 25.5      | -1.8      | -1.8153 µg/L | -1.8153 ppb | 09:24:27 |
| 3 | SiO2†              | 2948.5    | 31.0      | 5.8616 µg/L  | 5.8616 ppb  | 09:24:07 |
| 3 | Si 251.611†        | 685.7     | 248.0     | 17.651 µg/L  | 17.651 ppb  | 09:24:27 |
| 3 | Sn 189.927†        | 2.7       | 4.4       | 1.8601 µg/L  | 1.8601 ppb  | 09:24:27 |
| 3 | Ti 334.940†        | -648.0    | 74.7      | 0.1834 µg/L  | 0.1834 ppb  | 09:24:07 |
| 3 | Tl 190.801†        | -34.0     | 3.8       | 3.9929 µg/L  | 3.9929 ppb  | 09:24:27 |
| 3 | U 409.014†         | -39.3     | 19.5      | 1.8586 µg/L  | 1.8586 ppb  | 09:24:07 |
| 3 | V 292.402†         | 103.6     | -17.8     | -0.2240 µg/L | -0.2240 ppb | 09:24:07 |
| 3 | Zn 213.857†        | 669.8     | 21.6      | 0.5230 µg/L  | 0.5230 ppb  | 09:24:27 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1868347.0                | 102.59 %           | 0.159    |                    |          | 0.15%   |
| Sc RADIAL   | 87518.7                  | 102 %              | 0.5      |                    |          | 0.45%   |
| Y 371.029   | 1289361.3                | 102.40 %           | 0.210    |                    |          | 0.21%   |
| Ag 328.068†   | -6.8                     | -0.0587 µg/L       | 0.09817  | -0.0587 ppb        | 0.09817  | 167.30% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -2.6                     | -1.3501 µg/L       | 9.02058  | -1.3501 ppb        | 9.02058  | 668.13% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.8                     | -1.2794 µg/L       | 3.16163  | -1.2794 ppb        | 3.16163  | 247.12% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | -10.3                    | -0.5129 µg/L       | 0.01367  | -0.5129 ppb        | 0.01367  | 2.67%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 4.9                      | 0.1149 µg/L        | 0.18915  | 0.1149 ppb         | 0.18915  | 164.57% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 52.5                     | 0.0330 µg/L        | 0.04491  | 0.0330 ppb         | 0.04491  | 136.27% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 17.6                     | 6.5301 µg/L        | 1.95215  | 6.5301 ppb         | 1.95215  | 29.89%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | 4.5                      | 0.1128 µg/L        | 0.09380  | 0.1128 ppb         | 0.09380  | 83.15%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 1.5                      | 0.0700 µg/L        | 0.13705  | 0.0700 ppb         | 0.13705  | 195.65% |

|  |                           |                     |                  |
|--|---------------------------|---------------------|------------------|
| QC value within limits for Co 228.616        | Recovery = Not calculated |                     |                  |
| Cr 267.716†                                  | 10.0 0.2308 µg/L          | 0.15658 0.2308 ppb  | 0.15658 67.84%   |
| QC value within limits for Cr 267.716        | Recovery = Not calculated |                     |                  |
| Cu 324.752†                                  | -183.6 -1.2853 µg/L       | 0.19605 -1.2853 ppb | 0.19605 15.25%   |
| QC value within limits for Cu 324.752        | Recovery = Not calculated |                     |                  |
| Fe 238.204 Radial†                           | 1.7 19.263 µg/L           | 22.5882 19.263 ppb  | 22.5882 117.26%  |
| QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |                     |                  |
| K 766.490 Radial†                            | 23.0 11.661 µg/L          | 11.1150 11.661 ppb  | 11.1150 95.32%   |
| QC value within limits for K 766.490 Radial  | Recovery = Not calculated |                     |                  |
| Mg 279.077 IEC†                              | 5.3 67.525 µg/L           | 14.4395 67.525 ppb  | 14.4395 21.38%   |
| QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |                     |                  |
| Mn 257.610†                                  | 43.9 0.1408 µg/L          | 0.06673 0.1408 ppb  | 0.06673 47.40%   |
| QC value within limits for Mn 257.610        | Recovery = Not calculated |                     |                  |
| Mo 202.031†                                  | 1.9 0.2022 µg/L           | 0.27325 0.2022 ppb  | 0.27325 135.12%  |
| QC value within limits for Mo 202.031        | Recovery = Not calculated |                     |                  |
| Na 589.592 Radial†                           | 17.0 8.1044 µg/L          | 27.72943 8.1044 ppb | 27.72943 342.15% |
| QC value within limits for Na 589.592 Radial | Recovery = Not calculated |                     |                  |
| Ni 231.604†                                  | -6.0 -0.3575 µg/L         | 0.25716 -0.3575 ppb | 0.25716 71.93%   |
| QC value within limits for Ni 231.604        | Recovery = Not calculated |                     |                  |
| P 214.914†                                   | -0.8 -1.2722 µg/L         | 3.89389 -1.2722 ppb | 3.89389 306.08%  |
| QC value within limits for P 214.914         | Recovery = Not calculated |                     |                  |
| Pb 220.353†                                  | 5.4 1.5084 µg/L           | 1.33376 1.5084 ppb  | 1.33376 88.42%   |
| QC value within limits for Pb 220.353        | Recovery = Not calculated |                     |                  |
| S 181.975 Axial†                             | 3.3 11.056 µg/L           | 1.6342 11.056 ppb   | 1.6342 14.78%    |
| QC value within limits for S 181.975 Axial   | Recovery = Not calculated |                     |                  |
| Sb 206.836†                                  | 0.4 0.3504 µg/L           | 1.69856 0.3504 ppb  | 1.69856 484.74%  |
| QC value within limits for Sb 206.836        | Recovery = Not calculated |                     |                  |
| Se 196.026†                                  | -5.6 -5.5556 µg/L         | 3.66816 -5.5556 ppb | 3.66816 66.03%   |
| QC value within limits for Se 196.026        | Recovery = Not calculated |                     |                  |
| SiO2†  | 59.0 11.149 µg/L          | 5.1393 11.149 ppb   | 5.1393 46.10%    |
| QC value within limits for SiO2              | Recovery = Not calculated |                     |                  |
| Si 251.611†                                  | 229.4 16.324 µg/L         | 1.6213 16.324 ppb   | 1.6213 9.93%     |
| QC value within limits for Si 251.611        | Recovery = Not calculated |                     |                  |
| Sn 189.927†                                  | 1.9 0.7901 µg/L           | 1.14296 0.7901 ppb  | 1.14296 144.66%  |
| QC value within limits for Sn 189.927        | Recovery = Not calculated |                     |                  |
| Sr 421.552†                                  | 39.3 0.2393 µg/L          | 0.16319 0.2393 ppb  | 0.16319 68.20%   |
| QC value within limits for Sr 421.552        | Recovery = Not calculated |                     |                  |
| Ti 334.940†                                  | 98.4 0.2424 µg/L          | 0.05334 0.2424 ppb  | 0.05334 22.00%   |
| QC value within limits for Ti 334.940        | Recovery = Not calculated |                     |                  |
| Tl 190.801†                                  | 3.6 3.7962 µg/L           | 3.26861 3.7962 ppb  | 3.26861 86.10%   |
| QC value within limits for Tl 190.801        | Recovery = Not calculated |                     |                  |
| U 409.014†                                   | 4.1 0.3843 µg/L           | 1.36835 0.3843 ppb  | 1.36835 356.09%  |
| QC value within limits for U 409.014         | Recovery = Not calculated |                     |                  |
| V 292.402†                                   | -22.4 -0.2845 µg/L        | 0.71796 -0.2845 ppb | 0.71796 252.35%  |
| QC value within limits for V 292.402         | Recovery = Not calculated |                     |                  |
| Zn 213.857†                                  | -14.2 -0.3459 µg/L        | 0.75293 -0.3459 ppb | 0.75293 217.67%  |
| QC value within limits for Zn 213.857        | Recovery = Not calculated |                     |                  |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 09:53:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88090.1       | 88090.1             | 103 %              |                    | 09:54:06      |
| 1     | Al 396.153Radial†  | 9404.5        | 9417.9              | 4893.4 µg/L        | 4893.4 ppb         | 09:54:06      |
| 1     | Ca 317.933Radial†  | 14412.8       | 13714.0             | 5078.6 µg/L        | 5078.6 ppb         | 09:54:06      |
| 1     | Fe 238.204 Radial† | 462.0         | 435.1               | 4962.8 µg/L        | 4962.8 ppb         | 09:54:26      |
| 1     | K 766.490 Radial†  | 10120.8       | 9484.8              | 4801.0 µg/L        | 4801.0 ppb         | 09:54:06      |
| 1     | Mg 279.077 IEC†    | 417.4         | 400.6               | 5082.5 µg/L        | 5082.5 ppb         | 09:54:26      |
| 1     | Na 589.592 Radial† | 21301.7       | 20537.2             | 9793.0 µg/L        | 9793.0 ppb         | 09:54:06      |
| 1     | Sr 421.552†        | 81316.9       | 79090.7             | 481.33 µg/L        | 481.33 ppb         | 09:54:06      |
| 1     | Sc 361.383         | 1864591.3     | 1864591.3           | 102.39 %           |                    | 09:55:30      |
| 1     | Y 371.029          | 1283727.2     | 1283727.2           | 101.95 %           |                    | 09:55:30      |
| 1     | Ag 328.068†        | 56744.3       | 55959.4             | 484.61 µg/L        | 484.61 ppb         | 09:55:35      |
| 1     | As 188.979†        | 342.4         | 337.0               | 515.82 µg/L        | 515.82 ppb         | 09:55:56      |
| 1     | B 249.677†         | 10468.0       | 9915.0              | 483.30 µg/L        | 483.30 ppb         | 09:55:35      |
| 1     | Ba 233.527†        | 21766.7       | 21278.8             | 498.94 µg/L        | 498.94 ppb         | 09:55:35      |
| 1     | Be 313.107†        | 810281.7      | 792934.4            | 498.71 µg/L        | 498.71 ppb         | 09:55:30      |
| 1     | Cd 226.502†        | 20222.9       | 19917.8             | 506.41 µg/L        | 506.41 ppb         | 09:55:35      |
| 1     | Co 228.616†        | 11265.4       | 10978.0             | 501.83 µg/L        | 501.83 ppb         | 09:55:35      |
| 1     | Cr 267.716†        | 22290.8       | 21711.3             | 502.52 µg/L        | 502.52 ppb         | 09:55:35      |
| 1     | Cu 324.752†        | 74525.9       | 68520.5             | 482.00 µg/L        | 482.00 ppb         | 09:55:35      |
| 1     | Mn 257.610†        | 156256.0      | 153363.2            | 503.48 µg/L        | 503.48 ppb         | 09:55:30      |
| 1     | Mo 202.031†        | 5060.4        | 4932.6              | 517.93 µg/L        | 517.93 ppb         | 09:55:56      |
| 1     | Ni 231.604†        | 9042.4        | 8477.9              | 501.34 µg/L        | 501.34 ppb         | 09:55:35      |
| 1     | P 214.914†         | 1836.6        | 1506.8              | 2524.1 µg/L        | 2524.1 ppb         | 09:55:56      |
| 1     | Pb 220.353†        | 1934.3        | 1845.8              | 518.32 µg/L        | 518.32 ppb         | 09:55:56      |
| 1     | S 181.975 Axial†   | 342.7         | 312.7               | 1032.2 µg/L        | 1032.2 ppb         | 09:55:56      |
| 1     | Sb 206.836†        | 571.9         | 531.6               | 502.09 µg/L        | 502.09 ppb         | 09:55:56      |
| 1     | Se 196.026†        | 545.4         | 505.9               | 512.46 µg/L        | 512.46 ppb         | 09:55:56      |
| 1     | SiO2†              | 31184.7       | 27610.0             | 5218.1 µg/L        | 5218.1 ppb         | 09:55:35      |
| 1     | Si 251.611†        | 35719.5       | 34465.6             | 2452.6 µg/L        | 2452.6 ppb         | 09:55:35      |
| 1     | Sn 189.927†        | 1279.2        | 1251.2              | 527.62 µg/L        | 527.62 ppb         | 09:55:56      |
| 1     | Ti 334.940†        | 198729.9      | 194806.1            | 490.14 µg/L        | 490.14 ppb         | 09:55:30      |
| 1     | Tl 190.801†        | 458.4         | 484.7               | 512.48 µg/L        | 512.48 ppb         | 09:55:56      |
| 1     | U 409.014†         | 5150.5        | 5088.3              | 484.62 µg/L        | 484.62 ppb         | 09:55:35      |
| 1     | V 292.402†         | 39997.1       | 38946.1             | 498.30 µg/L        | 498.30 ppb         | 09:55:35      |
| 1     | Zn 213.857†        | 21740.1       | 20601.1             | 495.69 µg/L        | 495.69 ppb         | 09:55:35      |
| 2     | Sc RADIAL          | 87470.9       | 87470.9             | 102 %              |                    | 09:54:32      |
| 2     | Al 396.153Radial†  | 9201.0        | 9283.1              | 4823.4 µg/L        | 4823.4 ppb         | 09:54:32      |
| 2     | Ca 317.933Radial†  | 14104.8       | 13511.3             | 5003.6 µg/L        | 5003.6 ppb         | 09:54:32      |
| 2     | Fe 238.204 Radial† | 459.1         | 435.4               | 4967.0 µg/L        | 4967.0 ppb         | 09:54:52      |
| 2     | K 766.490 Radial†  | 10114.2       | 9548.1              | 4833.1 µg/L        | 4833.1 ppb         | 09:54:32      |
| 2     | Mg 279.077 IEC†    | 417.6         | 403.7               | 5121.1 µg/L        | 5121.1 ppb         | 09:54:52      |
| 2     | Na 589.592 Radial† | 20871.2       | 20261.8             | 9661.7 µg/L        | 9661.7 ppb         | 09:54:32      |
| 2     | Sr 421.552†        | 79700.0       | 78065.3             | 475.08 µg/L        | 475.08 ppb         | 09:54:32      |
| 2     | Sc 361.383         | 1846908.4     | 1846908.4           | 101.42 %           |                    | 09:56:03      |
| 2     | Y 371.029          | 1269816.7     | 1269816.7           | 100.85 %           |                    | 09:56:03      |
| 2     | Ag 328.068†        | 56655.0       | 56402.0             | 488.45 µg/L        | 488.45 ppb         | 09:56:09      |
| 2     | As 188.979†        | 334.9         | 332.8               | 509.36 µg/L        | 509.36 ppb         | 09:56:29      |
| 2     | B 249.677†         | 10428.7       | 9974.1              | 486.20 µg/L        | 486.20 ppb         | 09:56:09      |
| 2     | Ba 233.527†        | 21812.7       | 21527.6             | 504.77 µg/L        | 504.77 ppb         | 09:56:09      |
| 2     | Be 313.107†        | 802467.1      | 792805.9            | 498.63 µg/L        | 498.63 ppb         | 09:56:03      |
| 2     | Cd 226.502†        | 20155.2       | 20040.2             | 509.53 µg/L        | 509.53 ppb         | 09:56:09      |
| 2     | Co 228.616†        | 11301.7       | 11119.2             | 508.28 µg/L        | 508.28 ppb         | 09:56:09      |
| 2     | Cr 267.716†        | 22303.6       | 21932.4             | 507.63 µg/L        | 507.63 ppb         | 09:56:09      |
| 2     | Cu 324.752†        | 74664.7       | 69354.2             | 487.86 µg/L        | 487.86 ppb         | 09:56:09      |
| 2     | Mn 257.610†        | 154288.5      | 152884.4            | 501.90 µg/L        | 501.90 ppb         | 09:56:03      |
| 2     | Mo 202.031†        | 4913.3        | 4834.9              | 507.67 µg/L        | 507.67 ppb         | 09:56:29      |
| 2     | Ni 231.604†        | 9118.1        | 8637.1              | 510.75 µg/L        | 510.75 ppb         | 09:56:09      |
| 2     | P 214.914†         | 1816.1        | 1503.7              | 2518.1 µg/L        | 2518.1 ppb         | 09:56:29      |
| 2     | Pb 220.353†        | 1895.4        | 1825.6              | 512.61 µg/L        | 512.61 ppb         | 09:56:29      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 333.8     | 307.1     | 1013.8 µg/L | 1013.8 ppb | 09:56:29 |
| 2 | Sb 206.836†        | 568.6     | 533.7     | 503.81 µg/L | 503.81 ppb | 09:56:29 |
| 2 | Se 196.026†        | 541.8     | 507.5     | 513.96 µg/L | 513.96 ppb | 09:56:29 |
| 2 | SiO2†              | 31314.0   | 28029.0   | 5297.3 µg/L | 5297.3 ppb | 09:56:09 |
| 2 | Si 251.611†        | 35977.9   | 35054.4   | 2494.5 µg/L | 2494.5 ppb | 09:56:09 |
| 2 | Sn 189.927†        | 1237.3    | 1221.9    | 515.27 µg/L | 515.27 ppb | 09:56:29 |
| 2 | Ti 334.940†        | 196941.5  | 194901.0  | 490.37 µg/L | 490.37 ppb | 09:56:03 |
| 2 | Tl 190.801†        | 459.8     | 490.4     | 518.41 µg/L | 518.41 ppb | 09:56:29 |
| 2 | U 409.014†         | 5098.1    | 5084.8    | 484.29 µg/L | 484.29 ppb | 09:56:09 |
| 2 | V 292.402†         | 40001.0   | 39323.9   | 503.02 µg/L | 503.02 ppb | 09:56:09 |
| 2 | Zn 213.857†        | 21728.0   | 20792.4   | 500.28 µg/L | 500.28 ppb | 09:56:09 |
| 3 | Sc RADIAL          | 87844.6   | 87844.6   | 102 %       |            | 09:54:58 |
| 3 | Al 396.153Radial†  | 9046.2    | 9093.5    | 4726.7 µg/L | 4726.7 ppb | 09:54:58 |
| 3 | Ca 317.933Radial†  | 13879.8   | 13232.6   | 4900.4 µg/L | 4900.4 ppb | 09:54:58 |
| 3 | Fe 238.204 Radial† | 455.3     | 429.8     | 4901.3 µg/L | 4901.3 ppb | 09:55:18 |
| 3 | K 766.490 Radial†  | 10118.8   | 9510.4    | 4814.0 µg/L | 4814.0 ppb | 09:54:58 |
| 3 | Mg 279.077 IEC†    | 409.2     | 393.8     | 4993.8 µg/L | 4993.8 ppb | 09:55:18 |
| 3 | Na 589.592 Radial† | 20688.9   | 19996.6   | 9535.2 µg/L | 9535.2 ppb | 09:54:58 |
| 3 | Sr 421.552†        | 78778.4   | 76832.5   | 467.58 µg/L | 467.58 ppb | 09:54:58 |
| 3 | Sc 361.383         | 1852727.6 | 1852727.6 | 101.73 %    |            | 09:56:36 |
| 3 | Y 371.029          | 1275618.9 | 1275618.9 | 101.31 %    |            | 09:56:36 |
| 3 | Ag 328.068†        | 52179.1   | 51826.9   | 448.66 µg/L | 448.66 ppb | 09:56:42 |
| 3 | As 188.979†        | 274.3     | 272.2     | 416.44 µg/L | 416.44 ppb | 09:57:02 |
| 3 | B 249.677†         | 9536.0    | 9064.3    | 441.59 µg/L | 441.59 ppb | 09:56:42 |
| 3 | Ba 233.527†        | 19202.9   | 18894.8   | 443.02 µg/L | 443.02 ppb | 09:56:42 |
| 3 | Be 313.107†        | 726346.6  | 715498.0  | 450.01 µg/L | 450.01 ppb | 09:56:36 |
| 3 | Cd 226.502†        | 17654.4   | 17519.5   | 445.37 µg/L | 445.37 ppb | 09:56:42 |
| 3 | Co 228.616†        | 9793.0    | 9601.2    | 438.83 µg/L | 438.83 ppb | 09:56:42 |
| 3 | Cr 267.716†        | 18777.5   | 18397.3   | 425.82 µg/L | 425.82 ppb | 09:56:42 |
| 3 | Cu 324.752†        | 65642.5   | 60254.6   | 423.96 µg/L | 423.96 ppb | 09:56:42 |
| 3 | Mn 257.610†        | 140439.3  | 138793.5  | 455.65 µg/L | 455.65 ppb | 09:56:36 |
| 3 | Mo 202.031†        | 3971.4    | 3893.8    | 408.89 µg/L | 408.89 ppb | 09:57:02 |
| 3 | Ni 231.604†        | 7914.8    | 7426.1    | 439.15 µg/L | 439.15 ppb | 09:56:42 |
| 3 | P 214.914†         | 1552.3    | 1238.8    | 2071.6 µg/L | 2071.6 ppb | 09:57:02 |
| 3 | Pb 220.353†        | 1598.9    | 1528.3    | 429.10 µg/L | 429.10 ppb | 09:57:02 |
| 3 | S 181.975 Axial†   | 286.1     | 259.2     | 855.53 µg/L | 855.53 ppb | 09:57:02 |
| 3 | Sb 206.836†        | 476.7     | 441.6     | 416.59 µg/L | 416.59 ppb | 09:57:02 |
| 3 | Se 196.026†        | 455.7     | 421.2     | 428.42 µg/L | 428.42 ppb | 09:57:02 |
| 3 | SiO2†              | 28497.8   | 25163.9   | 4755.8 µg/L | 4755.8 ppb | 09:56:42 |
| 3 | Si 251.611†        | 32378.1   | 31404.6   | 2234.8 µg/L | 2234.8 ppb | 09:56:42 |
| 3 | Sn 189.927†        | 995.5     | 980.3     | 413.48 µg/L | 413.48 ppb | 09:57:02 |
| 3 | Ti 334.940†        | 176945.7  | 174636.2  | 439.36 µg/L | 439.36 ppb | 09:56:36 |
| 3 | Tl 190.801†        | 398.0     | 428.2     | 452.84 µg/L | 452.84 ppb | 09:57:02 |
| 3 | U 409.014†         | 4381.8    | 4364.9    | 415.60 µg/L | 415.60 ppb | 09:56:42 |
| 3 | V 292.402†         | 34539.5   | 33831.6   | 432.41 µg/L | 432.41 ppb | 09:56:42 |
| 3 | Zn 213.857†        | 19031.7   | 18074.8   | 434.85 µg/L | 434.85 ppb | 09:56:42 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1854742.4                | 101.85 %           | 0.495    |                    |          | 0.49%  |
| Sc RADIAL   | 87801.9                  | 102 %              | 0.4      |                    |          | 0.36%  |
| Y 371.029   | 1276387.6                | 101.37 %           | 0.555    |                    |          | 0.55%  |
| Ag 328.068†   | 54729.4                  | 473.91 µg/L        | 21.948   | 473.91 ppb         | 21.948   | 4.63%  |
| QC value within limits for Ag 328.068 Recovery = 94.78%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 9264.8                   | 4814.5 µg/L        | 83.70    | 4814.5 ppb         | 83.70    | 1.74%  |
| QC value within limits for Al 396.153Radial Recovery = 96.29% |                          |                    |          |                    |          |        |
| As 188.979†   | 314.0                    | 480.54 µg/L        | 55.608   | 480.54 ppb         | 55.608   | 11.57% |
| QC value within limits for As 188.979 Recovery = 96.11%       |                          |                    |          |                    |          |        |
| B 249.677†  | 9651.2                   | 470.36 µg/L        | 24.959   | 470.36 ppb         | 24.959   | 5.31%  |
| QC value within limits for B 249.677 Recovery = 94.07%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 20567.0                  | 482.24 µg/L        | 34.092   | 482.24 ppb         | 34.092   | 7.07%  |
| QC value within limits for Ba 233.527 Recovery = 96.45%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 767079.4                 | 482.45 µg/L        | 28.095   | 482.45 ppb         | 28.095   | 5.82%  |
| QC value within limits for Be 313.107 Recovery = 96.49%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 13486.0                  | 4994.2 µg/L        | 89.51    | 4994.2 ppb         | 89.51    | 1.79%  |
| QC value within limits for Ca 317.933Radial Recovery = 99.88% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 19159.2                  | 487.10 µg/L        | 36.174   | 487.10 ppb         | 36.174   | 7.43%  |
| QC value within limits for Cd 226.502 Recovery = 97.42%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 10566.2                  | 482.98 µg/L        | 38.370   | 482.98 ppb         | 38.370   | 7.94%  |

|  |                 |          |             |        |            |        |        |
|--|-----------------|----------|-------------|--------|------------|--------|--------|
| Cr   | 267.716†        | 20680.3  | 478.66 µg/L | 45.830 | 478.66 ppb | 45.830 | 9.57%  |
| QC value within limits for Cr 267.716 Recovery = 95.73%        |                 |          |             |        |            |        |        |
| Cu   | 324.752†        | 66043.1  | 464.61 µg/L | 35.324 | 464.61 ppb | 35.324 | 7.60%  |
| QC value within limits for Cu 324.752 Recovery = 92.92%        |                 |          |             |        |            |        |        |
| Fe   | 238.204 Radial† | 433.4    | 4943.7 µg/L | 36.75  | 4943.7 ppb | 36.75  | 0.74%  |
| QC value within limits for Fe 238.204 Radial Recovery = 98.87% |                 |          |             |        |            |        |        |
| K  | 766.490 Radial† | 9514.4   | 4816.0 µg/L | 16.12  | 4816.0 ppb | 16.12  | 0.33%  |
| QC value within limits for K 766.490 Radial Recovery = 96.32%  |                 |          |             |        |            |        |        |
| Mg   | 279.077 IEC†    | 399.3    | 5065.8 µg/L | 65.29  | 5065.8 ppb | 65.29  | 1.29%  |
| QC value within limits for Mg 279.077 IEC Recovery = 101.32%   |                 |          |             |        |            |        |        |
| Mn   | 257.610†        | 148347.0 | 487.01 µg/L | 27.174 | 487.01 ppb | 27.174 | 5.58%  |
| QC value within limits for Mn 257.610 Recovery = 97.40%        |                 |          |             |        |            |        |        |
| Mo   | 202.031†        | 4553.8   | 478.16 µg/L | 60.208 | 478.16 ppb | 60.208 | 12.59% |
| QC value within limits for Mo 202.031 Recovery = 95.63%        |                 |          |             |        |            |        |        |
| Na   | 589.592 Radial† | 20265.2  | 9663.3 µg/L | 128.89 | 9663.3 ppb | 128.89 | 1.33%  |
| QC value within limits for Na 589.592 Radial Recovery = 96.63% |                 |          |             |        |            |        |        |
| Ni   | 231.604†        | 8180.4   | 483.74 µg/L | 38.908 | 483.74 ppb | 38.908 | 8.04%  |
| QC value within limits for Ni 231.604 Recovery = 96.75%        |                 |          |             |        |            |        |        |
| P  | 214.914†        | 1416.4   | 2371.3 µg/L | 259.53 | 2371.3 ppb | 259.53 | 10.94% |
| QC value within limits for P 214.914 Recovery = 94.85%         |                 |          |             |        |            |        |        |
| Pb   | 220.353†        | 1733.3   | 486.68 µg/L | 49.941 | 486.68 ppb | 49.941 | 10.26% |
| QC value within limits for Pb 220.353 Recovery = 97.34%        |                 |          |             |        |            |        |        |
| S  | 181.975 Axial†  | 293.0    | 967.18 µg/L | 97.127 | 967.18 ppb | 97.127 | 10.04% |
| QC value within limits for S 181.975 Axial Recovery = 96.72%   |                 |          |             |        |            |        |        |
| Sb   | 206.836†        | 502.3    | 474.16 µg/L | 49.864 | 474.16 ppb | 49.864 | 10.52% |
| QC value within limits for Sb 206.836 Recovery = 94.83%        |                 |          |             |        |            |        |        |
| Se   | 196.026†        | 478.2    | 484.95 µg/L | 48.960 | 484.95 ppb | 48.960 | 10.10% |
| QC value within limits for Se 196.026 Recovery = 96.99%        |                 |          |             |        |            |        |        |
| SiO2†  |                 | 26934.3  | 5090.4 µg/L | 292.46 | 5090.4 ppb | 292.46 | 5.75%  |
| QC value within limits for SiO2 Recovery = 95.19%              |                 |          |             |        |            |        |        |
| Si   | 251.611†        | 33641.5  | 2394.0 µg/L | 139.44 | 2394.0 ppb | 139.44 | 5.82%  |
| QC value within limits for Si 251.611 Recovery = 95.76%        |                 |          |             |        |            |        |        |
| Sn   | 189.927†        | 1151.1   | 485.46 µg/L | 62.637 | 485.46 ppb | 62.637 | 12.90% |
| QC value within limits for Sn 189.927 Recovery = 97.09%        |                 |          |             |        |            |        |        |
| Sr   | 421.552†        | 77996.2  | 474.66 µg/L | 6.881  | 474.66 ppb | 6.881  | 1.45%  |
| QC value within limits for Sr 421.552 Recovery = 94.93%        |                 |          |             |        |            |        |        |
| Ti   | 334.940†        | 188114.4 | 473.29 µg/L | 29.384 | 473.29 ppb | 29.384 | 6.21%  |
| QC value within limits for Ti 334.940 Recovery = 94.66%        |                 |          |             |        |            |        |        |
| Tl   | 190.801†        | 467.7    | 494.58 µg/L | 36.269 | 494.58 ppb | 36.269 | 7.33%  |
| QC value within limits for Tl 190.801 Recovery = 98.92%        |                 |          |             |        |            |        |        |
| U  | 409.014†        | 4846.0   | 461.50 µg/L | 39.753 | 461.50 ppb | 39.753 | 8.61%  |
| QC value within limits for U 409.014 Recovery = 92.30%         |                 |          |             |        |            |        |        |
| V  | 292.402†        | 37367.2  | 477.91 µg/L | 39.475 | 477.91 ppb | 39.475 | 8.26%  |
| QC value within limits for V 292.402 Recovery = 95.58%         |                 |          |             |        |            |        |        |
| Zn   | 213.857†        | 19822.8  | 476.94 µg/L | 36.522 | 476.94 ppb | 36.522 | 7.66%  |
| QC value within limits for Zn 213.857 Recovery = 95.39%        |                 |          |             |        |            |        |        |

All analyte(s) passed QC.



Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 09:57:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 83485.6       | 83485.6             | 97.3 %             |                    | 09:57:45      |
| 1     | Al 396.153Radial†  | -236.5        | 14.1                | 7.3321 µg/L        | 7.3321 ppb         | 09:57:45      |
| 1     | Ca 317.933Radial†  | 354.0         | 38.7                | 14.319 µg/L        | 14.319 ppb         | 09:58:06      |
| 1     | Fe 238.204 Radial† | 14.6          | 0.0                 | 0.4639 µg/L        | 0.4639 ppb         | 09:58:06      |
| 1     | K 766.490 Radial†  | 365.0         | 1.5                 | 0.7430 µg/L        | 0.7430 ppb         | 09:57:45      |
| 1     | Mg 279.077 IEC†    | 13.7          | 8.2                 | 103.39 µg/L        | 103.39 ppb         | 09:58:06      |
| 1     | Na 589.592 Radial† | 277.7         | 73.0                | 34.808 µg/L        | 34.808 ppb         | 09:57:45      |
| 1     | Sr 421.552†        | 128.5         | 13.6                | 0.0828 µg/L        | 0.0828 ppb         | 09:57:45      |
| 1     | Sc 361.383         | 1773616.4     | 1773616.4           | 97.391 %           |                    | 09:59:08      |
| 1     | Y 371.029          | 1222025.3     | 1222025.3           | 97.052 %           |                    | 09:59:08      |
| 1     | Ag 328.068†        | -583.9        | -62.1               | -0.5331 µg/L       | -0.5331 ppb        | 09:59:13      |
| 1     | As 188.979†        | -5.2          | -2.8                | -4.2971 µg/L       | -4.2971 ppb        | 09:59:34      |
| 1     | B 249.677†         | 303.2         | 2.3                 | 0.1123 µg/L        | 0.1123 ppb         | 09:59:34      |
| 1     | Ba 233.527†        | -22.3         | -3.6                | -0.0833 µg/L       | -0.0833 ppb        | 09:59:34      |
| 1     | Be 313.107†        | -1548.2       | -54.1               | -0.0340 µg/L       | -0.0340 ppb        | 09:59:13      |
| 1     | Cd 226.502†        | -154.7        | 7.3                 | 0.1865 µg/L        | 0.1865 ppb         | 09:59:34      |
| 1     | Co 228.616†        | 28.1          | 4.1                 | 0.1877 µg/L        | 0.1877 ppb         | 09:59:34      |
| 1     | Cr 267.716†        | 62.9          | 4.6                 | 0.1062 µg/L        | 0.1062 ppb         | 09:59:34      |
| 1     | Cu 324.752†        | 4179.5        | 22.8                | 0.1601 µg/L        | 0.1601 ppb         | 09:59:13      |
| 1     | Mn 257.610†        | -783.4        | -55.7               | -0.1898 µg/L       | -0.1898 ppb        | 09:59:34      |
| 1     | Mo 202.031†        | 15.0          | 5.6                 | 0.5897 µg/L        | 0.5897 ppb         | 09:59:34      |
| 1     | Ni 231.604†        | 362.2         | 18.1                | 1.0730 µg/L        | 1.0730 ppb         | 09:59:34      |
| 1     | P 214.914†         | 288.9         | 9.6                 | 16.434 µg/L        | 16.434 ppb         | 09:59:34      |
| 1     | Pb 220.353†        | 44.8          | 2.6                 | 0.7421 µg/L        | 0.7421 ppb         | 09:59:34      |
| 1     | S 181.975 Axial†   | 26.3          | 5.0                 | 16.665 µg/L        | 16.665 ppb         | 09:59:34      |
| 1     | Sb 206.836†        | 26.7          | 0.4                 | 0.3559 µg/L        | 0.3559 ppb         | 09:59:34      |
| 1     | Se 196.026†        | 28.2          | 2.3                 | 2.1682 µg/L        | 2.1682 ppb         | 09:59:34      |
| 1     | SiO2†              | 2860.0        | 88.7                | 16.761 µg/L        | 16.761 ppb         | 09:59:13      |
| 1     | Si 251.611†        | 544.3         | 137.4               | 9.7744 µg/L        | 9.7744 ppb         | 09:59:34      |
| 1     | Sn 189.927†        | -1.6          | 0.1                 | 0.0636 µg/L        | 0.0636 ppb         | 09:59:34      |
| 1     | Ti 334.940†        | -700.2        | -11.5               | -0.0369 µg/L       | -0.0369 ppb        | 09:59:13      |
| 1     | Tl 190.801†        | -28.2         | 8.1                 | 8.4801 µg/L        | 8.4801 ppb         | 09:59:34      |
| 1     | U 409.014†         | -29.8         | 27.3                | 2.6013 µg/L        | 2.6013 ppb         | 09:59:13      |
| 1     | V 292.402†         | 122.5         | 6.8                 | 0.0936 µg/L        | 0.0936 ppb         | 09:59:13      |
| 1     | Zn 213.857†        | 618.7         | 2.9                 | 0.0601 µg/L        | 0.0601 ppb         | 09:59:34      |
| 2     | Sc RADIAL          | 84060.2       | 84060.2             | 98.0 %             |                    | 09:58:11      |
| 2     | Al 396.153Radial†  | -253.8        | -1.9                | -1.0022 µg/L       | -1.0022 ppb        | 09:58:11      |
| 2     | Ca 317.933Radial†  | 339.1         | 20.9                | 7.7507 µg/L        | 7.7507 ppb         | 09:58:32      |
| 2     | Fe 238.204 Radial† | 15.8          | 1.2                 | 13.490 µg/L        | 13.490 ppb         | 09:58:32      |
| 2     | K 766.490 Radial†  | 476.6         | 112.8               | 57.101 µg/L        | 57.101 ppb         | 09:58:11      |
| 2     | Mg 279.077 IEC†    | 9.0           | 3.2                 | 40.517 µg/L        | 40.517 ppb         | 09:58:32      |
| 2     | Na 589.592 Radial† | 260.3         | 53.3                | 25.434 µg/L        | 25.434 ppb         | 09:58:11      |
| 2     | Sr 421.552†        | 182.7         | 68.0                | 0.4139 µg/L        | 0.4139 ppb         | 09:58:11      |
| 2     | Sc 361.383         | 1770934.6     | 1770934.6           | 97.243 %           |                    | 09:59:40      |
| 2     | Y 371.029          | 1220167.7     | 1220167.7           | 96.904 %           |                    | 09:59:40      |
| 2     | Ag 328.068†        | -543.0        | -20.9               | -0.1861 µg/L       | -0.1861 ppb        | 09:59:46      |
| 2     | As 188.979†        | -0.6          | 2.0                 | 3.0361 µg/L        | 3.0361 ppb         | 10:00:06      |
| 2     | B 249.677†         | 315.1         | 15.0                | 0.7258 µg/L        | 0.7258 ppb         | 10:00:06      |
| 2     | Ba 233.527†        | -17.6         | 1.2                 | 0.0249 µg/L        | 0.0249 ppb         | 10:00:06      |
| 2     | Be 313.107†        | -1539.8       | -47.9               | -0.0301 µg/L       | -0.0301 ppb        | 09:59:46      |
| 2     | Cd 226.502†        | -168.8        | -7.4                | -0.1878 µg/L       | -0.1878 ppb        | 10:00:06      |
| 2     | Co 228.616†        | 24.2          | 0.1                 | 0.0054 µg/L        | 0.0054 ppb         | 10:00:06      |
| 2     | Cr 267.716†        | 69.0          | 10.9                | 0.2523 µg/L        | 0.2523 ppb         | 10:00:06      |
| 2     | Cu 324.752†        | 4140.9        | -10.3               | -0.0701 µg/L       | -0.0701 ppb        | 09:59:46      |
| 2     | Mn 257.610†        | -793.7        | -67.5               | -0.2236 µg/L       | -0.2236 ppb        | 10:00:06      |
| 2     | Mo 202.031†        | 8.3           | -1.3                | -0.1356 µg/L       | -0.1356 ppb        | 10:00:06      |
| 2     | Ni 231.604†        | 364.2         | 20.8                | 1.2314 µg/L        | 1.2314 ppb         | 10:00:06      |
| 2     | P 214.914†         | 290.0         | 11.2                | 19.064 µg/L        | 19.064 ppb         | 10:00:06      |
| 2     | Pb 220.353†        | 46.3          | 4.2                 | 1.1828 µg/L        | 1.1828 ppb         | 10:00:06      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 20.4      | -1.0      | -3.2309 µg/L | -3.2309 ppb | 10:00:06 |
| 2 | Sb 206.836†        | 32.3      | 6.2       | 5.8626 µg/L  | 5.8626 ppb  | 10:00:06 |
| 2 | Se 196.026†        | 17.7      | -8.5      | -8.4175 µg/L | -8.4175 ppb | 10:00:06 |
| 2 | SiO2†              | 2877.3    | 110.9     | 20.958 µg/L  | 20.958 ppb  | 09:59:46 |
| 2 | Si 251.611†        | 553.8     | 148.0     | 10.530 µg/L  | 10.530 ppb  | 10:00:06 |
| 2 | Sn 189.927†        | -6.5      | -4.9      | -2.0425 µg/L | -2.0425 ppb | 10:00:06 |
| 2 | Ti 334.940†        | -682.5    | 5.6       | 0.0110 µg/L  | 0.0110 ppb  | 09:59:46 |
| 2 | Tl 190.801†        | -31.1     | 5.0       | 5.2309 µg/L  | 5.2309 ppb  | 10:00:06 |
| 2 | U 409.014†         | -60.8     | -4.7      | -0.4467 µg/L | -0.4467 ppb | 09:59:46 |
| 2 | V 292.402†         | 30.0      | -88.1     | -1.1201 µg/L | -1.1201 ppb | 09:59:46 |
| 2 | Zn 213.857†        | 617.3     | 2.4       | 0.0505 µg/L  | 0.0505 ppb  | 10:00:06 |
| 3 | Sc RADIAL          | 84209.5   | 84209.5   | 98.1 %       |             | 09:58:37 |
| 3 | Al 396.153Radial†  | -228.5    | 24.4      | 12.681 µg/L  | 12.681 ppb  | 09:58:37 |
| 3 | Ca 317.933Radial†  | 349.5     | 30.9      | 11.447 µg/L  | 11.447 ppb  | 09:58:57 |
| 3 | Fe 238.204 Radial† | 13.5      | -1.2      | -14.157 µg/L | -14.157 ppb | 09:58:57 |
| 3 | K 766.490 Radial†  | 427.0     | 61.4      | 31.073 µg/L  | 31.073 ppb  | 09:58:37 |
| 3 | Mg 279.077 IEC†    | 10.9      | 5.2       | 65.319 µg/L  | 65.319 ppb  | 09:58:57 |
| 3 | Na 589.592 Radial† | 240.2     | 32.4      | 15.438 µg/L  | 15.438 ppb  | 09:58:37 |
| 3 | Sr 421.552†        | 150.5     | 34.9      | 0.2125 µg/L  | 0.2125 ppb  | 09:58:37 |
| 3 | Sc 361.383         | 1781684.1 | 1781684.1 | 97.834 %     |             | 10:00:12 |
| 3 | Y 371.029          | 1228841.2 | 1228841.2 | 97.593 %     |             | 10:00:12 |
| 3 | Ag 328.068†        | -591.7    | -67.3     | -0.5810 µg/L | -0.5810 ppb | 10:00:18 |
| 3 | As 188.979†        | -3.3      | -0.8      | -1.2651 µg/L | -1.2651 ppb | 10:00:38 |
| 3 | B 249.677†         | 315.4     | 13.3      | 0.6596 µg/L  | 0.6596 ppb  | 10:00:38 |
| 3 | Ba 233.527†        | -22.6     | -3.9      | -0.0905 µg/L | -0.0905 ppb | 10:00:38 |
| 3 | Be 313.107†        | -1542.4   | -41.0     | -0.0258 µg/L | -0.0258 ppb | 10:00:18 |
| 3 | Cd 226.502†        | -168.3    | -5.8      | -0.1462 µg/L | -0.1462 ppb | 10:00:38 |
| 3 | Co 228.616†        | 30.7      | 6.6       | 0.3015 µg/L  | 0.3015 ppb  | 10:00:38 |
| 3 | Cr 267.716†        | 73.0      | 14.6      | 0.3371 µg/L  | 0.3371 ppb  | 10:00:38 |
| 3 | Cu 324.752†        | 4140.7    | -36.2     | -0.2571 µg/L | -0.2571 ppb | 10:00:18 |
| 3 | Mn 257.610†        | -778.9    | -47.5     | -0.1611 µg/L | -0.1611 ppb | 10:00:38 |
| 3 | Mo 202.031†        | 13.4      | 3.9       | 0.4061 µg/L  | 0.4061 ppb  | 10:00:38 |
| 3 | Ni 231.604†        | 359.7     | 13.9      | 0.8238 µg/L  | 0.8238 ppb  | 10:00:38 |
| 3 | P 214.914†         | 288.1     | 7.4       | 12.747 µg/L  | 12.747 ppb  | 10:00:38 |
| 3 | Pb 220.353†        | 58.1      | 16.0      | 4.4833 µg/L  | 4.4833 ppb  | 10:00:38 |
| 3 | S 181.975 Axial†   | 22.6      | 1.1       | 3.7386 µg/L  | 3.7386 ppb  | 10:00:38 |
| 3 | Sb 206.836†        | 28.4      | 2.0       | 1.8738 µg/L  | 1.8738 ppb  | 10:00:38 |
| 3 | Se 196.026†        | 14.6      | -11.8     | -11.757 µg/L | -11.757 ppb | 10:00:38 |
| 3 | SiO2†              | 2858.4    | 73.7      | 13.925 µg/L  | 13.925 ppb  | 10:00:18 |
| 3 | Si 251.611†        | 539.5     | 130.0     | 9.2486 µg/L  | 9.2486 ppb  | 10:00:38 |
| 3 | Sn 189.927†        | -0.1      | 1.7       | 0.7188 µg/L  | 0.7188 ppb  | 10:00:38 |
| 3 | Ti 334.940†        | -693.8    | -1.7      | -0.0094 µg/L | -0.0094 ppb | 10:00:18 |
| 3 | Tl 190.801†        | -35.5     | 0.7       | 0.7207 µg/L  | 0.7207 ppb  | 10:00:38 |
| 3 | U 409.014†         | -18.5     | 38.9      | 3.7171 µg/L  | 3.7171 ppb  | 10:00:18 |
| 3 | V 292.402†         | 101.1     | -15.6     | -0.1874 µg/L | -0.1874 ppb | 10:00:18 |
| 3 | Zn 213.857†        | 651.1     | 33.1      | 0.7970 µg/L  | 0.7970 ppb  | 10:00:38 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1775411.7                | 97.489 %           | 0.3072   |                    |          | 0.32%   |
| Sc RADIAL   | 83918.4                  | 97.8 %             | 0.45     |                    |          | 0.46%   |
| Y 371.029   | 1223678.0                | 97.183 %           | 0.3627   |                    |          | 0.37%   |
| Ag 328.068†   | -50.1                    | -0.4334 µg/L       | 0.21555  | -0.4334 ppb        | 0.21555  | 49.73%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 12.2                     | 6.3370 µg/L        | 6.89571  | 6.3370 ppb         | 6.89571  | 108.82% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.5                     | -0.8420 µg/L       | 3.68486  | -0.8420 ppb        | 3.68486  | 437.61% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 10.2                     | 0.4992 µg/L        | 0.33674  | 0.4992 ppb         | 0.33674  | 67.45%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -2.1                     | -0.0496 µg/L       | 0.06467  | -0.0496 ppb        | 0.06467  | 130.35% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -47.7                    | -0.0300 µg/L       | 0.00412  | -0.0300 ppb        | 0.00412  | 13.73%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 30.2                     | 11.172 µg/L        | 3.2926   | 11.172 ppb         | 3.2926   | 29.47%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -2.0                     | -0.0492 µg/L       | 0.20520  | -0.0492 ppb        | 0.20520  | 417.26% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 3.6                      | 0.1649 µg/L        | 0.14935  | 0.1649 ppb         | 0.14935  | 90.59%  |

|                    |  |                           |          |             |
|--------------------|--|---------------------------|----------|-------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |
|                    | 10.0   | 0.2319 µg/L               | 0.11678  | 0.2319 ppb  |
|                    |  |                           | 0.11678  | 50.36%      |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |
|                    | -7.9   | -0.0557 µg/L              | 0.20894  | -0.0557 ppb |
|                    |  |                           | 0.20894  | 375.07%     |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |
|                    | -0.0   | -0.0677 µg/L              | 13.83161 | -0.0677 ppb |
|                    |  |                           | 13.83161 | >999.9%     |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |
|                    | 58.6   | 29.639 µg/L               | 28.2062  | 29.639 ppb  |
|                    |  |                           | 28.2062  | 95.17%      |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |
|                    | 5.5  | 69.742 µg/L               | 31.6690  | 69.742 ppb  |
|                    |  |                           | 31.6690  | 45.41%      |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |
|                    | -56.9  | -0.1915 µg/L              | 0.03129  | -0.1915 ppb |
|                    |  |                           | 0.03129  | 16.34%      |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |
|                    | 2.7  | 0.2867 µg/L               | 0.37710  | 0.2867 ppb  |
|                    |  |                           | 0.37710  | 131.53%     |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |
|                    | 52.9   | 25.227 µg/L               | 9.6869   | 25.227 ppb  |
|                    |  |                           | 9.6869   | 38.40%      |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |
|                    | 17.6   | 1.0427 µg/L               | 0.20546  | 1.0427 ppb  |
|                    |  |                           | 0.20546  | 19.70%      |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |
|                    | 9.4  | 16.082 µg/L               | 3.1729   | 16.082 ppb  |
|                    |  |                           | 3.1729   | 19.73%      |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |
|                    | 7.6  | 2.1361 µg/L               | 2.04465  | 2.1361 ppb  |
|                    |  |                           | 2.04465  | 95.72%      |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |
|                    | 1.7  | 5.7241 µg/L               | 10.09530 | 5.7241 ppb  |
|                    |  |                           | 10.09530 | 176.36%     |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |
|                    | 2.9  | 2.6974 µg/L               | 2.84425  | 2.6974 ppb  |
|                    |  |                           | 2.84425  | 105.44%     |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |
|                    | -6.0   | -6.0021 µg/L              | 7.27007  | -6.0021 ppb |
|                    |  |                           | 7.27007  | 121.13%     |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |
|                    | 91.1   | 17.215 µg/L               | 3.5382   | 17.215 ppb  |
|                    |  |                           | 3.5382   | 20.55%      |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |
|                    | 138.4  | 9.8511 µg/L               | 0.64426  | 9.8511 ppb  |
|                    |  |                           | 0.64426  | 6.54%       |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |
|                    | -1.0   | -0.4201 µg/L              | 1.44279  | -0.4201 ppb |
|                    |  |                           | 1.44279  | 343.46%     |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |
|                    | 38.8   | 0.2364 µg/L               | 0.16682  | 0.2364 ppb  |
|                    |  |                           | 0.16682  | 70.56%      |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |
|                    | -2.5   | -0.0118 µg/L              | 0.02404  | -0.0118 ppb |
|                    |  |                           | 0.02404  | 204.55%     |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |
|                    | 4.6  | 4.8106 µg/L               | 3.89673  | 4.8106 ppb  |
|                    |  |                           | 3.89673  | 81.00%      |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |
|                    | 20.5   | 1.9572 µg/L               | 2.15533  | 1.9572 ppb  |
|                    |  |                           | 2.15533  | 110.12%     |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |
|                    | -32.3  | -0.4046 µg/L              | 0.63535  | -0.4046 ppb |
|                    |  |                           | 0.63535  | 157.01%     |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |
|                    | 12.8   | 0.3025 µg/L               | 0.42826  | 0.3025 ppb  |
|                    |  |                           | 0.42826  | 141.56%     |

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 10:22:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 85652.5       | 85652.5             | 99.8 %             |                    | 10:23:16      |
| 1     | Al 396.153Radial†  | 9316.9        | 9590.8              | 4982.8 µg/L        | 4982.8 ppb         | 10:23:16      |
| 1     | Ca 317.933Radial†  | 14047.7       | 13747.8             | 5091.2 µg/L        | 5091.2 ppb         | 10:23:16      |
| 1     | Fe 238.204 Radial† | 456.5         | 442.3               | 5046.3 µg/L        | 5046.3 ppb         | 10:23:36      |
| 1     | K 766.490 Radial†  | 10028.5       | 9672.9              | 4896.3 µg/L        | 4896.3 ppb         | 10:23:16      |
| 1     | Mg 279.077 IEC†    | 417.5         | 412.3               | 5230.9 µg/L        | 5230.9 ppb         | 10:23:36      |
| 1     | Na 589.592 Radial† | 20324.8       | 20149.0             | 9607.9 µg/L        | 9607.9 ppb         | 10:23:16      |
| 1     | Sr 421.552†        | 78907.3       | 78931.0             | 480.35 µg/L        | 480.35 ppb         | 10:23:16      |
| 1     | Sc 361.383         | 1811655.5     | 1811655.5           | 99.479 %           |                    | 10:24:40      |
| 1     | Y 371.029          | 1249235.2     | 1249235.2           | 99.213 %           |                    | 10:24:40      |
| 1     | Ag 328.068†        | 57690.0       | 58529.5             | 506.90 µg/L        | 506.90 ppb         | 10:24:45      |
| 1     | As 188.979†        | 349.9         | 354.3               | 542.31 µg/L        | 542.31 ppb         | 10:25:06      |
| 1     | B 249.677†         | 10663.7       | 10410.4             | 507.54 µg/L        | 507.54 ppb         | 10:24:45      |
| 1     | Ba 233.527†        | 22383.1       | 22519.5             | 528.03 µg/L        | 528.03 ppb         | 10:24:45      |
| 1     | Be 313.107†        | 829920.7      | 835800.6            | 525.67 µg/L        | 525.67 ppb         | 10:24:40      |
| 1     | Cd 226.502†        | 20693.4       | 20967.9             | 533.14 µg/L        | 533.14 ppb         | 10:24:45      |
| 1     | Co 228.616†        | 11618.5       | 11654.5             | 532.75 µg/L        | 532.75 ppb         | 10:24:45      |
| 1     | Cr 267.716†        | 23010.1       | 23070.5             | 533.98 µg/L        | 533.98 ppb         | 10:24:45      |
| 1     | Cu 324.752†        | 76385.4       | 72516.5             | 510.07 µg/L        | 510.07 ppb         | 10:24:45      |
| 1     | Mn 257.610†        | 159681.6      | 161266.1            | 529.42 µg/L        | 529.42 ppb         | 10:24:40      |
| 1     | Mo 202.031†        | 5172.4        | 5189.6              | 544.91 µg/L        | 544.91 ppb         | 10:25:06      |
| 1     | Ni 231.604†        | 9365.5        | 9060.7              | 535.80 µg/L        | 535.80 ppb         | 10:24:45      |
| 1     | P 214.914†         | 1875.9        | 1598.7              | 2678.3 µg/L        | 2678.3 ppb         | 10:25:06      |
| 1     | Pb 220.353†        | 1966.1        | 1933.1              | 542.79 µg/L        | 542.79 ppb         | 10:25:06      |
| 1     | S 181.975 Axial†   | 335.3         | 315.1               | 1040.1 µg/L        | 1040.1 ppb         | 10:25:06      |
| 1     | Sb 206.836†        | 590.3         | 566.4               | 534.89 µg/L        | 534.89 ppb         | 10:25:06      |
| 1     | Se 196.026†        | 561.2         | 537.4               | 543.81 µg/L        | 543.81 ppb         | 10:25:06      |
| 1     | SiO2†              | 31709.1       | 29027.1             | 5485.9 µg/L        | 5485.9 ppb         | 10:24:45      |
| 1     | Si 251.611†        | 36424.7       | 36193.9             | 2575.6 µg/L        | 2575.6 ppb         | 10:24:45      |
| 1     | Sn 189.927†        | 1308.7        | 1317.4              | 555.51 µg/L        | 555.51 ppb         | 10:25:06      |
| 1     | Ti 334.940†        | 203417.0      | 205189.2            | 516.27 µg/L        | 516.27 ppb         | 10:24:40      |
| 1     | Tl 190.801†        | 463.6         | 503.1               | 532.00 µg/L        | 532.00 ppb         | 10:25:06      |
| 1     | U 409.014†         | 5212.8        | 5297.9              | 504.61 µg/L        | 504.61 ppb         | 10:24:45      |
| 1     | V 292.402†         | 41093.9       | 41190.1             | 527.03 µg/L        | 527.03 ppb         | 10:24:45      |
| 1     | Zn 213.857†        | 22266.1       | 21750.3             | 523.33 µg/L        | 523.33 ppb         | 10:24:45      |
| 2     | Sc RADIAL          | 84850.2       | 84850.2             | 98.9 %             |                    | 10:23:42      |
| 2     | Al 396.153Radial†  | 9351.8        | 9714.4              | 5047.6 µg/L        | 5047.6 ppb         | 10:23:42      |
| 2     | Ca 317.933Radial†  | 14132.6       | 13966.8             | 5172.2 µg/L        | 5172.2 ppb         | 10:23:42      |
| 2     | Fe 238.204 Radial† | 452.7         | 442.8               | 5051.8 µg/L        | 5051.8 ppb         | 10:24:02      |
| 2     | K 766.490 Radial†  | 10122.4       | 9862.8              | 4992.4 µg/L        | 4992.4 ppb         | 10:23:42      |
| 2     | Mg 279.077 IEC†    | 414.5         | 413.3               | 5242.9 µg/L        | 5242.9 ppb         | 10:24:02      |
| 2     | Na 589.592 Radial† | 20522.8       | 20541.7             | 9795.2 µg/L        | 9795.2 ppb         | 10:23:42      |
| 2     | Sr 421.552†        | 79577.7       | 80356.4             | 489.03 µg/L        | 489.03 ppb         | 10:23:42      |
| 2     | Sc 361.383         | 1809451.0     | 1809451.0           | 99.358 %           |                    | 10:25:13      |
| 2     | Y 371.029          | 1245971.9     | 1245971.9           | 98.954 %           |                    | 10:25:13      |
| 2     | Ag 328.068†        | 57851.2       | 58762.3             | 508.90 µg/L        | 508.90 ppb         | 10:25:19      |
| 2     | As 188.979†        | 342.0         | 346.8               | 530.82 µg/L        | 530.82 ppb         | 10:25:39      |
| 2     | B 249.677†         | 10668.1       | 10428.0             | 508.40 µg/L        | 508.40 ppb         | 10:25:19      |
| 2     | Ba 233.527†        | 22337.8       | 22501.4             | 527.60 µg/L        | 527.60 ppb         | 10:25:19      |
| 2     | Be 313.107†        | 824021.9      | 830880.0            | 522.57 µg/L        | 522.57 ppb         | 10:25:13      |
| 2     | Cd 226.502†        | 20735.7       | 21035.8             | 534.86 µg/L        | 534.86 ppb         | 10:25:19      |
| 2     | Co 228.616†        | 11615.2       | 11665.4             | 533.24 µg/L        | 533.24 ppb         | 10:25:19      |
| 2     | Cr 267.716†        | 23044.1       | 23132.9             | 535.42 µg/L        | 535.42 ppb         | 10:25:19      |
| 2     | Cu 324.752†        | 76314.5       | 72538.7             | 510.23 µg/L        | 510.23 ppb         | 10:25:19      |
| 2     | Mn 257.610†        | 158614.4      | 160387.6            | 526.54 µg/L        | 526.54 ppb         | 10:25:13      |
| 2     | Mo 202.031†        | 4978.5        | 5000.8              | 525.09 µg/L        | 525.09 ppb         | 10:25:39      |
| 2     | Ni 231.604†        | 9321.1        | 9027.6              | 533.84 µg/L        | 533.84 ppb         | 10:25:19      |
| 2     | P 214.914†         | 1813.1        | 1537.8              | 2574.2 µg/L        | 2574.2 ppb         | 10:25:39      |
| 2     | Pb 220.353†        | 1909.1        | 1878.1              | 527.32 µg/L        | 527.32 ppb         | 10:25:39      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 337.4     | 317.6     | 1048.3 µg/L | 1048.3 ppb | 10:25:39 |
| 2 | Sb 206.836†        | 569.0     | 545.7     | 515.07 µg/L | 515.07 ppb | 10:25:39 |
| 2 | Se 196.026†        | 545.4     | 522.2     | 528.70 µg/L | 528.70 ppb | 10:25:39 |
| 2 | SiO2†              | 31774.9   | 29132.1   | 5505.7 µg/L | 5505.7 ppb | 10:25:19 |
| 2 | Si 251.611†        | 36458.9   | 36272.9   | 2581.2 µg/L | 2581.2 ppb | 10:25:19 |
| 2 | Sn 189.927†        | 1264.5    | 1274.5    | 537.46 µg/L | 537.46 ppb | 10:25:39 |
| 2 | Ti 334.940†        | 202541.0  | 204556.7  | 514.67 µg/L | 514.67 ppb | 10:25:13 |
| 2 | Tl 190.801†        | 455.5     | 495.5     | 524.02 µg/L | 524.02 ppb | 10:25:39 |
| 2 | U 409.014†         | 5272.8    | 5364.7    | 510.98 µg/L | 510.98 ppb | 10:25:19 |
| 2 | V 292.402†         | 41102.9   | 41249.5   | 527.63 µg/L | 527.63 ppb | 10:25:19 |
| 2 | Zn 213.857†        | 22252.0   | 21763.4   | 523.66 µg/L | 523.66 ppb | 10:25:19 |
| 3 | Sc RADIAL          | 85358.4   | 85358.4   | 99.5 %      |            | 10:24:08 |
| 3 | Al 396.153Radial†  | 9396.7    | 9703.3    | 5044.0 µg/L | 5044.0 ppb | 10:24:08 |
| 3 | Ca 317.933Radial†  | 14210.2   | 13959.6   | 5169.6 µg/L | 5169.6 ppb | 10:24:08 |
| 3 | Fe 238.204 Radial† | 453.9     | 441.3     | 5032.6 µg/L | 5032.6 ppb | 10:24:28 |
| 3 | K 766.490 Radial†  | 10151.6   | 9831.2    | 4976.4 µg/L | 4976.4 ppb | 10:24:08 |
| 3 | Mg 279.077 IEC†    | 414.6     | 410.8     | 5210.2 µg/L | 5210.2 ppb | 10:24:28 |
| 3 | Na 589.592 Radial† | 20442.6   | 20337.7   | 9697.9 µg/L | 9697.9 ppb | 10:24:08 |
| 3 | Sr 421.552†        | 79712.1   | 80012.5   | 486.93 µg/L | 486.93 ppb | 10:24:08 |
| 3 | Sc 361.383         | 1848512.6 | 1848512.6 | 101.50 %    |            | 10:25:46 |
| 3 | Y 371.029          | 1272536.5 | 1272536.5 | 101.06 %    |            | 10:25:46 |
| 3 | Ag 328.068†        | 52332.9   | 52095.4   | 451.02 µg/L | 451.02 ppb | 10:25:52 |
| 3 | As 188.979†        | 277.8     | 276.3     | 422.66 µg/L | 422.66 ppb | 10:26:13 |
| 3 | B 249.677†         | 9577.7    | 9126.8    | 444.59 µg/L | 444.59 ppb | 10:25:52 |
| 3 | Ba 233.527†        | 19356.4   | 19089.0   | 447.58 µg/L | 447.58 ppb | 10:25:52 |
| 3 | Be 313.107†        | 735322.6  | 725969.1  | 456.59 µg/L | 456.59 ppb | 10:25:46 |
| 3 | Cd 226.502†        | 17887.3   | 17788.6   | 452.21 µg/L | 452.21 ppb | 10:25:52 |
| 3 | Co 228.616†        | 9934.2    | 9762.3    | 446.19 µg/L | 446.19 ppb | 10:25:52 |
| 3 | Cr 267.716†        | 18965.3   | 18624.4   | 431.08 µg/L | 431.08 ppb | 10:25:52 |
| 3 | Cu 324.752†        | 65997.1   | 60751.1   | 427.47 µg/L | 427.47 ppb | 10:25:52 |
| 3 | Mn 257.610†        | 141791.1  | 140440.0  | 461.04 µg/L | 461.04 ppb | 10:25:46 |
| 3 | Mo 202.031†        | 4048.3    | 3978.5    | 417.78 µg/L | 417.78 ppb | 10:26:13 |
| 3 | Ni 231.604†        | 8043.0    | 7570.1    | 447.66 µg/L | 447.66 ppb | 10:25:52 |
| 3 | P 214.914†         | 1560.3    | 1250.2    | 2090.6 µg/L | 2090.6 ppb | 10:26:13 |
| 3 | Pb 220.353†        | 1623.7    | 1556.3    | 436.99 µg/L | 436.99 ppb | 10:26:13 |
| 3 | S 181.975 Axial†   | 290.1     | 263.9     | 870.91 µg/L | 870.91 ppb | 10:26:13 |
| 3 | Sb 206.836†        | 478.6     | 444.5     | 419.43 µg/L | 419.43 ppb | 10:26:13 |
| 3 | Se 196.026†        | 455.5     | 422.0     | 429.47 µg/L | 429.47 ppb | 10:26:13 |
| 3 | SiO2†              | 28428.3   | 25159.3   | 4754.9 µg/L | 4754.9 ppb | 10:25:52 |
| 3 | Si 251.611†        | 32254.8   | 31355.6   | 2231.3 µg/L | 2231.3 ppb | 10:25:52 |
| 3 | Sn 189.927†        | 1004.3    | 991.2     | 418.10 µg/L | 418.10 ppb | 10:26:13 |
| 3 | Ti 334.940†        | 179068.2  | 177123.9  | 445.61 µg/L | 445.61 ppb | 10:25:46 |
| 3 | Tl 190.801†        | 391.1     | 422.3     | 446.67 µg/L | 446.67 ppb | 10:26:13 |
| 3 | U 409.014†         | 4415.4    | 4407.9    | 419.67 µg/L | 419.67 ppb | 10:25:52 |
| 3 | V 292.402†         | 34906.7   | 34270.8   | 438.04 µg/L | 438.04 ppb | 10:25:52 |
| 3 | Zn 213.857†        | 19193.3   | 18276.7   | 439.68 µg/L | 439.68 ppb | 10:25:52 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1823206.3                | 100.11 %           | 1.205    |                    |          | 1.20%  |
| Sc RADIAL  | 85287.0                  | 99.4 %             | 0.47     |                    |          | 0.48%  |
| Y 371.029  | 1255914.5                | 99.743 %           | 1.1506   |                    |          | 1.15%  |
| Ag 328.068†  | 56462.4                  | 488.94 µg/L        | 32.857   | 488.94 ppb         | 32.857   | 6.72%  |
| QC value within limits for Ag 328.068 Recovery = 97.79%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9669.5                   | 5024.8 µg/L        | 36.40    | 5024.8 ppb         | 36.40    | 0.72%  |
| QC value within limits for Al 396.153Radial Recovery = 100.50% |                          |                    |          |                    |          |        |
| As 188.979†  | 325.8                    | 498.60 µg/L        | 66.017   | 498.60 ppb         | 66.017   | 13.24% |
| QC value within limits for As 188.979 Recovery = 99.72%        |                          |                    |          |                    |          |        |
| B 249.677†   | 9988.4                   | 486.84 µg/L        | 36.598   | 486.84 ppb         | 36.598   | 7.52%  |
| QC value within limits for B 249.677 Recovery = 97.37%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21370.0                  | 501.07 µg/L        | 46.327   | 501.07 ppb         | 46.327   | 9.25%  |
| QC value within limits for Ba 233.527 Recovery = 100.21%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 797549.9                 | 501.61 µg/L        | 39.018   | 501.61 ppb         | 39.018   | 7.78%  |
| QC value within limits for Be 313.107 Recovery = 100.32%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13891.4                  | 5144.3 µg/L        | 46.06    | 5144.3 ppb         | 46.06    | 0.90%  |
| QC value within limits for Ca 317.933Radial Recovery = 102.89% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19930.8                  | 506.73 µg/L        | 47.230   | 506.73 ppb         | 47.230   | 9.32%  |
| QC value within limits for Cd 226.502 Recovery = 101.35%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11027.4                  | 504.06 µg/L        | 50.115   | 504.06 ppb         | 50.115   | 9.94%  |

|   |          |             |         |            |         |        |  |
|---|----------|-------------|---------|------------|---------|--------|--|
| QC value within limits for Co 228.616 Recovery = 100.81%        |          |             |         |            |         |        |  |
| Cr 267.716†   | 21609.3  | 500.16 µg/L | 59.830  | 500.16 ppb | 59.830  | 11.96% |  |
| QC value within limits for Cr 267.716 Recovery = 100.03%        |          |             |         |            |         |        |  |
| Cu 324.752†   | 68602.1  | 482.59 µg/L | 47.738  | 482.59 ppb | 47.738  | 9.89%  |  |
| QC value within limits for Cu 324.752 Recovery = 96.52%         |          |             |         |            |         |        |  |
| Fe 238.204 Radial†  | 442.1    | 5043.6 µg/L | 9.90    | 5043.6 ppb | 9.90    | 0.20%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = 100.87% |          |             |         |            |         |        |  |
| K 766.490 Radial†   | 9788.9   | 4955.0 µg/L | 51.50   | 4955.0 ppb | 51.50   | 1.04%  |  |
| QC value within limits for K 766.490 Radial Recovery = 99.10%   |          |             |         |            |         |        |  |
| Mg 279.077 IEC†   | 412.1    | 5228.0 µg/L | 16.53   | 5228.0 ppb | 16.53   | 0.32%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 104.56%    |          |             |         |            |         |        |  |
| Mn 257.610†   | 154031.2 | 505.67 µg/L | 38.671  | 505.67 ppb | 38.671  | 7.65%  |  |
| QC value within limits for Mn 257.610 Recovery = 101.13%        |          |             |         |            |         |        |  |
| Mo 202.031†   | 4723.0   | 495.93 µg/L | 68.394  | 495.93 ppb | 68.394  | 13.79% |  |
| QC value within limits for Mo 202.031 Recovery = 99.19%         |          |             |         |            |         |        |  |
| Na 589.592 Radial†  | 20342.8  | 9700.3 µg/L | 93.65   | 9700.3 ppb | 93.65   | 0.97%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 97.00%  |          |             |         |            |         |        |  |
| Ni 231.604†   | 8552.8   | 505.77 µg/L | 50.330  | 505.77 ppb | 50.330  | 9.95%  |  |
| QC value within limits for Ni 231.604 Recovery = 101.15%        |          |             |         |            |         |        |  |
| P 214.914†  | 1462.2   | 2447.7 µg/L | 313.60  | 2447.7 ppb | 313.60  | 12.81% |  |
| QC value within limits for P 214.914 Recovery = 97.91%          |          |             |         |            |         |        |  |
| Pb 220.353†   | 1789.1   | 502.37 µg/L | 57.143  | 502.37 ppb | 57.143  | 11.37% |  |
| QC value within limits for Pb 220.353 Recovery = 100.47%        |          |             |         |            |         |        |  |
| S 181.975 Axial†  | 298.9    | 986.43 µg/L | 100.135 | 986.43 ppb | 100.135 | 10.15% |  |
| QC value within limits for S 181.975 Axial Recovery = 98.64%    |          |             |         |            |         |        |  |
| Sb 206.836†   | 518.9    | 489.80 µg/L | 61.740  | 489.80 ppb | 61.740  | 12.61% |  |
| QC value within limits for Sb 206.836 Recovery = 97.96%         |          |             |         |            |         |        |  |
| Se 196.026†   | 493.9    | 500.66 µg/L | 62.112  | 500.66 ppb | 62.112  | 12.41% |  |
| QC value within limits for Se 196.026 Recovery = 100.13%        |          |             |         |            |         |        |  |
| SiO2†   | 27772.9  | 5248.8 µg/L | 427.88  | 5248.8 ppb | 427.88  | 8.15%  |  |
| QC value within limits for SiO2 Recovery = 98.16%               |          |             |         |            |         |        |  |
| Si 251.611†   | 34607.5  | 2462.7 µg/L | 200.42  | 2462.7 ppb | 200.42  | 8.14%  |  |
| QC value within limits for Si 251.611 Recovery = 98.51%         |          |             |         |            |         |        |  |
| Sn 189.927†   | 1194.3   | 503.69 µg/L | 74.673  | 503.69 ppb | 74.673  | 14.83% |  |
| QC value within limits for Sn 189.927 Recovery = 100.74%        |          |             |         |            |         |        |  |
| Sr 421.552†   | 79766.6  | 485.44 µg/L | 4.527   | 485.44 ppb | 4.527   | 0.93%  |  |
| QC value within limits for Sr 421.552 Recovery = 97.09%         |          |             |         |            |         |        |  |
| Ti 334.940†   | 195623.3 | 492.18 µg/L | 40.342  | 492.18 ppb | 40.342  | 8.20%  |  |
| QC value within limits for Ti 334.940 Recovery = 98.44%         |          |             |         |            |         |        |  |
| Tl 190.801†   | 473.6    | 500.89 µg/L | 47.132  | 500.89 ppb | 47.132  | 9.41%  |  |
| QC value within limits for Tl 190.801 Recovery = 100.18%        |          |             |         |            |         |        |  |
| U 409.014†  | 5023.5   | 478.42 µg/L | 50.981  | 478.42 ppb | 50.981  | 10.66% |  |
| QC value within limits for U 409.014 Recovery = 95.68%          |          |             |         |            |         |        |  |
| V 292.402†  | 38903.4  | 497.57 µg/L | 51.554  | 497.57 ppb | 51.554  | 10.36% |  |
| QC value within limits for V 292.402 Recovery = 99.51%          |          |             |         |            |         |        |  |
| Zn 213.857†   | 20596.8  | 495.56 µg/L | 48.389  | 495.56 ppb | 48.389  | 9.76%  |  |
| QC value within limits for Zn 213.857 Recovery = 99.11%         |          |             |         |            |         |        |  |
| All analyte(s) passed QC.                                       |          |             |         |            |         |        |  |

Sequence No.: 8  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/11/2010 10:26:22  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86833.6       | 86833.6             | 101 %              |                    | 10:26:55      |
| 1     | Al 396.153Radial†  | -213.3        | 46.4                | 24.135 µg/L        | 24.135 ppb         | 10:26:55      |
| 1     | Ca 317.933Radial†  | 360.8         | 31.4                | 11.628 µg/L        | 11.628 ppb         | 10:27:16      |
| 1     | Fe 238.204 Radial† | 14.5          | -0.6                | -7.0832 µg/L       | -7.0832 ppb        | 10:27:16      |
| 1     | K 766.490 Radial†  | 332.1         | -45.6               | -23.061 µg/L       | -23.061 ppb        | 10:26:55      |
| 1     | Mg 279.077 IEC†    | 9.9           | 3.8                 | 48.119 µg/L        | 48.119 ppb         | 10:27:16      |
| 1     | Na 589.592 Radial† | 211.4         | -3.5                | -1.6505 µg/L       | -1.6505 ppb        | 10:26:55      |
| 1     | Sr 421.552†        | 166.3         | 45.9                | 0.2791 µg/L        | 0.2791 ppb         | 10:26:55      |
| 1     | Sc 361.383         | 1861733.8     | 1861733.8           | 102.23 %           |                    | 10:28:17      |
| 1     | Y 371.029          | 1286229.3     | 1286229.3           | 102.15 %           |                    | 10:28:17      |
| 1     | Ag 328.068†        | -523.1        | 25.8                | 0.2209 µg/L        | 0.2209 ppb         | 10:28:23      |
| 1     | As 188.979†        | -0.3          | 2.3                 | 3.5180 µg/L        | 3.5180 ppb         | 10:28:43      |
| 1     | B 249.677†         | 327.7         | 11.5                | 0.5670 µg/L        | 0.5670 ppb         | 10:28:43      |
| 1     | Ba 233.527†        | -24.1         | -4.3                | -0.1004 µg/L       | -0.1004 ppb        | 10:28:43      |
| 1     | Be 313.107†        | -1493.1       | 75.0                | 0.0471 µg/L        | 0.0471 ppb         | 10:28:23      |
| 1     | Cd 226.502†        | -177.5        | -7.5                | -0.1891 µg/L       | -0.1891 ppb        | 10:28:43      |
| 1     | Co 228.616†        | 22.7          | -2.6                | -0.1195 µg/L       | -0.1195 ppb        | 10:28:43      |
| 1     | Cr 267.716†        | 61.5          | 0.2                 | 0.0037 µg/L        | 0.0037 ppb         | 10:28:43      |
| 1     | Cu 324.752†        | 4144.8        | -214.2              | -1.5055 µg/L       | -1.5055 ppb        | 10:28:23      |
| 1     | Mn 257.610†        | -799.8        | -33.7               | -0.1144 µg/L       | -0.1144 ppb        | 10:28:43      |
| 1     | Mo 202.031†        | 15.1          | 5.0                 | 0.5199 µg/L        | 0.5199 ppb         | 10:28:43      |
| 1     | Ni 231.604†        | 360.0         | -1.7                | -0.0980 µg/L       | -0.0980 ppb        | 10:28:43      |
| 1     | P 214.914†         | 284.5         | -8.7                | -14.750 µg/L       | -14.750 ppb        | 10:28:43      |
| 1     | Pb 220.353†        | 53.9          | 9.4                 | 2.6254 µg/L        | 2.6254 ppb         | 10:28:43      |
| 1     | S 181.975 Axial†   | 24.2          | 1.6                 | 5.4146 µg/L        | 5.4146 ppb         | 10:28:43      |
| 1     | Sb 206.836†        | 29.9          | 2.2                 | 2.0950 µg/L        | 2.0950 ppb         | 10:28:43      |
| 1     | Se 196.026†        | 22.9          | -4.3                | -4.3394 µg/L       | -4.3394 ppb        | 10:28:43      |
| 1     | SiO2†              | 2802.4        | -106.7              | -20.169 µg/L       | -20.169 ppb        | 10:28:23      |
| 1     | Si 251.611†        | 475.6         | 43.8                | 3.1137 µg/L        | 3.1137 ppb         | 10:28:43      |
| 1     | Sn 189.927†        | -7.3          | -5.3                | -2.2447 µg/L       | -2.2447 ppb        | 10:28:43      |
| 1     | Ti 334.940†        | -668.8        | 53.2                | 0.1303 µg/L        | 0.1303 ppb         | 10:28:23      |
| 1     | Tl 190.801†        | -36.8         | 1.0                 | 1.0269 µg/L        | 1.0269 ppb         | 10:28:43      |
| 1     | U 409.014†         | 44.5          | 101.4               | 9.6766 µg/L        | 9.6766 ppb         | 10:28:23      |
| 1     | V 292.402†         | 120.1         | -1.5                | -0.0040 µg/L       | -0.0040 ppb        | 10:28:23      |
| 1     | Zn 213.857†        | 614.4         | -31.4               | -0.7599 µg/L       | -0.7599 ppb        | 10:28:43      |
| 2     | Sc RADIAL          | 86487.6       | 86487.6             | 101 %              |                    | 10:27:21      |
| 2     | Al 396.153Radial†  | -267.5        | -8.2                | -4.3117 µg/L       | -4.3117 ppb        | 10:27:21      |
| 2     | Ca 317.933Radial†  | 351.2         | 23.3                | 8.6252 µg/L        | 8.6252 ppb         | 10:27:41      |
| 2     | Fe 238.204 Radial† | 15.7          | 0.6                 | 7.3790 µg/L        | 7.3790 ppb         | 10:27:41      |
| 2     | K 766.490 Radial†  | 364.8         | -11.8               | -5.9893 µg/L       | -5.9893 ppb        | 10:27:21      |
| 2     | Mg 279.077 IEC†    | 7.1           | 1.1                 | 13.422 µg/L        | 13.422 ppb         | 10:27:41      |
| 2     | Na 589.592 Radial† | 235.9         | 21.6                | 10.308 µg/L        | 10.308 ppb         | 10:27:21      |
| 2     | Sr 421.552†        | 169.1         | 49.4                | 0.3003 µg/L        | 0.3003 ppb         | 10:27:21      |
| 2     | Sc 361.383         | 1861720.2     | 1861720.2           | 102.23 %           |                    | 10:28:49      |
| 2     | Y 371.029          | 1285322.2     | 1285322.2           | 102.08 %           |                    | 10:28:49      |
| 2     | Ag 328.068†        | -560.6        | -10.9               | -0.0986 µg/L       | -0.0986 ppb        | 10:28:55      |
| 2     | As 188.979†        | -3.6          | -0.9                | -1.3995 µg/L       | -1.3995 ppb        | 10:29:16      |
| 2     | B 249.677†         | 320.2         | 4.1                 | 0.1993 µg/L        | 0.1993 ppb         | 10:29:16      |
| 2     | Ba 233.527†        | -23.6         | -3.8                | -0.0896 µg/L       | -0.0896 ppb        | 10:29:16      |
| 2     | Be 313.107†        | -1596.9       | -26.5               | -0.0167 µg/L       | -0.0167 ppb        | 10:28:55      |
| 2     | Cd 226.502†        | -184.1        | -13.9               | -0.3541 µg/L       | -0.3541 ppb        | 10:29:16      |
| 2     | Co 228.616†        | 27.8          | 2.4                 | 0.1104 µg/L        | 0.1104 ppb         | 10:29:16      |
| 2     | Cr 267.716†        | 83.6          | 21.8                | 0.5036 µg/L        | 0.5036 ppb         | 10:29:16      |
| 2     | Cu 324.752†        | 4213.9        | -146.6              | -1.0281 µg/L       | -1.0281 ppb        | 10:28:55      |
| 2     | Mn 257.610†        | -811.9        | -45.6               | -0.1502 µg/L       | -0.1502 ppb        | 10:29:16      |
| 2     | Mo 202.031†        | 22.0          | 11.7                | 1.2321 µg/L        | 1.2321 ppb         | 10:29:16      |
| 2     | Ni 231.604†        | 357.0         | -4.6                | -0.2711 µg/L       | -0.2711 ppb        | 10:29:16      |
| 2     | P 214.914†         | 291.1         | -2.2                | -3.6789 µg/L       | -3.6789 ppb        | 10:29:16      |
| 2     | Pb 220.353†        | 40.9          | -3.4                | -0.9541 µg/L       | -0.9541 ppb        | 10:29:16      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 32.7      | 10.0      | 33.078 µg/L  | 33.078 ppb  | 10:29:16 |
| 2 | Sb 206.836†        | 26.3      | -1.3      | -1.2202 µg/L | -1.2202 ppb | 10:29:16 |
| 2 | Se 196.026†        | 23.8      | -3.5      | -3.4481 µg/L | -3.4481 ppb | 10:29:16 |
| 2 | SiO2†              | 2819.7    | -89.7     | -16.959 µg/L | -16.959 ppb | 10:28:55 |
| 2 | Si 251.611†        | 448.4     | 17.2      | 1.2205 µg/L  | 1.2205 ppb  | 10:29:16 |
| 2 | Sn 189.927†        | -5.9      | -4.0      | -1.6831 µg/L | -1.6831 ppb | 10:29:16 |
| 2 | Ti 334.940†        | -659.6    | 62.2      | 0.1557 µg/L  | 0.1557 ppb  | 10:28:55 |
| 2 | Tl 190.801†        | -35.6     | 2.2       | 2.2871 µg/L  | 2.2871 ppb  | 10:29:16 |
| 2 | U 409.014†         | 69.6      | 125.9     | 12.018 µg/L  | 12.018 ppb  | 10:28:55 |
| 2 | V 292.402†         | 51.7      | -68.4     | -0.8458 µg/L | -0.8458 ppb | 10:28:55 |
| 2 | Zn 213.857†        | 619.1     | -26.8     | -0.6467 µg/L | -0.6467 ppb | 10:29:16 |
| 3 | Sc RADIAL          | 87334.4   | 87334.4   | 102 %        |             | 10:27:47 |
| 3 | Al 396.153Radial†  | -265.8    | -4.0      | -2.1049 µg/L | -2.1049 ppb | 10:27:47 |
| 3 | Ca 317.933Radial†  | 359.8     | 28.4      | 10.511 µg/L  | 10.511 ppb  | 10:28:07 |
| 3 | Fe 238.204 Radial† | 13.7      | -1.5      | -16.992 µg/L | -16.992 ppb | 10:28:07 |
| 3 | K 766.490 Radial†  | 318.7     | -60.5     | -30.649 µg/L | -30.649 ppb | 10:27:47 |
| 3 | Mg 279.077 IEC†    | 10.2      | 4.0       | 51.236 µg/L  | 51.236 ppb  | 10:28:07 |
| 3 | Na 589.592 Radial† | 186.9     | -28.7     | -13.698 µg/L | -13.698 ppb | 10:27:47 |
| 3 | Sr 421.552†        | 134.1     | 13.3      | 0.0808 µg/L  | 0.0808 ppb  | 10:27:47 |
| 3 | Sc 361.383         | 1870801.8 | 1870801.8 | 102.73 %     |             | 10:29:22 |
| 3 | Y 371.029          | 1292914.1 | 1292914.1 | 102.68 %     |             | 10:29:22 |
| 3 | Ag 328.068†        | -522.4    | 28.9      | 0.2476 µg/L  | 0.2476 ppb  | 10:29:27 |
| 3 | As 188.979†        | -3.1      | -0.4      | -0.6351 µg/L | -0.6351 ppb | 10:29:48 |
| 3 | B 249.677†         | 314.9     | -2.5      | -0.1137 µg/L | -0.1137 ppb | 10:29:48 |
| 3 | Ba 233.527†        | -27.9     | -7.9      | -0.1841 µg/L | -0.1841 ppb | 10:29:48 |
| 3 | Be 313.107†        | -1581.4   | -3.9      | -0.0025 µg/L | -0.0025 ppb | 10:29:27 |
| 3 | Cd 226.502†        | -173.6    | -2.8      | -0.0689 µg/L | -0.0689 ppb | 10:29:48 |
| 3 | Co 228.616†        | 28.0      | 2.4       | 0.1105 µg/L  | 0.1105 ppb  | 10:29:48 |
| 3 | Cr 267.716†        | 82.7      | 20.4      | 0.4730 µg/L  | 0.4730 ppb  | 10:29:48 |
| 3 | Cu 324.752†        | 4217.7    | -162.9    | -1.1472 µg/L | -1.1472 ppb | 10:29:27 |
| 3 | Mn 257.610†        | -778.3    | -9.0      | -0.0339 µg/L | -0.0339 ppb | 10:29:48 |
| 3 | Mo 202.031†        | 13.7      | 3.5       | 0.3639 µg/L  | 0.3639 ppb  | 10:29:48 |
| 3 | Ni 231.604†        | 361.3     | -2.1      | -0.1232 µg/L | -0.1232 ppb | 10:29:48 |
| 3 | P 214.914†         | 286.1     | -8.5      | -14.312 µg/L | -14.312 ppb | 10:29:48 |
| 3 | Pb 220.353†        | 49.3      | 4.6       | 1.2952 µg/L  | 1.2952 ppb  | 10:29:48 |
| 3 | S 181.975 Axial†   | 22.3      | -0.3      | -1.0530 µg/L | -1.0530 ppb | 10:29:48 |
| 3 | Sb 206.836†        | 27.5      | -0.3      | -0.2387 µg/L | -0.2387 ppb | 10:29:48 |
| 3 | Se 196.026†        | 28.2      | 0.7       | 0.5713 µg/L  | 0.5713 ppb  | 10:29:48 |
| 3 | SiO2†              | 2839.3    | -84.1     | -15.890 µg/L | -15.890 ppb | 10:29:27 |
| 3 | Si 251.611†        | 468.5     | 34.6      | 2.4621 µg/L  | 2.4621 ppb  | 10:29:48 |
| 3 | Sn 189.927†        | -4.5      | -2.6      | -1.0788 µg/L | -1.0788 ppb | 10:29:48 |
| 3 | Ti 334.940†        | -715.4    | 11.0      | 0.0239 µg/L  | 0.0239 ppb  | 10:29:27 |
| 3 | Tl 190.801†        | -38.6     | -0.6      | -0.6425 µg/L | -0.6425 ppb | 10:29:48 |
| 3 | U 409.014†         | 2.8       | 60.5      | 5.7800 µg/L  | 5.7800 ppb  | 10:29:27 |
| 3 | V 292.402†         | 125.4     | 3.1       | 0.0519 µg/L  | 0.0519 ppb  | 10:29:27 |
| 3 | Zn 213.857†        | 660.9     | 11.0      | 0.2668 µg/L  | 0.2668 ppb  | 10:29:48 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1864751.9                | 102.39 %           | 0.288    |                    |          | 0.28%   |
| Sc RADIAL   | 86885.2                  | 101 %              | 0.5      |                    |          | 0.49%   |
| Y 371.029   | 1288155.2                | 102.30 %           | 0.329    |                    |          | 0.32%   |
| Ag 328.068†   | 14.6                     | 0.1233 µg/L        | 0.19266  | 0.1233 ppb         | 0.19266  | 156.25% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 11.4                     | 5.9061 µg/L        | 15.82517 | 5.9061 ppb         | 15.82517 | 267.95% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 0.3                      | 0.4945 µg/L        | 2.64621  | 0.4945 ppb         | 2.64621  | 535.12% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 4.4                      | 0.2176 µg/L        | 0.34069  | 0.2176 ppb         | 0.34069  | 156.60% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -5.3                     | -0.1247 µg/L       | 0.05169  | -0.1247 ppb        | 0.05169  | 41.45%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 14.9                     | 0.0093 µg/L        | 0.03352  | 0.0093 ppb         | 0.03352  | 360.07% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 27.7                     | 10.255 µg/L        | 1.5178   | 10.255 ppb         | 1.5178   | 14.80%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -8.0                     | -0.2040 µg/L       | 0.14318  | -0.2040 ppb        | 0.14318  | 70.17%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 0.7                      | 0.0338 µg/L        | 0.13274  | 0.0338 ppb         | 0.13274  | 392.58% |



|                    |  |                           |          |             |                  |
|--------------------|--|---------------------------|----------|-------------|------------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |                  |
|                    | 14.1   | 0.3268 µg/L               | 0.28019  | 0.3268 ppb  | 0.28019 85.74%   |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |                  |
|                    | -174.6                                       | -1.2269 µg/L              | 0.24846  | -1.2269 ppb | 0.24846 20.25%   |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |                  |
|                    | -0.5   | -5.5654 µg/L              | 12.25624 | -5.5654 ppb | 12.25624 220.22% |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |                  |
|                    | -39.3  | -19.900 µg/L              | 12.6302  | -19.900 ppb | 12.6302 63.47%   |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |                  |
|                    | 3.0  | 37.592 µg/L               | 20.9898  | 37.592 ppb  | 20.9898 55.84%   |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |                  |
|                    | -29.4  | -0.0995 µg/L              | 0.05958  | -0.0995 ppb | 0.05958 59.89%   |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |                  |
|                    | 6.7  | 0.7053 µg/L               | 0.46283  | 0.7053 ppb  | 0.46283 65.62%   |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |                  |
|                    | -3.5   | -1.6800 µg/L              | 12.00299 | -1.6800 ppb | 12.00299 714.48% |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |                  |
|                    | -2.8   | -0.1641 µg/L              | 0.09353  | -0.1641 ppb | 0.09353 57.00%   |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |                  |
|                    | -6.5   | -10.914 µg/L              | 6.2692   | -10.914 ppb | 6.2692 57.44%    |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |                  |
|                    | 3.5  | 0.9888 µg/L               | 1.80932  | 0.9888 ppb  | 1.80932 182.98%  |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |                  |
|                    | 3.8  | 12.480 µg/L               | 18.1295  | 12.480 ppb  | 18.1295 145.27%  |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |                  |
|                    | 0.2  | 0.2121 µg/L               | 1.70296  | 0.2121 ppb  | 1.70296 803.05%  |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |                  |
|                    | -2.4   | -2.4054 µg/L              | 2.61610  | -2.4054 ppb | 2.61610 108.76%  |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |                  |
|                    | -93.5  | -17.673 µg/L              | 2.2271   | -17.673 ppb | 2.2271 12.60%    |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |                  |
|                    | 31.8   | 2.2655 µg/L               | 0.96180  | 2.2655 ppb  | 0.96180 42.45%   |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |                  |
|                    | -4.0   | -1.6689 µg/L              | 0.58308  | -1.6689 ppb | 0.58308 34.94%   |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |                  |
|                    | 36.2   | 0.2201 µg/L               | 0.12109  | 0.2201 ppb  | 0.12109 55.02%   |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |                  |
|                    | 42.1   | 0.1033 µg/L               | 0.06995  | 0.1033 ppb  | 0.06995 67.72%   |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |                  |
|                    | 0.8  | 0.8905 µg/L               | 1.46956  | 0.8905 ppb  | 1.46956 165.03%  |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |                  |
|                    | 96.0   | 9.1582 µg/L               | 3.15113  | 9.1582 ppb  | 3.15113 34.41%   |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |                  |
|                    | -22.3  | -0.2660 µg/L              | 0.50291  | -0.2660 ppb | 0.50291 189.07%  |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |                  |
|                    | -15.7  | -0.3799 µg/L              | 0.56292  | -0.3799 ppb | 0.56292 148.16%  |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |          |             |                  |

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 10:55:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86792.9       | 86792.9             | 101 %              |                    | 10:55:50      |
| 1     | Al 396.153Radial†  | 9462.7        | 9612.3              | 4993.8 µg/L        | 4993.8 ppb         | 10:55:50      |
| 1     | Ca 317.933Radial†  | 14449.7       | 13960.3             | 5169.9 µg/L        | 5169.9 ppb         | 10:55:50      |
| 1     | Fe 238.204 Radial† | 467.0         | 446.8               | 5096.7 µg/L        | 5096.7 ppb         | 10:56:10      |
| 1     | K 766.490 Radial†  | 10316.6       | 9825.7              | 4973.6 µg/L        | 4973.6 ppb         | 10:55:50      |
| 1     | Mg 279.077 IEC†    | 419.3         | 408.5               | 5183.5 µg/L        | 5183.5 ppb         | 10:56:10      |
| 1     | Na 589.592 Radial† | 21333.6       | 20878.8             | 9955.9 µg/L        | 9955.9 ppb         | 10:55:50      |
| 1     | Sr 421.552†        | 81869.5       | 80820.9             | 491.85 µg/L        | 491.85 ppb         | 10:55:50      |
| 1     | Sc 361.383         | 1796765.9     | 1796765.9           | 98.662 %           |                    | 10:57:14      |
| 1     | Y 371.029          | 1236475.8     | 1236475.8           | 98.200 %           |                    | 10:57:14      |
| 1     | Ag 328.068†        | 57820.6       | 59142.4             | 512.19 µg/L        | 512.19 ppb         | 10:57:20      |
| 1     | As 188.979†        | 354.0         | 361.4               | 553.19 µg/L        | 553.19 ppb         | 10:57:40      |
| 1     | B 249.677†         | 10680.0       | 10515.8             | 512.68 µg/L        | 512.68 ppb         | 10:57:20      |
| 1     | Ba 233.527†        | 22284.6       | 22606.2             | 530.06 µg/L        | 530.06 ppb         | 10:57:20      |
| 1     | Be 313.107†        | 830562.3      | 843364.3            | 530.42 µg/L        | 530.42 ppb         | 10:57:14      |
| 1     | Cd 226.502†        | 20691.5       | 21138.4             | 537.47 µg/L        | 537.47 ppb         | 10:57:20      |
| 1     | Co 228.616†        | 11579.1       | 11711.4             | 535.35 µg/L        | 535.35 ppb         | 10:57:20      |
| 1     | Cr 267.716†        | 22928.2       | 23179.2             | 536.49 µg/L        | 536.49 ppb         | 10:57:20      |
| 1     | Cu 324.752†        | 76470.4       | 73239.0             | 515.16 µg/L        | 515.16 ppb         | 10:57:20      |
| 1     | Mn 257.610†        | 160057.2      | 162977.0            | 535.04 µg/L        | 535.04 ppb         | 10:57:14      |
| 1     | Mo 202.031†        | 5220.9        | 5281.9              | 554.59 µg/L        | 554.59 ppb         | 10:57:40      |
| 1     | Ni 231.604†        | 9320.0        | 9092.7              | 537.69 µg/L        | 537.69 ppb         | 10:57:20      |
| 1     | P 214.914†         | 1901.4        | 1640.2              | 2748.6 µg/L        | 2748.6 ppb         | 10:57:40      |
| 1     | Pb 220.353†        | 1989.7        | 1973.3              | 554.10 µg/L        | 554.10 ppb         | 10:57:40      |
| 1     | S 181.975 Axial†   | 342.7         | 325.4               | 1073.9 µg/L        | 1073.9 ppb         | 10:57:40      |
| 1     | Sb 206.836†        | 590.8         | 571.8               | 540.11 µg/L        | 540.11 ppb         | 10:57:40      |
| 1     | Se 196.026†        | 564.9         | 545.8               | 552.30 µg/L        | 552.30 ppb         | 10:57:40      |
| 1     | SiO2†              | 31693.9       | 29275.8             | 5532.9 µg/L        | 5532.9 ppb         | 10:57:20      |
| 1     | Si 251.611†        | 36351.7       | 36423.3             | 2592.0 µg/L        | 2592.0 ppb         | 10:57:20      |
| 1     | Sn 189.927†        | 1312.5        | 1332.1              | 561.73 µg/L        | 561.73 ppb         | 10:57:40      |
| 1     | Ti 334.940†        | 203803.8      | 207275.8            | 521.52 µg/L        | 521.52 ppb         | 10:57:14      |
| 1     | Tl 190.801†        | 472.6         | 516.0               | 545.64 µg/L        | 545.64 ppb         | 10:57:40      |
| 1     | U 409.014†         | 5278.3        | 5407.8              | 515.09 µg/L        | 515.09 ppb         | 10:57:20      |
| 1     | V 292.402†         | 41007.5       | 41444.8             | 530.34 µg/L        | 530.34 ppb         | 10:57:20      |
| 1     | Zn 213.857†        | 22240.7       | 21910.0             | 527.19 µg/L        | 527.19 ppb         | 10:57:20      |
| 2     | Sc RADIAL          | 85649.2       | 85649.2             | 99.8 %             |                    | 10:56:16      |
| 2     | Al 396.153Radial†  | 9397.1        | 9671.5              | 5024.9 µg/L        | 5024.9 ppb         | 10:56:16      |
| 2     | Ca 317.933Radial†  | 14344.6       | 14045.8             | 5201.5 µg/L        | 5201.5 ppb         | 10:56:16      |
| 2     | Fe 238.204 Radial† | 466.4         | 452.3               | 5159.8 µg/L        | 5159.8 ppb         | 10:56:36      |
| 2     | K 766.490 Radial†  | 10190.1       | 9835.1              | 4978.4 µg/L        | 4978.4 ppb         | 10:56:16      |
| 2     | Mg 279.077 IEC†    | 424.4         | 419.2               | 5318.8 µg/L        | 5318.8 ppb         | 10:56:36      |
| 2     | Na 589.592 Radial† | 21257.7       | 21084.4             | 10054 µg/L         | 10054 ppb          | 10:56:16      |
| 2     | Sr 421.552†        | 81443.5       | 81474.9             | 495.83 µg/L        | 495.83 ppb         | 10:56:16      |
| 2     | Sc 361.383         | 1800078.2     | 1800078.2           | 98.844 %           |                    | 10:57:47      |
| 2     | Y 371.029          | 1239891.8     | 1239891.8           | 98.471 %           |                    | 10:57:47      |
| 2     | Ag 328.068†        | 57764.1       | 58977.4             | 510.77 µg/L        | 510.77 ppb         | 10:57:53      |
| 2     | As 188.979†        | 343.6         | 350.2               | 536.09 µg/L        | 536.09 ppb         | 10:58:13      |
| 2     | B 249.677†         | 10657.0       | 10472.6             | 510.53 µg/L        | 510.53 ppb         | 10:57:53      |
| 2     | Ba 233.527†        | 22308.1       | 22588.4             | 529.64 µg/L        | 529.64 ppb         | 10:57:53      |
| 2     | Be 313.107†        | 832826.8      | 844106.2            | 530.89 µg/L        | 530.89 ppb         | 10:57:47      |
| 2     | Cd 226.502†        | 20655.9       | 21063.7             | 535.56 µg/L        | 535.56 ppb         | 10:57:53      |
| 2     | Co 228.616†        | 11612.2       | 11723.2             | 535.88 µg/L        | 535.88 ppb         | 10:57:53      |
| 2     | Cr 267.716†        | 22918.1       | 23126.2             | 535.27 µg/L        | 535.27 ppb         | 10:57:53      |
| 2     | Cu 324.752†        | 76505.8       | 73132.3             | 514.42 µg/L        | 514.42 ppb         | 10:57:53      |
| 2     | Mn 257.610†        | 160045.8      | 162666.9            | 534.02 µg/L        | 534.02 ppb         | 10:57:47      |
| 2     | Mo 202.031†        | 5109.7        | 5159.6              | 541.76 µg/L        | 541.76 ppb         | 10:58:13      |
| 2     | Ni 231.604†        | 9338.4        | 9093.9              | 537.76 µg/L        | 537.76 ppb         | 10:57:53      |
| 2     | P 214.914†         | 1870.3        | 1605.2              | 2688.8 µg/L        | 2688.8 ppb         | 10:58:13      |
| 2     | Pb 220.353†        | 1966.4        | 1946.0              | 546.41 µg/L        | 546.41 ppb         | 10:58:13      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 337.1     | 319.1     | 1053.1 µg/L | 1053.1 ppb | 10:58:13 |
| 2 | Sb 206.836†        | 573.6     | 553.3     | 522.52 µg/L | 522.52 ppb | 10:58:13 |
| 2 | Se 196.026†        | 561.9     | 541.8     | 548.39 µg/L | 548.39 ppb | 10:58:13 |
| 2 | SiO2†              | 31818.1   | 29342.3   | 5545.5 µg/L | 5545.5 ppb | 10:57:53 |
| 2 | Si 251.611†        | 36521.3   | 36527.1   | 2599.3 µg/L | 2599.3 ppb | 10:57:53 |
| 2 | Sn 189.927†        | 1286.1    | 1302.9    | 549.44 µg/L | 549.44 ppb | 10:58:13 |
| 2 | Ti 334.940†        | 204356.2  | 207454.5  | 521.96 µg/L | 521.96 ppb | 10:57:47 |
| 2 | Tl 190.801†        | 467.7     | 510.2     | 539.52 µg/L | 539.52 ppb | 10:58:13 |
| 2 | U 409.014†         | 5317.8    | 5437.8    | 517.94 µg/L | 517.94 ppb | 10:57:53 |
| 2 | V 292.402†         | 40993.7   | 41354.3   | 529.08 µg/L | 529.08 ppb | 10:57:53 |
| 2 | Zn 213.857†        | 22273.1   | 21901.3   | 526.96 µg/L | 526.96 ppb | 10:57:53 |
| 3 | Sc RADIAL          | 86119.8   | 86119.8   | 100 %       |            | 10:56:42 |
| 3 | Al 396.153Radial†  | 9459.1    | 9681.9    | 5032.5 µg/L | 5032.5 ppb | 10:56:42 |
| 3 | Ca 317.933Radial†  | 14388.5   | 14011.0   | 5188.6 µg/L | 5188.6 ppb | 10:56:42 |
| 3 | Fe 238.204 Radial† | 465.8     | 449.1     | 5122.4 µg/L | 5122.4 ppb | 10:57:02 |
| 3 | K 766.490 Radial†  | 10276.8   | 9865.8    | 4993.9 µg/L | 4993.9 ppb | 10:56:42 |
| 3 | Mg 279.077 IEC†    | 417.8     | 410.3     | 5203.8 µg/L | 5203.8 ppb | 10:57:02 |
| 3 | Na 589.592 Radial† | 21314.5   | 21024.7   | 10025 µg/L  | 10025 ppb  | 10:56:42 |
| 3 | Sr 421.552†        | 81772.6   | 81357.0   | 495.12 µg/L | 495.12 ppb | 10:56:42 |
| 3 | Sc 361.383         | 1793992.8 | 1793992.8 | 98.509 %    |            | 10:58:20 |
| 3 | Y 371.029          | 1236718.6 | 1236718.6 | 98.219 %    |            | 10:58:20 |
| 3 | Ag 328.068†        | 53990.7   | 55345.1   | 479.13 µg/L | 479.13 ppb | 10:58:26 |
| 3 | As 188.979†        | 287.0     | 293.9     | 449.75 µg/L | 449.75 ppb | 10:58:47 |
| 3 | B 249.677†         | 9868.8    | 9709.1    | 473.07 µg/L | 473.07 ppb | 10:58:26 |
| 3 | Ba 233.527†        | 19969.6   | 20291.1   | 475.76 µg/L | 475.76 ppb | 10:58:26 |
| 3 | Be 313.107†        | 756333.1  | 769313.1  | 483.85 µg/L | 483.85 ppb | 10:58:20 |
| 3 | Cd 226.502†        | 18462.7   | 18908.2   | 480.69 µg/L | 480.69 ppb | 10:58:26 |
| 3 | Co 228.616†        | 10225.1   | 10355.0   | 473.28 µg/L | 473.28 ppb | 10:58:26 |
| 3 | Cr 267.716†        | 19574.3   | 19810.5   | 458.53 µg/L | 458.53 ppb | 10:58:26 |
| 3 | Cu 324.752†        | 68077.7   | 64839.2   | 456.19 µg/L | 456.19 ppb | 10:58:26 |
| 3 | Mn 257.610†        | 145924.7  | 148881.4  | 488.77 µg/L | 488.77 ppb | 10:58:20 |
| 3 | Mo 202.031†        | 4109.3    | 4161.7    | 437.01 µg/L | 437.01 ppb | 10:58:47 |
| 3 | Ni 231.604†        | 8253.0    | 8024.1    | 474.51 µg/L | 474.51 ppb | 10:58:26 |
| 3 | P 214.914†         | 1582.6    | 1319.5    | 2206.1 µg/L | 2206.1 ppb | 10:58:47 |
| 3 | Pb 220.353†        | 1657.2    | 1638.9    | 460.14 µg/L | 460.14 ppb | 10:58:47 |
| 3 | S 181.975 Axial†   | 294.1     | 276.6     | 912.85 µg/L | 912.85 ppb | 10:58:47 |
| 3 | Sb 206.836†        | 483.5     | 463.8     | 437.61 µg/L | 437.61 ppb | 10:58:47 |
| 3 | Se 196.026†        | 476.0     | 456.5     | 463.91 µg/L | 463.91 ppb | 10:58:47 |
| 3 | SiO2†              | 29266.9   | 26861.8   | 5076.7 µg/L | 5076.7 ppb | 10:58:26 |
| 3 | Si 251.611†        | 33281.3   | 33363.4   | 2374.2 µg/L | 2374.2 ppb | 10:58:26 |
| 3 | Sn 189.927†        | 1034.2    | 1051.7    | 443.58 µg/L | 443.58 ppb | 10:58:47 |
| 3 | Ti 334.940†        | 184106.5  | 187599.7  | 471.99 µg/L | 471.99 ppb | 10:58:20 |
| 3 | Tl 190.801†        | 404.7     | 447.8     | 473.71 µg/L | 473.71 ppb | 10:58:47 |
| 3 | U 409.014†         | 4585.4    | 4712.7    | 448.74 µg/L | 448.74 ppb | 10:58:26 |
| 3 | V 292.402†         | 36005.6   | 36431.4   | 465.64 µg/L | 465.64 ppb | 10:58:26 |
| 3 | Zn 213.857†        | 19797.7   | 19464.9   | 468.31 µg/L | 468.31 ppb | 10:58:26 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1796945.6                | 98.672 %           | 0.1673   |                    |          | 0.17%  |
| Sc RADIAL  | 86187.3                  | 100 %              | 0.7      |                    |          | 0.67%  |
| Y 371.029  | 1237695.4                | 98.296 %           | 0.1514   |                    |          | 0.15%  |
| Ag 328.068†  | 57821.6                  | 500.70 µg/L        | 18.688   | 500.70 ppb         | 18.688   | 3.73%  |
| QC value within limits for Ag 328.068 Recovery = 100.14%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9655.2                   | 5017.1 µg/L        | 20.47    | 5017.1 ppb         | 20.47    | 0.41%  |
| QC value within limits for Al 396.153Radial Recovery = 100.34% |                          |                    |          |                    |          |        |
| As 188.979†  | 335.2                    | 513.01 µg/L        | 55.446   | 513.01 ppb         | 55.446   | 10.81% |
| QC value within limits for As 188.979 Recovery = 102.60%       |                          |                    |          |                    |          |        |
| B 249.677†   | 10232.5                  | 498.76 µg/L        | 22.273   | 498.76 ppb         | 22.273   | 4.47%  |
| QC value within limits for B 249.677 Recovery = 99.75%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21828.5                  | 511.82 µg/L        | 31.231   | 511.82 ppb         | 31.231   | 6.10%  |
| QC value within limits for Ba 233.527 Recovery = 102.36%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 818927.9                 | 515.06 µg/L        | 27.024   | 515.06 ppb         | 27.024   | 5.25%  |
| QC value within limits for Be 313.107 Recovery = 103.01%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 14005.7                  | 5186.7 µg/L        | 15.92    | 5186.7 ppb         | 15.92    | 0.31%  |
| QC value within limits for Ca 317.933Radial Recovery = 103.73% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 20370.1                  | 517.91 µg/L        | 32.242   | 517.91 ppb         | 32.242   | 6.23%  |
| QC value within limits for Cd 226.502 Recovery = 103.58%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11263.2                  | 514.84 µg/L        | 35.991   | 514.84 ppb         | 35.991   | 6.99%  |

|       |                 |          |             |        |            |        |        |
|-------|-----------------|----------|-------------|--------|------------|--------|--------|
| Cr    | 267.716†        | 22038.6  | 510.10 µg/L | 44.662 | 510.10 ppb | 44.662 | 8.76%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Cu    | 324.752†        | 70403.5  | 495.25 µg/L | 33.835 | 495.25 ppb | 33.835 | 6.83%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Fe    | 238.204 Radial† | 449.4    | 5126.3 µg/L | 31.74  | 5126.3 ppb | 31.74  | 0.62%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| K     | 766.490 Radial† | 9842.2   | 4981.9 µg/L | 10.62  | 4981.9 ppb | 10.62  | 0.21%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Mg    | 279.077 IEC†    | 412.7    | 5235.3 µg/L | 72.96  | 5235.3 ppb | 72.96  | 1.39%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Mn    | 257.610†        | 158175.1 | 519.28 µg/L | 26.429 | 519.28 ppb | 26.429 | 5.09%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Mo    | 202.031†        | 4867.7   | 511.12 µg/L | 64.502 | 511.12 ppb | 64.502 | 12.62% |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Na    | 589.592 Radial† | 20996.0  | 10012 µg/L  | 50.4   | 10012 ppb  | 50.4   | 0.50%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Ni    | 231.604†        | 8736.9   | 516.65 µg/L | 36.499 | 516.65 ppb | 36.499 | 7.06%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| P     | 214.914†        | 1521.6   | 2547.8 µg/L | 297.42 | 2547.8 ppb | 297.42 | 11.67% |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Pb    | 220.353†        | 1852.8   | 520.22 µg/L | 52.171 | 520.22 ppb | 52.171 | 10.03% |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| S     | 181.975 Axial†  | 307.0    | 1013.3 µg/L | 87.60  | 1013.3 ppb | 87.60  | 8.64%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Sb    | 206.836†        | 529.7    | 500.08 µg/L | 54.813 | 500.08 ppb | 54.813 | 10.96% |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Se    | 196.026†        | 514.7    | 521.53 µg/L | 49.938 | 521.53 ppb | 49.938 | 9.58%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| SiO2† |                 | 28493.3  | 5385.0 µg/L | 267.11 | 5385.0 ppb | 267.11 | 4.96%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Si    | 251.611†        | 35438.0  | 2521.8 µg/L | 127.90 | 2521.8 ppb | 127.90 | 5.07%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Sn    | 189.927†        | 1228.9   | 518.25 µg/L | 64.959 | 518.25 ppb | 64.959 | 12.53% |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Sr    | 421.552†        | 81217.6  | 494.27 µg/L | 2.121  | 494.27 ppb | 2.121  | 0.43%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Ti    | 334.940†        | 200776.7 | 505.16 µg/L | 28.729 | 505.16 ppb | 28.729 | 5.69%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Tl    | 190.801†        | 491.3    | 519.62 µg/L | 39.883 | 519.62 ppb | 39.883 | 7.68%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| U     | 409.014†        | 5186.1   | 493.92 µg/L | 39.157 | 493.92 ppb | 39.157 | 7.93%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| V     | 292.402†        | 39743.5  | 508.35 µg/L | 36.992 | 508.35 ppb | 36.992 | 7.28%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |
| Zn    | 213.857†        | 21092.1  | 507.49 µg/L | 33.930 | 507.49 ppb | 33.930 | 6.69%  |
|       |                 |          |             |        |            |        |        |
|       |                 |          |             |        |            |        |        |

QC value within limits for Co 228.616 Recovery = 102.97%  
 QC value within limits for Cr 267.716 Recovery = 102.02%  
 QC value within limits for Cu 324.752 Recovery = 99.05%  
 QC value within limits for Fe 238.204 Radial Recovery = 102.53%  
 QC value within limits for K 766.490 Radial Recovery = 99.64%  
 QC value within limits for Mg 279.077 IEC Recovery = 104.71%  
 QC value within limits for Mn 257.610 Recovery = 103.86%  
 QC value within limits for Mo 202.031 Recovery = 102.22%  
 QC value within limits for Na 589.592 Radial Recovery = 100.12%  
 QC value within limits for Ni 231.604 Recovery = 103.33%  
 QC value within limits for P 214.914 Recovery = 101.91%  
 QC value within limits for Pb 220.353 Recovery = 104.04%  
 QC value within limits for S 181.975 Axial Recovery = 101.33%  
 QC value within limits for Sb 206.836 Recovery = 100.02%  
 QC value within limits for Se 196.026 Recovery = 104.31%  
 QC value within limits for SiO2 Recovery = 100.70%  
 QC value within limits for Si 251.611 Recovery = 100.87%  
 QC value within limits for Sn 189.927 Recovery = 103.65%  
 QC value within limits for Sr 421.552 Recovery = 98.85%  
 QC value within limits for Ti 334.940 Recovery = 101.03%  
 QC value within limits for Tl 190.801 Recovery = 103.92%  
 QC value within limits for U 409.014 Recovery = 98.78%  
 QC value within limits for V 292.402 Recovery = 101.67%  
 QC value within limits for Zn 213.857 Recovery = 101.50%

All analyte(s) passed QC.

Sequence No.: 17

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 10:58:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Rep1# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84798.9          | 84798.9                | 98.8 %                |                       | 10:59:29         |
| 1     | Al 396.153Radial†  | -261.6           | -7.6                   | -3.9400 µg/L          | -3.9400 ppb           | 10:59:29         |
| 1     | Ca 317.933Radial†  | 341.1            | 20.0                   | 7.4113 µg/L           | 7.4113 ppb            | 10:59:50         |
| 1     | Fe 238.204 Radial† | 16.4             | 1.7                    | 19.084 µg/L           | 19.084 ppb            | 10:59:50         |
| 1     | K 766.490 Radial†  | 391.8            | 22.8                   | 11.521 µg/L           | 11.521 ppb            | 10:59:29         |
| 1     | Mg 279.077 IEC†    | 11.2             | 5.4                    | 68.246 µg/L           | 68.246 ppb            | 10:59:50         |
| 1     | Na 589.592 Radial† | 233.8            | 24.2                   | 11.521 µg/L           | 11.521 ppb            | 10:59:29         |
| 1     | Sr 421.552†        | 179.2            | 62.8                   | 0.3824 µg/L           | 0.3824 ppb            | 10:59:29         |
| 1     | Sc 361.383         | 1793297.1        | 1793297.1              | 98.471 %              |                       | 11:00:52         |
| 1     | Y 371.029          | 1236222.4        | 1236222.4              | 98.180 %              |                       | 11:00:52         |
| 1     | Ag 328.068†        | -506.2           | 23.4                   | 0.2051 µg/L           | 0.2051 ppb            | 11:00:57         |
| 1     | As 188.979†        | -5.1             | -2.6                   | -3.9852 µg/L          | -3.9852 ppb           | 11:01:18         |
| 1     | B 249.677†         | 292.5            | -12.0                  | -0.5999 µg/L          | -0.5999 ppb           | 11:00:57         |
| 1     | Ba 233.527†        | -18.7            | 0.3                    | 0.0072 µg/L           | 0.0072 ppb            | 11:01:18         |
| 1     | Be 313.107†        | -1566.4          | -55.2                  | -0.0347 µg/L          | -0.0347 ppb           | 11:00:57         |
| 1     | Cd 226.502†        | -148.5           | 15.3                   | 0.3888 µg/L           | 0.3888 ppb            | 11:01:18         |
| 1     | Co 228.616†        | 16.7             | -7.9                   | -0.3600 µg/L          | -0.3600 ppb           | 11:01:18         |
| 1     | Cr 267.716†        | 28.9             | -30.7                  | -0.7094 µg/L          | -0.7094 ppb           | 11:00:57         |
| 1     | Cu 324.752†        | 4143.4           | -61.0                  | -0.4246 µg/L          | -0.4246 ppb           | 11:00:57         |
| 1     | Mn 257.610†        | -813.3           | -77.2                  | -0.2570 µg/L          | -0.2570 ppb           | 11:00:57         |
| 1     | Mo 202.031†        | 13.0             | 3.4                    | 0.3542 µg/L           | 0.3542 ppb            | 11:01:18         |
| 1     | Ni 231.604†        | 365.3            | 17.2                   | 1.0199 µg/L           | 1.0199 ppb            | 11:01:18         |
| 1     | P 214.914†         | 285.2            | 2.6                    | 4.5523 µg/L           | 4.5523 ppb            | 11:01:18         |
| 1     | Pb 220.353†        | 52.8             | 10.2                   | 2.8681 µg/L           | 2.8681 ppb            | 11:01:18         |
| 1     | S 181.975 Axial†   | 28.5             | 6.9                    | 22.852 µg/L           | 22.852 ppb            | 11:01:18         |
| 1     | Sb 206.836†        | 26.1             | -0.5                   | -0.5015 µg/L          | -0.5015 ppb           | 11:01:18         |
| 1     | Se 196.026†        | 21.9             | -4.4                   | -4.3948 µg/L          | -4.3948 ppb           | 11:01:18         |
| 1     | SiO2†              | 2794.6           | -10.0                  | -1.8927 µg/L          | -1.8927 ppb           | 11:00:57         |
| 1     | Si 251.611†        | 435.6            | 20.9                   | 1.4861 µg/L           | 1.4861 ppb            | 11:01:18         |
| 1     | Sn 189.927†        | 1.3              | 3.1                    | 1.3216 µg/L           | 1.3216 ppb            | 11:01:18         |
| 1     | Ti 334.940†        | -687.6           | 9.2                    | 0.0179 µg/L           | 0.0179 ppb            | 11:00:57         |
| 1     | Tl 190.801†        | -40.4            | -4.0                   | -4.1958 µg/L          | -4.1958 ppb           | 11:01:18         |
| 1     | U 409.014†         | -20.2            | 37.4                   | 3.5654 µg/L           | 3.5654 ppb            | 11:00:57         |
| 1     | V 292.402†         | 147.7            | 31.0                   | 0.3949 µg/L           | 0.3949 ppb            | 11:00:57         |
| 1     | Zn 213.857†        | 603.8            | -19.2                  | -0.4750 µg/L          | -0.4750 ppb           | 11:01:18         |
| 2     | Sc RADIAL          | 84179.6          | 84179.6                | 98.1 %                |                       | 10:59:55         |
| 2     | Al 396.153Radial†  | -293.2           | -41.7                  | -21.755 µg/L          | -21.755 ppb           | 10:59:55         |
| 2     | Ca 317.933Radial†  | 349.9            | 31.5                   | 11.679 µg/L           | 11.679 ppb            | 11:00:15         |
| 2     | Fe 238.204 Radial† | 15.0             | 0.3                    | 3.6142 µg/L           | 3.6142 ppb            | 11:00:15         |
| 2     | K 766.490 Radial†  | 398.6            | 32.6                   | 16.503 µg/L           | 16.503 ppb            | 10:59:55         |
| 2     | Mg 279.077 IEC†    | 9.9              | 4.2                    | 52.790 µg/L           | 52.790 ppb            | 11:00:15         |
| 2     | Na 589.592 Radial† | 211.1            | 2.8                    | 1.3172 µg/L           | 1.3172 ppb            | 10:59:55         |
| 2     | Sr 421.552†        | 153.7            | 38.2                   | 0.2324 µg/L           | 0.2324 ppb            | 10:59:55         |
| 2     | Sc 361.383         | 1793701.8        | 1793701.8              | 98.493 %              |                       | 11:01:24         |
| 2     | Y 371.029          | 1238691.7        | 1238691.7              | 98.376 %              |                       | 11:01:24         |
| 2     | Ag 328.068†        | -663.3           | -135.9                 | -1.1708 µg/L          | -1.1708 ppb           | 11:01:29         |
| 2     | As 188.979†        | -4.7             | -2.2                   | -3.4110 µg/L          | -3.4110 ppb           | 11:01:50         |
| 2     | B 249.677†         | 349.9            | 46.2                   | 2.2579 µg/L           | 2.2579 ppb            | 11:01:29         |
| 2     | Ba 233.527†        | -24.1            | -5.2                   | -0.1231 µg/L          | -0.1231 ppb           | 11:01:50         |
| 2     | Be 313.107†        | -1601.1          | -90.0                  | -0.0566 µg/L          | -0.0566 ppb           | 11:01:29         |
| 2     | Cd 226.502†        | -172.9           | -9.4                   | -0.2384 µg/L          | -0.2384 ppb           | 11:01:50         |
| 2     | Co 228.616†        | 34.0             | 9.7                    | 0.4449 µg/L           | 0.4449 ppb            | 11:01:50         |
| 2     | Cr 267.716†        | 76.4             | 17.6                   | 0.4061 µg/L           | 0.4061 ppb            | 11:01:29         |
| 2     | Cu 324.752†        | 4193.8           | -10.7                  | -0.0748 µg/L          | -0.0748 ppb           | 11:01:29         |
| 2     | Mn 257.610†        | -837.3           | -101.5                 | -0.3366 µg/L          | -0.3366 ppb           | 11:01:29         |
| 2     | Mo 202.031†        | 20.5             | 11.0                   | 1.1584 µg/L           | 1.1584 ppb            | 11:01:50         |
| 2     | Ni 231.604†        | 354.1            | 5.7                    | 0.3373 µg/L           | 0.3373 ppb            | 11:01:50         |
| 2     | P 214.914†         | 290.6            | 8.1                    | 13.804 µg/L           | 13.804 ppb            | 11:01:50         |
| 2     | Pb 220.353†        | 39.7             | -3.1                   | -0.8638 µg/L          | -0.8638 ppb           | 11:01:50         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 24.8      | 3.2       | 10.590 µg/L  | 10.590 ppb  | 11:01:50 |
| 2 | Sb 206.836†        | 32.3      | 5.8       | 5.4869 µg/L  | 5.4869 ppb  | 11:01:50 |
| 2 | Se 196.026†        | 17.1      | -9.4      | -9.3313 µg/L | -9.3313 ppb | 11:01:50 |
| 2 | SiO2†              | 2826.3    | 21.5      | 4.0704 µg/L  | 4.0704 ppb  | 11:01:29 |
| 2 | Si 251.611†        | 445.3     | 30.6      | 2.1793 µg/L  | 2.1793 ppb  | 11:01:50 |
| 2 | Sn 189.927†        | 6.8       | 8.7       | 3.6592 µg/L  | 3.6592 ppb  | 11:01:50 |
| 2 | Ti 334.940†        | -737.2    | -41.1     | -0.1074 µg/L | -0.1074 ppb | 11:01:29 |
| 2 | Tl 190.801†        | -30.3     | 6.2       | 6.5346 µg/L  | 6.5346 ppb  | 11:01:50 |
| 2 | U 409.014†         | -16.6     | 41.0      | 3.9106 µg/L  | 3.9106 ppb  | 11:01:29 |
| 2 | V 292.402†         | 83.6      | -34.0     | -0.4184 µg/L | -0.4184 ppb | 11:01:29 |
| 2 | Zn 213.857†        | 599.8     | -23.5     | -0.5733 µg/L | -0.5733 ppb | 11:01:50 |
| 3 | Sc RADIAL          | 84527.8   | 84527.8   | 98.5 %       |             | 11:00:21 |
| 3 | Al 396.153Radial†  | -257.2    | -3.9      | -2.0307 µg/L | -2.0307 ppb | 11:00:21 |
| 3 | Ca 317.933Radial†  | 342.0     | 22.0      | 8.1601 µg/L  | 8.1601 ppb  | 11:00:41 |
| 3 | Fe 238.204 Radial† | 15.0      | 0.3       | 3.4822 µg/L  | 3.4822 ppb  | 11:00:41 |
| 3 | K 766.490 Radial†  | 449.5     | 82.5      | 41.780 µg/L  | 41.780 ppb  | 11:00:21 |
| 3 | Mg 279.077 IEC†    | 12.5      | 6.7       | 85.472 µg/L  | 85.472 ppb  | 11:00:41 |
| 3 | Na 589.592 Radial† | 262.6     | 54.2      | 25.856 µg/L  | 25.856 ppb  | 11:00:21 |
| 3 | Sr 421.552†        | 162.6     | 46.6      | 0.2839 µg/L  | 0.2839 ppb  | 11:00:21 |
| 3 | Sc 361.383         | 1789072.7 | 1789072.7 | 98.239 %     |             | 11:01:56 |
| 3 | Y 371.029          | 1236756.0 | 1236756.0 | 98.222 %     |             | 11:01:56 |
| 3 | Ag 328.068†        | -496.5    | 32.1      | 0.2768 µg/L  | 0.2768 ppb  | 11:02:01 |
| 3 | As 188.979†        | -3.8      | -1.3      | -1.9747 µg/L | -1.9747 ppb | 11:02:22 |
| 3 | B 249.677†         | 351.0     | 48.3      | 2.3593 µg/L  | 2.3593 ppb  | 11:02:01 |
| 3 | Ba 233.527†        | -23.2     | -4.4      | -0.1019 µg/L | -0.1019 ppb | 11:02:22 |
| 3 | Be 313.107†        | -1549.7   | -41.9     | -0.0264 µg/L | -0.0264 ppb | 11:02:01 |
| 3 | Cd 226.502†        | -173.6    | -10.5     | -0.2672 µg/L | -0.2672 ppb | 11:02:22 |
| 3 | Co 228.616†        | 36.9      | 12.8      | 0.5843 µg/L  | 0.5843 ppb  | 11:02:22 |
| 3 | Cr 267.716†        | 50.0      | -9.1      | -0.2113 µg/L | -0.2113 ppb | 11:02:01 |
| 3 | Cu 324.752†        | 4107.2    | -87.8     | -0.6161 µg/L | -0.6161 ppb | 11:02:01 |
| 3 | Mn 257.610†        | -809.8    | -75.7     | -0.2541 µg/L | -0.2541 ppb | 11:02:01 |
| 3 | Mo 202.031†        | 13.4      | 3.8       | 0.4030 µg/L  | 0.4030 ppb  | 11:02:22 |
| 3 | Ni 231.604†        | 366.8     | 19.6      | 1.1573 µg/L  | 1.1573 ppb  | 11:02:22 |
| 3 | P 214.914†         | 291.3     | 9.5       | 16.264 µg/L  | 16.264 ppb  | 11:02:22 |
| 3 | Pb 220.353†        | 48.5      | 6.0       | 1.6862 µg/L  | 1.6862 ppb  | 11:02:22 |
| 3 | S 181.975 Axial†   | 18.1      | -3.5      | -11.667 µg/L | -11.667 ppb | 11:02:22 |
| 3 | Sb 206.836†        | 26.7      | 0.2       | 0.1513 µg/L  | 0.1513 ppb  | 11:02:22 |
| 3 | Se 196.026†        | 24.5      | -1.8      | -1.8745 µg/L | -1.8745 ppb | 11:02:22 |
| 3 | SiO2†              | 2782.4    | -15.7     | -2.9740 µg/L | -2.9740 ppb | 11:02:01 |
| 3 | Si 251.611†        | 464.7     | 51.6      | 3.6684 µg/L  | 3.6684 ppb  | 11:02:22 |
| 3 | Sn 189.927†        | 0.0       | 1.8       | 0.7590 µg/L  | 0.7590 ppb  | 11:02:22 |
| 3 | Ti 334.940†        | -700.6    | -5.8      | -0.0212 µg/L | -0.0212 ppb | 11:02:01 |
| 3 | Tl 190.801†        | -36.4     | -0.1      | -0.0821 µg/L | -0.0821 ppb | 11:02:22 |
| 3 | U 409.014†         | -13.1     | 44.6      | 4.2524 µg/L  | 4.2524 ppb  | 11:02:01 |
| 3 | V 292.402†         | 123.0     | 6.2       | 0.0848 µg/L  | 0.0848 ppb  | 11:02:01 |
| 3 | Zn 213.857†        | 665.9     | 45.4      | 1.0917 µg/L  | 1.0917 ppb  | 11:02:22 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1792023.9                | 98.401 %           | 0.1408   |                    |          | 0.14%   |
| Sc RADIAL   | 84502.1                  | 98.5 %             | 0.36     |                    |          | 0.37%   |
| Y 371.029   | 1237223.4                | 98.259 %           | 0.1032   |                    |          | 0.11%   |
| Ag 328.068†   | -26.8                    | -0.2297 µg/L       | 0.81587  | -0.2297 ppb        | 0.81587  | 355.26% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -17.7                    | -9.2420 µg/L       | 10.87883 | -9.2420 ppb        | 10.87883 | 117.71% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -2.0                     | -3.1236 µg/L       | 1.03559  | -3.1236 ppb        | 1.03559  | 33.15%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 27.5                     | 1.3391 µg/L        | 1.67995  | 1.3391 ppb         | 1.67995  | 125.45% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -3.1                     | -0.0726 µg/L       | 0.06991  | -0.0726 ppb        | 0.06991  | 96.29%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -62.4                    | -0.0392 µg/L       | 0.01562  | -0.0392 ppb        | 0.01562  | 39.81%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 24.5                     | 9.0835 µg/L        | 2.27885  | 9.0835 ppb         | 2.27885  | 25.09%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -1.5                     | -0.0390 µg/L       | 0.37071  | -0.0390 ppb        | 0.37071  | 951.47% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 4.9                      | 0.2231 µg/L        | 0.50973  | 0.2231 ppb         | 0.50973  | 228.49% |

|                    |  |                           |          |             |                  |
|--------------------|--|---------------------------|----------|-------------|------------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |                  |
|                    | -7.4   | -0.1716 µg/L              | 0.55880  | -0.1716 ppb | 0.55880 325.71%  |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |                  |
|                    | -53.2  | -0.3718 µg/L              | 0.27449  | -0.3718 ppb | 0.27449 73.83%   |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |                  |
|                    | 0.8  | 8.7269 µg/L               | 8.97005  | 8.7269 ppb  | 8.97005 102.79%  |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |                  |
|                    | 46.0   | 23.268 µg/L               | 16.2238  | 23.268 ppb  | 16.2238 69.73%   |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |                  |
|                    | 5.4  | 68.836 µg/L               | 16.3490  | 68.836 ppb  | 16.3490 23.75%   |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |                  |
|                    | -84.8  | -0.2826 µg/L              | 0.04683  | -0.2826 ppb | 0.04683 16.57%   |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |                  |
|                    | 6.1  | 0.6385 µg/L               | 0.45088  | 0.6385 ppb  | 0.45088 70.61%   |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |                  |
|                    | 27.0   | 12.898 µg/L               | 12.3273  | 12.898 ppb  | 12.3273 95.57%   |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |                  |
|                    | 14.2   | 0.8382 µg/L               | 0.43915  | 0.8382 ppb  | 0.43915 52.39%   |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |                  |
|                    | 6.7  | 11.540 µg/L               | 6.1754   | 11.540 ppb  | 6.1754 53.51%    |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |                  |
|                    | 4.4  | 1.2302 µg/L               | 1.90730  | 1.2302 ppb  | 1.90730 155.04%  |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |                  |
|                    | 2.2  | 7.2584 µg/L               | 17.49944 | 7.2584 ppb  | 17.49944 241.09% |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |                  |
|                    | 1.8  | 1.7122 µg/L               | 3.28521  | 1.7122 ppb  | 3.28521 191.87%  |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |                  |
|                    | -5.2   | -5.2002 µg/L              | 3.79307  | -5.2002 ppb | 3.79307 72.94%   |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |                  |
|                    | -1.4   | -0.2655 µg/L              | 3.79370  | -0.2655 ppb | 3.79370 >999.9%  |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |                  |
|                    | 34.4   | 2.4446 µg/L               | 1.11512  | 2.4446 ppb  | 1.11512 45.62%   |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |                  |
|                    | 4.5  | 1.9133 µg/L               | 1.53797  | 1.9133 ppb  | 1.53797 80.38%   |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |                  |
|                    | 49.2   | 0.2996 µg/L               | 0.07620  | 0.2996 ppb  | 0.07620 25.44%   |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |                  |
|                    | -12.6  | -0.0369 µg/L              | 0.06411  | -0.0369 ppb | 0.06411 173.65%  |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |                  |
|                    | 0.7  | 0.7522 µg/L               | 5.41364  | 0.7522 ppb  | 5.41364 719.70%  |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |                  |
|                    | 41.0   | 3.9095 µg/L               | 0.34349  | 3.9095 ppb  | 0.34349 8.79%    |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |                  |
|                    | 1.1  | 0.0204 µg/L               | 0.41044  | 0.0204 ppb  | 0.41044 >999.9%  |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |                  |
|                    | 0.9  | 0.0145 µg/L               | 0.93423  | 0.0145 ppb  | 0.93423 >999.9%  |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |          |             |                  |

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 11:14:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86436.6       | 86436.6             | 101 %              |                    | 11:15:16      |
| 1     | Al 396.153Radial†  | 9382.1        | 9570.9              | 4972.4 µg/L        | 4972.4 ppb         | 11:15:16      |
| 1     | Ca 317.933Radial†  | 14286.3       | 13857.0             | 5131.6 µg/L        | 5131.6 ppb         | 11:15:16      |
| 1     | Fe 238.204 Radial† | 462.9         | 444.6               | 5071.4 µg/L        | 5071.4 ppb         | 11:15:37      |
| 1     | K 766.490 Radial†  | 10142.4       | 9694.8              | 4907.3 µg/L        | 4907.3 ppb         | 11:15:16      |
| 1     | Mg 279.077 IEC†    | 416.6         | 407.6               | 5171.1 µg/L        | 5171.1 ppb         | 11:15:37      |
| 1     | Na 589.592 Radial† | 21121.6       | 20755.3             | 9897.0 µg/L        | 9897.0 ppb         | 11:15:16      |
| 1     | Sr 421.552†        | 80805.0       | 80097.8             | 487.45 µg/L        | 487.45 ppb         | 11:15:16      |
| 1     | Sc 361.383         | 1790439.0     | 1790439.0           | 98.314 %           |                    | 11:16:40      |
| 1     | Y 371.029          | 1233559.0     | 1233559.0           | 97.968 %           |                    | 11:16:40      |
| 1     | Ag 328.068†        | 56522.8       | 58029.5             | 502.54 µg/L        | 502.54 ppb         | 11:16:46      |
| 1     | As 188.979†        | 340.4         | 348.8               | 533.96 µg/L        | 533.96 ppb         | 11:17:06      |
| 1     | B 249.677†         | 10382.3       | 10251.2             | 499.73 µg/L        | 499.73 ppb         | 11:16:46      |
| 1     | Ba 233.527†        | 21746.4       | 22138.5             | 519.09 µg/L        | 519.09 ppb         | 11:16:46      |
| 1     | Be 313.107†        | 805386.2      | 820731.3            | 516.19 µg/L        | 516.19 ppb         | 11:16:40      |
| 1     | Cd 226.502†        | 20067.9       | 20578.1             | 523.21 µg/L        | 523.21 ppb         | 11:16:46      |
| 1     | Co 228.616†        | 11235.0       | 11402.8             | 521.25 µg/L        | 521.25 ppb         | 11:16:46      |
| 1     | Cr 267.716†        | 22315.5       | 22638.1             | 523.97 µg/L        | 523.97 ppb         | 11:16:46      |
| 1     | Cu 324.752†        | 74448.3       | 71456.1             | 502.63 µg/L        | 502.63 ppb         | 11:16:46      |
| 1     | Mn 257.610†        | 155281.2      | 158692.4            | 520.98 µg/L        | 520.98 ppb         | 11:16:40      |
| 1     | Mo 202.031†        | 5114.4        | 5192.3              | 545.19 µg/L        | 545.19 ppb         | 11:17:06      |
| 1     | Ni 231.604†        | 9056.4        | 8858.0              | 523.81 µg/L        | 523.81 ppb         | 11:16:46      |
| 1     | P 214.914†         | 1849.0        | 1593.7              | 2670.5 µg/L        | 2670.5 ppb         | 11:17:06      |
| 1     | Pb 220.353†        | 1950.9        | 1941.0              | 545.03 µg/L        | 545.03 ppb         | 11:17:06      |
| 1     | S 181.975 Axial†   | 339.6         | 323.4               | 1067.4 µg/L        | 1067.4 ppb         | 11:17:06      |
| 1     | Sb 206.836†        | 579.4         | 562.4               | 531.19 µg/L        | 531.19 ppb         | 11:17:06      |
| 1     | Se 196.026†        | 554.6         | 537.3               | 543.81 µg/L        | 543.81 ppb         | 11:17:06      |
| 1     | SiO2†              | 30868.8       | 28550.1             | 5395.7 µg/L        | 5395.7 ppb         | 11:16:46      |
| 1     | Si 251.611†        | 35391.5       | 35576.8             | 2531.7 µg/L        | 2531.7 ppb         | 11:16:46      |
| 1     | Sn 189.927†        | 1293.6        | 1317.5              | 555.59 µg/L        | 555.59 ppb         | 11:17:06      |
| 1     | Ti 334.940†        | 197899.3      | 202000.0            | 508.24 µg/L        | 508.24 ppb         | 11:16:40      |
| 1     | Tl 190.801†        | 461.8         | 506.7               | 535.75 µg/L        | 535.75 ppb         | 11:17:06      |
| 1     | U 409.014†         | 5155.9        | 5302.1              | 505.01 µg/L        | 505.01 ppb         | 11:16:46      |
| 1     | V 292.402†         | 39924.9       | 40490.5             | 518.13 µg/L        | 518.13 ppb         | 11:16:46      |
| 1     | Zn 213.857†        | 21675.2       | 21414.5             | 515.26 µg/L        | 515.26 ppb         | 11:16:46      |
| 2     | Sc RADIAL          | 86319.9       | 86319.9             | 101 %              |                    | 11:15:42      |
| 2     | Al 396.153Radial†  | 9310.6        | 9512.4              | 4942.5 µg/L        | 4942.5 ppb         | 11:15:42      |
| 2     | Ca 317.933Radial†  | 14209.2       | 13799.6             | 5110.3 µg/L        | 5110.3 ppb         | 11:15:42      |
| 2     | Fe 238.204 Radial† | 466.5         | 448.8               | 5119.6 µg/L        | 5119.6 ppb         | 11:16:03      |
| 2     | K 766.490 Radial†  | 10202.4       | 9768.0              | 4944.4 µg/L        | 4944.4 ppb         | 11:15:42      |
| 2     | Mg 279.077 IEC†    | 415.5         | 407.1               | 5164.3 µg/L        | 5164.3 ppb         | 11:16:03      |
| 2     | Na 589.592 Radial† | 21109.3       | 20771.5             | 9904.7 µg/L        | 9904.7 ppb         | 11:15:42      |
| 2     | Sr 421.552†        | 80616.4       | 80018.7             | 486.97 µg/L        | 486.97 ppb         | 11:15:42      |
| 2     | Sc 361.383         | 1818367.8     | 1818367.8           | 99.848 %           |                    | 11:17:13      |
| 2     | Y 371.029          | 1252645.0     | 1252645.0           | 99.484 %           |                    | 11:17:13      |
| 2     | Ag 328.068†        | 57043.1       | 57667.5             | 499.41 µg/L        | 499.41 ppb         | 11:17:19      |
| 2     | As 188.979†        | 336.9         | 340.0               | 520.41 µg/L        | 520.41 ppb         | 11:17:39      |
| 2     | B 249.677†         | 10483.1       | 10190.0             | 496.70 µg/L        | 496.70 ppb         | 11:17:19      |
| 2     | Ba 233.527†        | 21972.0       | 22024.8             | 516.43 µg/L        | 516.43 ppb         | 11:17:19      |
| 2     | Be 313.107†        | 812849.5      | 815623.7            | 512.98 µg/L        | 512.98 ppb         | 11:17:13      |
| 2     | Cd 226.502†        | 20264.9       | 20462.0             | 520.25 µg/L        | 520.25 ppb         | 11:17:19      |
| 2     | Co 228.616†        | 11373.2       | 11365.8             | 519.54 µg/L        | 519.54 ppb         | 11:17:19      |
| 2     | Cr 267.716†        | 22491.2       | 22465.4             | 519.97 µg/L        | 519.97 ppb         | 11:17:19      |
| 2     | Cu 324.752†        | 75280.3       | 71126.3             | 500.33 µg/L        | 500.33 ppb         | 11:17:19      |
| 2     | Mn 257.610†        | 156270.4      | 157257.2            | 516.27 µg/L        | 516.27 ppb         | 11:17:13      |
| 2     | Mo 202.031†        | 4967.3        | 4965.0              | 521.34 µg/L        | 521.34 ppb         | 11:17:39      |
| 2     | Ni 231.604†        | 9168.0        | 8828.2              | 522.05 µg/L        | 522.05 ppb         | 11:17:19      |
| 2     | P 214.914†         | 1815.2        | 1530.9              | 2563.3 µg/L        | 2563.3 ppb         | 11:17:39      |
| 2     | Pb 220.353†        | 1905.7        | 1865.2              | 523.72 µg/L        | 523.72 ppb         | 11:17:39      |



|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 333.2     | 311.7     | 1029.0 µg/L | 1029.0 ppb | 11:17:39 |
| 2 | Sb 206.836†        | 566.2     | 540.1     | 509.89 µg/L | 509.89 ppb | 11:17:39 |
| 2 | Se 196.026†        | 550.7     | 524.8     | 531.62 µg/L | 531.62 ppb | 11:17:39 |
| 2 | SiO2†              | 31293.5   | 28493.2   | 5385.0 µg/L | 5385.0 ppb | 11:17:19 |
| 2 | Si 251.611†        | 35860.0   | 35493.2   | 2525.8 µg/L | 2525.8 ppb | 11:17:19 |
| 2 | Sn 189.927†        | 1247.1    | 1250.8    | 527.45 µg/L | 527.45 ppb | 11:17:39 |
| 2 | Ti 334.940†        | 199416.4  | 200427.7  | 504.28 µg/L | 504.28 ppb | 11:17:13 |
| 2 | Tl 190.801†        | 457.5     | 495.2     | 523.62 µg/L | 523.62 ppb | 11:17:39 |
| 2 | U 409.014†         | 5194.0    | 5259.7    | 500.96 µg/L | 500.96 ppb | 11:17:19 |
| 2 | V 292.402†         | 40235.4   | 40177.7   | 513.97 µg/L | 513.97 ppb | 11:17:19 |
| 2 | Zn 213.857†        | 21874.6   | 21275.5   | 511.90 µg/L | 511.90 ppb | 11:17:19 |
| 3 | Sc RADIAL          | 86779.6   | 86779.6   | 101 %       |            | 11:16:08 |
| 3 | Al 396.153Radial†  | 9297.6    | 9450.5    | 4912.4 µg/L | 4912.4 ppb | 11:16:08 |
| 3 | Ca 317.933Radial†  | 14256.1   | 13771.1   | 5099.8 µg/L | 5099.8 ppb | 11:16:08 |
| 3 | Fe 238.204 Radial† | 458.6     | 438.5     | 5001.3 µg/L | 5001.3 ppb | 11:16:29 |
| 3 | K 766.490 Radial†  | 10298.8   | 9809.6    | 4965.4 µg/L | 4965.4 ppb | 11:16:08 |
| 3 | Mg 279.077 IEC†    | 412.8     | 402.2     | 5100.6 µg/L | 5100.6 ppb | 11:16:29 |
| 3 | Na 589.592 Radial† | 21118.9   | 20669.7   | 9856.2 µg/L | 9856.2 ppb | 11:16:08 |
| 3 | Sr 421.552†        | 80454.5   | 79434.1   | 483.42 µg/L | 483.42 ppb | 11:16:08 |
| 3 | Sc 361.383         | 1833742.6 | 1833742.6 | 100.69 %    |            | 11:17:47 |
| 3 | Y 371.029          | 1263603.8 | 1263603.8 | 100.35 %    |            | 11:17:47 |
| 3 | Ag 328.068†        | 52553.1   | 52729.4   | 456.48 µg/L | 456.48 ppb | 11:17:52 |
| 3 | As 188.979†        | 275.6     | 276.3     | 422.67 µg/L | 422.67 ppb | 11:18:13 |
| 3 | B 249.677†         | 9562.4    | 9187.6    | 447.59 µg/L | 447.59 ppb | 11:17:52 |
| 3 | Ba 233.527†        | 19388.6   | 19274.6   | 451.93 µg/L | 451.93 ppb | 11:17:52 |
| 3 | Be 313.107†        | 734295.0  | 730783.5  | 459.62 µg/L | 459.62 ppb | 11:17:47 |
| 3 | Cd 226.502†        | 17816.8   | 17860.5   | 454.04 µg/L | 454.04 ppb | 11:17:52 |
| 3 | Co 228.616†        | 9862.2    | 9769.6    | 446.52 µg/L | 446.52 ppb | 11:17:52 |
| 3 | Cr 267.716†        | 18973.8   | 18783.4   | 434.76 µg/L | 434.76 ppb | 11:17:52 |
| 3 | Cu 324.752†        | 66233.0   | 61509.1   | 432.78 µg/L | 432.78 ppb | 11:17:52 |
| 3 | Mn 257.610†        | 141920.7  | 141693.9  | 465.17 µg/L | 465.17 ppb | 11:17:47 |
| 3 | Mo 202.031†        | 3991.3    | 3954.0    | 415.21 µg/L | 415.21 ppb | 11:18:13 |
| 3 | Ni 231.604†        | 8005.1    | 7596.3    | 449.21 µg/L | 449.21 ppb | 11:17:52 |
| 3 | P 214.914†         | 1546.2    | 1248.6    | 2087.3 µg/L | 2087.3 ppb | 11:18:13 |
| 3 | Pb 220.353†        | 1602.9    | 1548.6    | 434.78 µg/L | 434.78 ppb | 11:18:13 |
| 3 | S 181.975 Axial†   | 281.0     | 257.0     | 848.38 µg/L | 848.38 ppb | 11:18:13 |
| 3 | Sb 206.836†        | 475.6     | 445.3     | 420.09 µg/L | 420.09 ppb | 11:18:13 |
| 3 | Se 196.026†        | 471.4     | 441.4     | 448.64 µg/L | 448.64 ppb | 11:18:13 |
| 3 | SiO2†              | 28374.7   | 25331.7   | 4787.5 µg/L | 4787.5 ppb | 11:17:52 |
| 3 | Si 251.611†        | 32317.3   | 31673.7   | 2254.0 µg/L | 2254.0 ppb | 11:17:52 |
| 3 | Sn 189.927†        | 987.3     | 982.3     | 414.36 µg/L | 414.36 ppb | 11:18:13 |
| 3 | Ti 334.940†        | 178912.5  | 178390.2  | 448.81 µg/L | 448.81 ppb | 11:17:47 |
| 3 | Tl 190.801†        | 393.3     | 427.6     | 452.28 µg/L | 452.28 ppb | 11:18:13 |
| 3 | U 409.014†         | 4540.3    | 4567.0    | 434.86 µg/L | 434.86 ppb | 11:17:52 |
| 3 | V 292.402†         | 34875.4   | 34516.7   | 441.16 µg/L | 441.16 ppb | 11:17:52 |
| 3 | Zn 213.857†        | 19161.5   | 18397.4   | 442.60 µg/L | 442.60 ppb | 11:17:52 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1814183.1                | 99.618 %           | 1.2055   |                    |          | 1.21%  |
| Sc RADIAL  | 86512.1                  | 101 %              | 0.3      |                    |          | 0.28%  |
| Y 371.029  | 1249935.9                | 99.269 %           | 1.2075   |                    |          | 1.22%  |
| Ag 328.068†  | 56142.1                  | 486.14 µg/L        | 25.736   | 486.14 ppb         | 25.736   | 5.29%  |
| QC value within limits for Ag 328.068 Recovery = 97.23%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9511.2                   | 4942.5 µg/L        | 30.00    | 4942.5 ppb         | 30.00    | 0.61%  |
| QC value within limits for Al 396.153Radial Recovery = 98.85%  |                          |                    |          |                    |          |        |
| As 188.979†  | 321.7                    | 492.35 µg/L        | 60.718   | 492.35 ppb         | 60.718   | 12.33% |
| QC value within limits for As 188.979 Recovery = 98.47%        |                          |                    |          |                    |          |        |
| B 249.677†   | 9876.3                   | 481.34 µg/L        | 29.270   | 481.34 ppb         | 29.270   | 6.08%  |
| QC value within limits for B 249.677 Recovery = 96.27%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21146.0                  | 495.82 µg/L        | 38.033   | 495.82 ppb         | 38.033   | 7.67%  |
| QC value within limits for Ba 233.527 Recovery = 99.16%        |                          |                    |          |                    |          |        |
| Be 313.107†  | 789046.2                 | 496.26 µg/L        | 31.774   | 496.26 ppb         | 31.774   | 6.40%  |
| QC value within limits for Be 313.107 Recovery = 99.25%        |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13809.2                  | 5113.9 µg/L        | 16.20    | 5113.9 ppb         | 16.20    | 0.32%  |
| QC value within limits for Ca 317.933Radial Recovery = 102.28% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19633.5                  | 499.17 µg/L        | 39.109   | 499.17 ppb         | 39.109   | 7.83%  |
| QC value within limits for Cd 226.502 Recovery = 99.83%        |                          |                    |          |                    |          |        |
| Co 228.616†  | 10846.1                  | 495.77 µg/L        | 42.661   | 495.77 ppb         | 42.661   | 8.61%  |

|   |                 |          |             |         |            |         |        |
|---|-----------------|----------|-------------|---------|------------|---------|--------|
| Cr  | 267.716†        | 21295.6  | 492.90 µg/L | 50.392  | 492.90 ppb | 50.392  | 10.22% |
| QC value within limits for Co 228.616 Recovery = 99.15%         |                 |          |             |         |            |         |        |
| Cu  | 324.752†        | 68030.5  | 478.58 µg/L | 39.679  | 478.58 ppb | 39.679  | 8.29%  |
| QC value within limits for Cr 267.716 Recovery = 98.58%         |                 |          |             |         |            |         |        |
| Fe  | 238.204 Radial† | 444.0    | 5064.1 µg/L | 59.50   | 5064.1 ppb | 59.50   | 1.17%  |
| QC value within limits for Cu 324.752 Recovery = 95.72%         |                 |          |             |         |            |         |        |
| K   | 766.490 Radial† | 9757.5   | 4939.1 µg/L | 29.42   | 4939.1 ppb | 29.42   | 0.60%  |
| QC value within limits for Fe 238.204 Radial Recovery = 101.28% |                 |          |             |         |            |         |        |
| Mg  | 279.077 IEC†    | 405.6    | 5145.3 µg/L | 38.87   | 5145.3 ppb | 38.87   | 0.76%  |
| QC value within limits for K 766.490 Radial Recovery = 98.78%   |                 |          |             |         |            |         |        |
| Mn  | 257.610†        | 152547.8 | 500.80 µg/L | 30.952  | 500.80 ppb | 30.952  | 6.18%  |
| QC value within limits for Mg 279.077 IEC Recovery = 102.91%    |                 |          |             |         |            |         |        |
| Mo  | 202.031†        | 4703.8   | 493.91 µg/L | 69.189  | 493.91 ppb | 69.189  | 14.01% |
| QC value within limits for Mn 257.610 Recovery = 100.16%        |                 |          |             |         |            |         |        |
| Na  | 589.592 Radial† | 20732.2  | 9886.0 µg/L | 26.08   | 9886.0 ppb | 26.08   | 0.26%  |
| QC value within limits for Mo 202.031 Recovery = 98.78%         |                 |          |             |         |            |         |        |
| Ni  | 231.604†        | 8427.5   | 498.36 µg/L | 42.572  | 498.36 ppb | 42.572  | 8.54%  |
| QC value within limits for Na 589.592 Radial Recovery = 98.86%  |                 |          |             |         |            |         |        |
| P   | 214.914†        | 1457.7   | 2440.4 µg/L | 310.41  | 2440.4 ppb | 310.41  | 12.72% |
| QC value within limits for Ni 231.604 Recovery = 99.67%         |                 |          |             |         |            |         |        |
| Pb  | 220.353†        | 1784.9   | 501.18 µg/L | 58.478  | 501.18 ppb | 58.478  | 11.67% |
| QC value within limits for P 214.914 Recovery = 97.61%          |                 |          |             |         |            |         |        |
| S   | 181.975 Axial†  | 297.4    | 981.57 µg/L | 116.940 | 981.57 ppb | 116.940 | 11.91% |
| QC value within limits for Pb 220.353 Recovery = 100.24%        |                 |          |             |         |            |         |        |
| Sb  | 206.836†        | 515.9    | 487.06 µg/L | 58.968  | 487.06 ppb | 58.968  | 12.11% |
| QC value within limits for S 181.975 Axial Recovery = 98.16%    |                 |          |             |         |            |         |        |
| Se  | 196.026†        | 501.2    | 508.02 µg/L | 51.784  | 508.02 ppb | 51.784  | 10.19% |
| QC value within limits for Sb 206.836 Recovery = 97.41%         |                 |          |             |         |            |         |        |
| SiO2†   |                 | 27458.3  | 5189.4 µg/L | 348.11  | 5189.4 ppb | 348.11  | 6.71%  |
| QC value within limits for Se 196.026 Recovery = 101.60%        |                 |          |             |         |            |         |        |
| Si  | 251.611†        | 34247.9  | 2437.1 µg/L | 158.67  | 2437.1 ppb | 158.67  | 6.51%  |
| QC value within limits for SiO2 Recovery = 97.04%               |                 |          |             |         |            |         |        |
| Sn  | 189.927†        | 1183.5   | 499.13 µg/L | 74.750  | 499.13 ppb | 74.750  | 14.98% |
| QC value within limits for Si 251.611 Recovery = 97.49%         |                 |          |             |         |            |         |        |
| Sr  | 421.552†        | 79850.2  | 485.95 µg/L | 2.206   | 485.95 ppb | 2.206   | 0.45%  |
| QC value within limits for Sn 189.927 Recovery = 99.83%         |                 |          |             |         |            |         |        |
| Ti  | 334.940†        | 193606.0 | 487.11 µg/L | 33.232  | 487.11 ppb | 33.232  | 6.82%  |
| QC value within limits for Sr 421.552 Recovery = 97.19%         |                 |          |             |         |            |         |        |
| Tl  | 190.801†        | 476.5    | 503.89 µg/L | 45.101  | 503.89 ppb | 45.101  | 8.95%  |
| QC value within limits for Ti 334.940 Recovery = 97.42%         |                 |          |             |         |            |         |        |
| U   | 409.014†        | 5042.9   | 480.28 µg/L | 39.383  | 480.28 ppb | 39.383  | 8.20%  |
| QC value within limits for Tl 190.801 Recovery = 100.78%        |                 |          |             |         |            |         |        |
| V   | 292.402†        | 38395.0  | 491.09 µg/L | 43.286  | 491.09 ppb | 43.286  | 8.81%  |
| QC value within limits for U 409.014 Recovery = 96.06%          |                 |          |             |         |            |         |        |
| Zn  | 213.857†        | 20362.5  | 489.92 µg/L | 41.015  | 489.92 ppb | 41.015  | 8.37%  |
| QC value within limits for V 292.402 Recovery = 98.22%          |                 |          |             |         |            |         |        |
| QC value within limits for Zn 213.857 Recovery = 97.98%         |                 |          |             |         |            |         |        |

All analyte(s) passed QC.

Sequence No.: 4  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/11/2010 11:18:23  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 83882.6          | 83882.6                | 97.8 %                |                       | 11:18:56         |
| 1     | Al 396.153Radial†  | -292.9           | -42.4                  | -22.112 µg/L          | -22.112 ppb           | 11:18:56         |
| 1     | Ca 317.933Radial†  | 334.3            | 16.7                   | 6.2024 µg/L           | 6.2024 ppb            | 11:19:16         |
| 1     | Fe 238.204 Radial† | 15.6             | 1.0                    | 11.616 µg/L           | 11.616 ppb            | 11:19:16         |
| 1     | K 766.490 Radial†  | 399.4            | 34.9                   | 17.649 µg/L           | 17.649 ppb            | 11:18:56         |
| 1     | Mg 279.077 IEC†    | 9.4              | 3.7                    | 46.653 µg/L           | 46.653 ppb            | 11:19:16         |
| 1     | Na 589.592 Radial† | 213.2            | 5.7                    | 2.7340 µg/L           | 2.7340 ppb            | 11:18:56         |
| 1     | Sr 421.552†        | 146.0            | 30.8                   | 0.1877 µg/L           | 0.1877 ppb            | 11:18:56         |
| 1     | Sc 361.383         | 1806955.3        | 1806955.3              | 99.221 %              |                       | 11:20:18         |
| 1     | Y 371.029          | 1248854.8        | 1248854.8              | 99.183 %              |                       | 11:20:18         |
| 1     | Ag 328.068†        | -586.3           | -53.4                  | -0.4597 µg/L          | -0.4597 ppb           | 11:20:23         |
| 1     | As 188.979†        | -3.4             | -0.8                   | -1.2739 µg/L          | -1.2739 ppb           | 11:20:44         |
| 1     | B 249.677†         | 319.8            | 13.3                   | 0.6446 µg/L           | 0.6446 ppb            | 11:20:44         |
| 1     | Ba 233.527†        | -23.5            | -4.4                   | -0.1035 µg/L          | -0.1035 ppb           | 11:20:44         |
| 1     | Be 313.107†        | -1651.9          | -129.3                 | -0.0813 µg/L          | -0.0813 ppb           | 11:20:23         |
| 1     | Cd 226.502†        | -174.2           | -9.4                   | -0.2395 µg/L          | -0.2395 ppb           | 11:20:44         |
| 1     | Co 228.616†        | 23.3             | -1.3                   | -0.0585 µg/L          | -0.0585 ppb           | 11:20:44         |
| 1     | Cr 267.716†        | 86.6             | 27.2                   | 0.6292 µg/L           | 0.6292 ppb            | 11:20:44         |
| 1     | Cu 324.752†        | 4122.5           | -113.8                 | -0.7967 µg/L          | -0.7967 ppb           | 11:20:23         |
| 1     | Mn 257.610†        | -804.0           | -61.6                  | -0.2048 µg/L          | -0.2048 ppb           | 11:20:44         |
| 1     | Mo 202.031†        | 16.9             | 7.2                    | 0.7568 µg/L           | 0.7568 ppb            | 11:20:44         |
| 1     | Ni 231.604†        | 362.5            | 11.6                   | 0.6848 µg/L           | 0.6848 ppb            | 11:20:44         |
| 1     | P 214.914†         | 285.3            | 0.6                    | 1.0395 µg/L           | 1.0395 ppb            | 11:20:44         |
| 1     | Pb 220.353†        | 46.5             | 3.5                    | 0.9805 µg/L           | 0.9805 ppb            | 11:20:44         |
| 1     | S 181.975 Axial†   | 24.3             | 2.5                    | 8.1246 µg/L           | 8.1246 ppb            | 11:20:44         |
| 1     | Sb 206.836†        | 29.0             | 2.3                    | 2.1314 µg/L           | 2.1314 ppb            | 11:20:44         |
| 1     | Se 196.026†        | 25.9             | -0.7                   | -0.6638 µg/L          | -0.6638 ppb           | 11:20:44         |
| 1     | SiO2†              | 2756.6           | -69.7                  | -13.179 µg/L          | -13.179 ppb           | 11:20:23         |
| 1     | Si 251.611†        | 427.5            | 9.4                    | 0.6670 µg/L           | 0.6670 ppb            | 11:20:44         |
| 1     | Sn 189.927†        | 3.0              | 4.8                    | 2.0390 µg/L           | 2.0390 ppb            | 11:20:44         |
| 1     | Ti 334.940†        | -722.2           | -20.5                  | -0.0551 µg/L          | -0.0551 ppb           | 11:20:23         |
| 1     | Tl 190.801†        | -27.9            | 8.9                    | 9.2687 µg/L           | 9.2687 ppb            | 11:20:44         |
| 1     | U 409.014†         | -34.9            | 22.7                   | 2.1610 µg/L           | 2.1610 ppb            | 11:20:23         |
| 1     | V 292.402†         | 102.4            | -15.7                  | -0.1921 µg/L          | -0.1921 ppb           | 11:20:23         |
| 1     | Zn 213.857†        | 616.5            | -11.1                  | -0.2728 µg/L          | -0.2728 ppb           | 11:20:44         |
| 2     | Sc RADIAL          | 83773.2          | 83773.2                | 97.6 %                |                       | 11:19:22         |
| 2     | Al 396.153Radial†  | -255.0           | -4.0                   | -2.0954 µg/L          | -2.0954 ppb           | 11:19:22         |
| 2     | Ca 317.933Radial†  | 334.8            | 17.8                   | 6.5771 µg/L           | 6.5771 ppb            | 11:19:42         |
| 2     | Fe 238.204 Radial† | 16.4             | 1.9                    | 21.351 µg/L           | 21.351 ppb            | 11:19:42         |
| 2     | K 766.490 Radial†  | 312.6            | -53.5                  | -27.073 µg/L          | -27.073 ppb           | 11:19:22         |
| 2     | Mg 279.077 IEC†    | 6.0              | 0.2                    | 2.9148 µg/L           | 2.9148 ppb            | 11:19:42         |
| 2     | Na 589.592 Radial† | 182.6            | -25.4                  | -12.111 µg/L          | -12.111 ppb           | 11:19:22         |
| 2     | Sr 421.552†        | 147.4            | 32.5                   | 0.1980 µg/L           | 0.1980 ppb            | 11:19:22         |
| 2     | Sc 361.383         | 1810916.5        | 1810916.5              | 99.439 %              |                       | 11:20:50         |
| 2     | Y 371.029          | 1250176.4        | 1250176.4              | 99.288 %              |                       | 11:20:50         |
| 2     | Ag 328.068†        | -481.9           | 52.9                   | 0.4558 µg/L           | 0.4558 ppb            | 11:20:56         |
| 2     | As 188.979†        | -5.5             | -2.9                   | -4.5260 µg/L          | -4.5260 ppb           | 11:21:16         |
| 2     | B 249.677†         | 308.6            | 1.2                    | 0.0505 µg/L           | 0.0505 ppb            | 11:21:16         |
| 2     | Ba 233.527†        | -30.3            | -11.2                  | -0.2617 µg/L          | -0.2617 ppb           | 11:21:16         |
| 2     | Be 313.107†        | -1589.0          | -62.4                  | -0.0393 µg/L          | -0.0393 ppb           | 11:20:56         |
| 2     | Cd 226.502†        | -165.1           | 0.2                    | 0.0022 µg/L           | 0.0022 ppb            | 11:21:16         |
| 2     | Co 228.616†        | 25.2             | 0.6                    | 0.0260 µg/L           | 0.0260 ppb            | 11:21:16         |
| 2     | Cr 267.716†        | 80.7             | 21.1                   | 0.4891 µg/L           | 0.4891 ppb            | 11:21:16         |
| 2     | Cu 324.752†        | 4191.4           | -53.6                  | -0.3722 µg/L          | -0.3722 ppb           | 11:20:56         |
| 2     | Mn 257.610†        | -801.9           | -57.8                  | -0.1887 µg/L          | -0.1887 ppb           | 11:21:16         |
| 2     | Mo 202.031†        | 10.7             | 1.0                    | 0.1019 µg/L           | 0.1019 ppb            | 11:21:16         |
| 2     | Ni 231.604†        | 348.7            | -3.1                   | -0.1859 µg/L          | -0.1859 ppb           | 11:21:16         |
| 2     | P 214.914†         | 280.9            | -4.5                   | -7.6435 µg/L          | -7.6435 ppb           | 11:21:16         |
| 2     | Pb 220.353†        | 39.6             | -3.6                   | -1.0068 µg/L          | -1.0068 ppb           | 11:21:16         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 29.4      | 7.5       | 24.916 µg/L  | 24.916 ppb  | 11:21:16 |
| 2 | Sb 206.836†        | 23.3      | -3.6      | -3.4001 µg/L | -3.4001 ppb | 11:21:16 |
| 2 | Se 196.026†        | 22.9      | -3.7      | -3.6430 µg/L | -3.6430 ppb | 11:21:16 |
| 2 | SiO2†              | 2779.5    | -52.8     | -9.9874 µg/L | -9.9874 ppb | 11:20:56 |
| 2 | Si 251.611†        | 422.7     | 3.6       | 0.2541 µg/L  | 0.2541 ppb  | 11:21:16 |
| 2 | Sn 189.927†        | -2.1      | -0.3      | -0.1456 µg/L | -0.1456 ppb | 11:21:16 |
| 2 | Ti 334.940†        | -687.2    | 16.4      | 0.0412 µg/L  | 0.0412 ppb  | 11:20:56 |
| 2 | Tl 190.801†        | -32.9     | 3.9       | 4.1147 µg/L  | 4.1147 ppb  | 11:21:16 |
| 2 | U 409.014†         | -3.3      | 54.6      | 5.2030 µg/L  | 5.2030 ppb  | 11:20:56 |
| 2 | V 292.402†         | 116.8     | -1.5      | -0.0159 µg/L | -0.0159 ppb | 11:20:56 |
| 2 | Zn 213.857†        | 612.3     | -16.6     | -0.4023 µg/L | -0.4023 ppb | 11:21:16 |
| 3 | Sc RADIAL          | 84235.6   | 84235.6   | 98.2 %       |             | 11:19:47 |
| 3 | Al 396.153Radial†  | -249.6    | 2.9       | 1.5213 µg/L  | 1.5213 ppb  | 11:19:47 |
| 3 | Ca 317.933Radial†  | 343.4     | 24.6      | 9.1134 µg/L  | 9.1134 ppb  | 11:20:08 |
| 3 | Fe 238.204 Radial† | 16.8      | 2.2       | 24.718 µg/L  | 24.718 ppb  | 11:20:08 |
| 3 | K 766.490 Radial†  | 370.4     | 3.6       | 1.8212 µg/L  | 1.8212 ppb  | 11:19:47 |
| 3 | Mg 279.077 IEC†    | 11.8      | 6.1       | 77.080 µg/L  | 77.080 ppb  | 11:20:08 |
| 3 | Na 589.592 Radial† | 182.2     | -26.8     | -12.769 µg/L | -12.769 ppb | 11:19:47 |
| 3 | Sr 421.552†        | 145.0     | 29.2      | 0.1779 µg/L  | 0.1779 ppb  | 11:19:47 |
| 3 | Sc 361.383         | 1809577.4 | 1809577.4 | 99.365 %     |             | 11:21:22 |
| 3 | Y 371.029          | 1249813.9 | 1249813.9 | 99.259 %     |             | 11:21:22 |
| 3 | Ag 328.068†        | -606.9    | -73.3     | -0.6284 µg/L | -0.6284 ppb | 11:21:28 |
| 3 | As 188.979†        | -3.9      | -1.3      | -2.0132 µg/L | -2.0132 ppb | 11:21:48 |
| 3 | B 249.677†         | 320.5     | 13.5      | 0.6480 µg/L  | 0.6480 ppb  | 11:21:48 |
| 3 | Ba 233.527†        | -15.5     | 3.7       | 0.0860 µg/L  | 0.0860 ppb  | 11:21:48 |
| 3 | Be 313.107†        | -1568.8   | -43.3     | -0.0272 µg/L | -0.0272 ppb | 11:21:28 |
| 3 | Cd 226.502†        | -170.2    | -5.1      | -0.1325 µg/L | -0.1325 ppb | 11:21:48 |
| 3 | Co 228.616†        | 20.9      | -3.8      | -0.1723 µg/L | -0.1723 ppb | 11:21:48 |
| 3 | Cr 267.716†        | 88.3      | 28.8      | 0.6663 µg/L  | 0.6663 ppb  | 11:21:48 |
| 3 | Cu 324.752†        | 4123.8    | -118.5    | -0.8277 µg/L | -0.8277 ppb | 11:21:28 |
| 3 | Mn 257.610†        | -795.6    | -52.0     | -0.1746 µg/L | -0.1746 ppb | 11:21:48 |
| 3 | Mo 202.031†        | 9.0       | -0.8      | -0.0819 µg/L | -0.0819 ppb | 11:21:48 |
| 3 | Ni 231.604†        | 369.6     | 18.2      | 1.0776 µg/L  | 1.0776 ppb  | 11:21:48 |
| 3 | P 214.914†         | 283.3     | -1.9      | -3.1406 µg/L | -3.1406 ppb | 11:21:48 |
| 3 | Pb 220.353†        | 42.8      | -0.3      | -0.0877 µg/L | -0.0877 ppb | 11:21:48 |
| 3 | S 181.975 Axial†   | 21.8      | -0.1      | -0.2946 µg/L | -0.2946 ppb | 11:21:48 |
| 3 | Sb 206.836†        | 28.6      | 1.8       | 1.6844 µg/L  | 1.6844 ppb  | 11:21:48 |
| 3 | Se 196.026†        | 19.8      | -6.8      | -6.7439 µg/L | -6.7439 ppb | 11:21:48 |
| 3 | SiO2†              | 2790.5    | -39.7     | -7.4999 µg/L | -7.4999 ppb | 11:21:28 |
| 3 | Si 251.611†        | 446.2     | 27.5      | 1.9599 µg/L  | 1.9599 ppb  | 11:21:48 |
| 3 | Sn 189.927†        | 1.2       | 3.0       | 1.2512 µg/L  | 1.2512 ppb  | 11:21:48 |
| 3 | Ti 334.940†        | -732.3    | -29.6     | -0.0804 µg/L | -0.0804 ppb | 11:21:28 |
| 3 | Tl 190.801†        | -36.6     | 0.2       | 0.2244 µg/L  | 0.2244 ppb  | 11:21:48 |
| 3 | U 409.014†         | -18.0     | 39.8      | 3.7898 µg/L  | 3.7898 ppb  | 11:21:28 |
| 3 | V 292.402†         | 116.8     | -1.4      | -0.0176 µg/L | -0.0176 ppb | 11:21:28 |
| 3 | Zn 213.857†        | 654.4     | 26.2      | 0.6252 µg/L  | 0.6252 ppb  | 11:21:48 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1809149.7                | 99.342 %           | 0.1106   |                    |          | 0.11%   |
| Sc RADIAL   | 83963.8                  | 97.9 %             | 0.28     |                    |          | 0.29%   |
| Y 371.029   | 1249615.0                | 99.243 %           | 0.0542   |                    |          | 0.05%   |
| Ag 328.068†   | -24.6                    | -0.2107 µg/L       | 0.58339  | -0.2107 ppb        | 0.58339  | 276.82% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -14.5                    | -7.5621 µg/L       | 12.72990 | -7.5621 ppb        | 12.72990 | 168.34% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -1.7                     | -2.6043 µg/L       | 1.70475  | -2.6043 ppb        | 1.70475  | 65.46%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 9.3                      | 0.4477 µg/L        | 0.34399  | 0.4477 ppb         | 0.34399  | 76.83%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -4.0                     | -0.0931 µg/L       | 0.17406  | -0.0931 ppb        | 0.17406  | 187.02% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -78.3                    | -0.0493 µg/L       | 0.02843  | -0.0493 ppb        | 0.02843  | 57.69%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 19.7                     | 7.2976 µg/L        | 1.58367  | 7.2976 ppb         | 1.58367  | 21.70%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -4.8                     | -0.1233 µg/L       | 0.12110  | -0.1233 ppb        | 0.12110  | 98.25%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -1.5                     | -0.0683 µg/L       | 0.09950  | -0.0683 ppb        | 0.09950  | 145.74% |

|  |                 |       |              |          |             |          |         |
|--|-----------------|-------|--------------|----------|-------------|----------|---------|
| Cr   | 267.716†        | 25.7  | 0.5949 µg/L  | 0.09345  | 0.5949 ppb  | 0.09345  | 15.71%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Cu   | 324.752†        | -95.3 | -0.6655 µg/L | 0.25446  | -0.6655 ppb | 0.25446  | 38.23%  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Fe   | 238.204 Radial† | 1.7   | 19.228 µg/L  | 6.8038   | 19.228 ppb  | 6.8038   | 35.38%  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| K  | 766.490 Radial† | -5.0  | -2.5343 µg/L | 22.67683 | -2.5343 ppb | 22.67683 | 894.81% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |          |             |          |         |
| Mg   | 279.077 IEC†    | 3.3   | 42.216 µg/L  | 37.2812  | 42.216 ppb  | 37.2812  | 88.31%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |          |             |          |         |
| Mn   | 257.610†        | -57.2 | -0.1893 µg/L | 0.01512  | -0.1893 ppb | 0.01512  | 7.98%   |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Mo   | 202.031†        | 2.5   | 0.2589 µg/L  | 0.44082  | 0.2589 ppb  | 0.44082  | 170.25% |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Na   | 589.592 Radial† | -15.5 | -7.3819 µg/L | 8.76677  | -7.3819 ppb | 8.76677  | 118.76% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| Ni   | 231.604†        | 8.9   | 0.5255 µg/L  | 0.64668  | 0.5255 ppb  | 0.64668  | 123.06% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| P  | 214.914†        | -1.9  | -3.2482 µg/L | 4.34247  | -3.2482 ppb | 4.34247  | 133.69% |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Pb   | 220.353†        | -0.1  | -0.0380 µg/L | 0.99460  | -0.0380 ppb | 0.99460  | >999.9% |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| S  | 181.975 Axial†  | 3.3   | 10.915 µg/L  | 12.8349  | 10.915 ppb  | 12.8349  | 117.59% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |          |             |          |         |
| Sb   | 206.836†        | 0.2   | 0.1385 µg/L  | 3.07271  | 0.1385 ppb  | 3.07271  | >999.9% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Se   | 196.026†        | -3.8  | -3.6836 µg/L | 3.04026  | -3.6836 ppb | 3.04026  | 82.54%  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| SiO2†  |                 | -54.1 | -10.222 µg/L | 2.8467   | -10.222 ppb | 2.8467   | 27.85%  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |          |             |          |         |
| Si   | 251.611†        | 13.5  | 0.9603 µg/L  | 0.88989  | 0.9603 ppb  | 0.88989  | 92.67%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sn   | 189.927†        | 2.5   | 1.0482 µg/L  | 1.10637  | 1.0482 ppb  | 1.10637  | 105.55% |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sr   | 421.552†        | 30.9  | 0.1879 µg/L  | 0.01005  | 0.1879 ppb  | 0.01005  | 5.35%   |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Ti   | 334.940†        | -11.2 | -0.0314 µg/L | 0.06413  | -0.0314 ppb | 0.06413  | 203.97% |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Tl   | 190.801†        | 4.3   | 4.5360 µg/L  | 4.53682  | 4.5360 ppb  | 4.53682  | 100.02% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| U  | 409.014†        | 39.0  | 3.7180 µg/L  | 1.52227  | 3.7180 ppb  | 1.52227  | 40.94%  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| V  | 292.402†        | -6.2  | -0.0752 µg/L | 0.10126  | -0.0752 ppb | 0.10126  | 134.65% |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Zn   | 213.857†        | -0.5  | -0.0166 µg/L | 0.55961  | -0.0166 ppb | 0.55961  | >999.9% |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 11:43:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86239.6          | 86239.6                | 101 %                 |                       | 11:44:19         |
| 1     | Al 396.153Radial†  | 9415.6           | 9625.5                 | 5000.5 µg/L           | 5000.5 ppb            | 11:44:19         |
| 1     | Ca 317.933Radial†  | 14274.4          | 13877.6                | 5139.2 µg/L           | 5139.2 ppb            | 11:44:19         |
| 1     | Fe 238.204 Radial† | 455.0            | 437.7                  | 4994.2 µg/L           | 4994.2 ppb            | 11:44:39         |
| 1     | K 766.490 Radial†  | 10156.2          | 9731.5                 | 4925.9 µg/L           | 4925.9 ppb            | 11:44:19         |
| 1     | Mg 279.077 IEC†    | 413.3            | 405.3                  | 5142.7 µg/L           | 5142.7 ppb            | 11:44:39         |
| 1     | Na 589.592 Radial† | 20665.6          | 20349.5                | 9703.5 µg/L           | 9703.5 ppb            | 11:44:19         |
| 1     | Sr 421.552†        | 80044.6          | 79524.4                | 483.96 µg/L           | 483.96 ppb            | 11:44:19         |
| 1     | Sc 361.383         | 1791102.9        | 1791102.9              | 98.351 %              |                       | 11:45:43         |
| 1     | Y 371.029          | 1231077.4        | 1231077.4              | 97.771 %              |                       | 11:45:43         |
| 1     | Ag 328.068†        | 58821.3          | 60345.2                | 522.60 µg/L           | 522.60 ppb            | 11:45:48         |
| 1     | As 188.979†        | 352.8            | 361.3                  | 553.05 µg/L           | 553.05 ppb            | 11:46:09         |
| 1     | B 249.677†         | 10877.0          | 10750.3                | 524.23 µg/L           | 524.23 ppb            | 11:45:48         |
| 1     | Ba 233.527†        | 22829.4          | 23231.6                | 544.72 µg/L           | 544.72 ppb            | 11:45:48         |
| 1     | Be 313.107†        | 848928.6         | 864700.2               | 543.84 µg/L           | 543.84 ppb            | 11:45:43         |
| 1     | Cd 226.502†        | 21185.4          | 21706.9                | 551.95 µg/L           | 551.95 ppb            | 11:45:48         |
| 1     | Co 228.616†        | 11847.8          | 12021.7                | 549.53 µg/L           | 549.53 ppb            | 11:45:48         |
| 1     | Cr 267.716†        | 23417.5          | 23750.2                | 549.71 µg/L           | 549.71 ppb            | 11:45:48         |
| 1     | Cu 324.752†        | 77880.1          | 74917.4                | 526.92 µg/L           | 526.92 ppb            | 11:45:48         |
| 1     | Mn 257.610†        | 163555.9         | 167047.3               | 548.41 µg/L           | 548.41 ppb            | 11:45:43         |
| 1     | Mo 202.031†        | 5287.2           | 5366.1                 | 563.42 µg/L           | 563.42 ppb            | 11:46:09         |
| 1     | Ni 231.604†        | 9533.4           | 9339.5                 | 552.28 µg/L           | 552.28 ppb            | 11:45:48         |
| 1     | P 214.914†         | 1910.0           | 1655.0                 | 2772.9 µg/L           | 2772.9 ppb            | 11:46:09         |
| 1     | Pb 220.353†        | 2019.5           | 2010.0                 | 564.39 µg/L           | 564.39 ppb            | 11:46:09         |
| 1     | S 181.975 Axial†   | 354.4            | 338.3                  | 1116.8 µg/L           | 1116.8 ppb            | 11:46:09         |
| 1     | Sb 206.836†        | 599.1            | 582.1                  | 549.77 µg/L           | 549.77 ppb            | 11:46:09         |
| 1     | Se 196.026†        | 570.9            | 553.7                  | 559.82 µg/L           | 559.82 ppb            | 11:46:09         |
| 1     | SiO2†              | 32267.2          | 29960.3                | 5662.3 µg/L           | 5662.3 ppb            | 11:45:48         |
| 1     | Si 251.611†        | 37136.0          | 37337.2                | 2657.0 µg/L           | 2657.0 ppb            | 11:45:48         |
| 1     | Sn 189.927†        | 1338.8           | 1363.0                 | 574.75 µg/L           | 574.75 ppb            | 11:46:09         |
| 1     | Ti 334.940†        | 208405.5         | 212607.8               | 534.95 µg/L           | 534.95 ppb            | 11:45:43         |
| 1     | Tl 190.801†        | 473.9            | 518.9                  | 548.76 µg/L           | 548.76 ppb            | 11:46:09         |
| 1     | U 409.014†         | 5385.5           | 5533.7                 | 527.12 µg/L           | 527.12 ppb            | 11:45:48         |
| 1     | V 292.402†         | 41871.7          | 42454.9                | 543.27 µg/L           | 543.27 ppb            | 11:45:48         |
| 1     | Zn 213.857†        | 22774.5          | 22524.0                | 541.99 µg/L           | 541.99 ppb            | 11:45:48         |
| 2     | Sc RADIAL          | 86413.9          | 86413.9                | 101 %                 |                       | 11:44:45         |
| 2     | Al 396.153Radial†  | 9353.4           | 9544.9                 | 4958.7 µg/L           | 4958.7 ppb            | 11:44:45         |
| 2     | Ca 317.933Radial†  | 14247.8          | 13822.5                | 5118.8 µg/L           | 5118.8 ppb            | 11:44:45         |
| 2     | Fe 238.204 Radial† | 451.3            | 433.2                  | 4942.6 µg/L           | 4942.6 ppb            | 11:45:05         |
| 2     | K 766.490 Radial†  | 10160.0          | 9714.9                 | 4917.5 µg/L           | 4917.5 ppb            | 11:44:45         |
| 2     | Mg 279.077 IEC†    | 418.5            | 409.6                  | 5196.8 µg/L           | 5196.8 ppb            | 11:45:05         |
| 2     | Na 589.592 Radial† | 20687.0          | 20329.3                | 9693.9 µg/L           | 9693.9 ppb            | 11:44:45         |
| 2     | Sr 421.552†        | 79879.0          | 79199.3                | 481.99 µg/L           | 481.99 ppb            | 11:44:45         |
| 2     | Sc 361.383         | 1780047.5        | 1780047.5              | 97.744 %              |                       | 11:46:16         |
| 2     | Y 371.029          | 1226365.5        | 1226365.5              | 97.397 %              |                       | 11:46:16         |
| 2     | Ag 328.068†        | 59057.1          | 60957.9                | 527.89 µg/L           | 527.89 ppb            | 11:46:22         |
| 2     | As 188.979†        | 349.4            | 360.1                  | 551.23 µg/L           | 551.23 ppb            | 11:46:42         |
| 2     | B 249.677†         | 10908.4          | 10851.2                | 529.20 µg/L           | 529.20 ppb            | 11:46:22         |
| 2     | Ba 233.527†        | 22828.5          | 23374.8                | 548.08 µg/L           | 548.08 ppb            | 11:46:22         |
| 2     | Be 313.107†        | 844289.9         | 865315.3               | 544.23 µg/L           | 544.23 ppb            | 11:46:16         |
| 2     | Cd 226.502†        | 21166.7          | 21821.6                | 554.87 µg/L           | 554.87 ppb            | 11:46:22         |
| 2     | Co 228.616†        | 11857.1          | 12106.1                | 553.39 µg/L           | 553.39 ppb            | 11:46:22         |
| 2     | Cr 267.716†        | 23510.3          | 23993.0                | 555.33 µg/L           | 555.33 ppb            | 11:46:22         |
| 2     | Cu 324.752†        | 77782.2          | 75309.0                | 529.66 µg/L           | 529.66 ppb            | 11:46:22         |
| 2     | Mn 257.610†        | 162338.3         | 166834.4               | 547.70 µg/L           | 547.70 ppb            | 11:46:16         |
| 2     | Mo 202.031†        | 5183.7           | 5293.5                 | 555.81 µg/L           | 555.81 ppb            | 11:46:42         |
| 2     | Ni 231.604†        | 9543.3           | 9409.8                 | 556.44 µg/L           | 556.44 ppb            | 11:46:22         |
| 2     | P 214.914†         | 1880.6           | 1637.0                 | 2741.8 µg/L           | 2741.8 ppb            | 11:46:42         |
| 2     | Pb 220.353†        | 1989.5           | 1992.0                 | 559.30 µg/L           | 559.30 ppb            | 11:46:42         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 352.1     | 338.3     | 1116.5 µg/L | 1116.5 ppb | 11:46:42 |
| 2 | Sb 206.836†        | 585.9     | 572.4     | 540.47 µg/L | 540.47 ppb | 11:46:42 |
| 2 | Se 196.026†        | 558.4     | 544.6     | 550.57 µg/L | 550.57 ppb | 11:46:42 |
| 2 | SiO2†              | 32298.1   | 30195.7   | 5706.7 µg/L | 5706.7 ppb | 11:46:22 |
| 2 | Si 251.611†        | 37149.9   | 37586.0   | 2674.7 µg/L | 2674.7 ppb | 11:46:22 |
| 2 | Sn 189.927†        | 1310.5    | 1342.5    | 566.12 µg/L | 566.12 ppb | 11:46:42 |
| 2 | Ti 334.940†        | 206769.0  | 212249.6  | 534.05 µg/L | 534.05 ppb | 11:46:16 |
| 2 | Tl 190.801†        | 471.9     | 519.8     | 549.75 µg/L | 549.75 ppb | 11:46:42 |
| 2 | U 409.014†         | 5459.7    | 5643.6    | 537.62 µg/L | 537.62 ppb | 11:46:22 |
| 2 | V 292.402†         | 41866.4   | 42713.9   | 546.52 µg/L | 546.52 ppb | 11:46:22 |
| 2 | Zn 213.857†        | 22743.0   | 22635.6   | 544.67 µg/L | 544.67 ppb | 11:46:22 |
| 3 | Sc RADIAL          | 85241.1   | 85241.1   | 99.3 %      |            | 11:45:10 |
| 3 | Al 396.153Radial†  | 9297.2    | 9616.1    | 4998.1 µg/L | 4998.1 ppb | 11:45:10 |
| 3 | Ca 317.933Radial†  | 14177.2   | 13946.1   | 5164.6 µg/L | 5164.6 ppb | 11:45:10 |
| 3 | Fe 238.204 Radial† | 456.6     | 444.7     | 5071.7 µg/L | 5071.7 ppb | 11:45:31 |
| 3 | K 766.490 Radial†  | 10092.3   | 9785.5    | 4953.3 µg/L | 4953.3 ppb | 11:45:10 |
| 3 | Mg 279.077 IEC†    | 420.0     | 416.8     | 5286.9 µg/L | 5286.9 ppb | 11:45:31 |
| 3 | Na 589.592 Radial† | 20556.9   | 20481.0   | 9766.2 µg/L | 9766.2 ppb | 11:45:10 |
| 3 | Sr 421.552†        | 79483.7   | 79892.7   | 486.21 µg/L | 486.21 ppb | 11:45:10 |
| 3 | Sc 361.383         | 1791200.2 | 1791200.2 | 98.356 %    |            | 11:46:49 |
| 3 | Y 371.029          | 1231375.8 | 1231375.8 | 97.795 %    |            | 11:46:49 |
| 3 | Ag 328.068†        | 54376.5   | 55822.8   | 483.27 µg/L | 483.27 ppb | 11:46:55 |
| 3 | As 188.979†        | 286.9     | 294.3     | 450.31 µg/L | 450.31 ppb | 11:47:15 |
| 3 | B 249.677†         | 9936.2    | 9793.2    | 477.22 µg/L | 477.22 ppb | 11:46:55 |
| 3 | Ba 233.527†        | 20269.6   | 20627.7   | 483.65 µg/L | 483.65 ppb | 11:46:55 |
| 3 | Be 313.107†        | 765862.4  | 780198.7  | 490.70 µg/L | 490.70 ppb | 11:46:49 |
| 3 | Cd 226.502†        | 18616.6   | 19094.0   | 485.43 µg/L | 485.43 ppb | 11:46:55 |
| 3 | Co 228.616†        | 10350.2   | 10498.3   | 479.83 µg/L | 479.83 ppb | 11:46:55 |
| 3 | Cr 267.716†        | 19772.5   | 20043.0   | 463.91 µg/L | 463.91 ppb | 11:46:55 |
| 3 | Cu 324.752†        | 68697.5   | 65577.0   | 461.36 µg/L | 461.36 ppb | 11:46:55 |
| 3 | Mn 257.610†        | 147770.2  | 150988.7  | 495.68 µg/L | 495.68 ppb | 11:46:49 |
| 3 | Mo 202.031†        | 4182.6    | 4242.7    | 445.51 µg/L | 445.51 ppb | 11:47:15 |
| 3 | Ni 231.604†        | 8360.8    | 8146.8    | 481.76 µg/L | 481.76 ppb | 11:46:55 |
| 3 | P 214.914†         | 1603.9    | 1343.7    | 2246.9 µg/L | 2246.9 ppb | 11:47:15 |
| 3 | Pb 220.353†        | 1678.6    | 1663.3    | 466.97 µg/L | 466.97 ppb | 11:47:15 |
| 3 | S 181.975 Axial†   | 296.8     | 279.8     | 923.40 µg/L | 923.40 ppb | 11:47:15 |
| 3 | Sb 206.836†        | 491.3     | 472.5     | 445.83 µg/L | 445.83 ppb | 11:47:15 |
| 3 | Se 196.026†        | 486.9     | 468.3     | 475.36 µg/L | 475.36 ppb | 11:47:15 |
| 3 | SiO2†              | 29418.3   | 27062.0   | 5114.5 µg/L | 5114.5 ppb | 11:46:55 |
| 3 | Si 251.611†        | 33615.8   | 33756.2   | 2402.2 µg/L | 2402.2 ppb | 11:46:55 |
| 3 | Sn 189.927†        | 1034.0    | 1053.1    | 444.17 µg/L | 444.17 ppb | 11:47:15 |
| 3 | Ti 334.940†        | 186352.1  | 190174.3  | 478.46 µg/L | 478.46 ppb | 11:46:49 |
| 3 | Tl 190.801†        | 409.0     | 452.8     | 479.03 µg/L | 479.03 ppb | 11:47:15 |
| 3 | U 409.014†         | 4681.0    | 4817.1    | 458.71 µg/L | 458.71 ppb | 11:46:55 |
| 3 | V 292.402†         | 36309.0   | 36796.9   | 470.37 µg/L | 470.37 ppb | 11:46:55 |
| 3 | Zn 213.857†        | 20007.8   | 19709.8   | 474.20 µg/L | 474.20 ppb | 11:46:55 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1787450.2                | 98.150 %           | 0.3520   |                    |          | 0.36%  |
| Sc RADIAL  | 85964.9                  | 100 %              | 0.7      |                    |          | 0.74%  |
| Y 371.029  | 1229606.2                | 97.654 %           | 0.2232   |                    |          | 0.23%  |
| Ag 328.068†  | 59042.0                  | 511.25 µg/L        | 24.380   | 511.25 ppb         | 24.380   | 4.77%  |
| QC value within limits for Ag 328.068 Recovery = 102.25%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9595.5                   | 4985.7 µg/L        | 23.48    | 4985.7 ppb         | 23.48    | 0.47%  |
| QC value within limits for Al 396.153Radial Recovery = 99.71%  |                          |                    |          |                    |          |        |
| As 188.979†  | 338.6                    | 518.20 µg/L        | 58.798   | 518.20 ppb         | 58.798   | 11.35% |
| QC value within limits for As 188.979 Recovery = 103.64%       |                          |                    |          |                    |          |        |
| B 249.677†   | 10464.9                  | 510.21 µg/L        | 28.681   | 510.21 ppb         | 28.681   | 5.62%  |
| QC value within limits for B 249.677 Recovery = 102.04%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 22411.3                  | 525.48 µg/L        | 36.270   | 525.48 ppb         | 36.270   | 6.90%  |
| QC value within limits for Ba 233.527 Recovery = 105.10%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 836738.1                 | 526.26 µg/L        | 30.795   | 526.26 ppb         | 30.795   | 5.85%  |
| QC value within limits for Be 313.107 Recovery = 105.25%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13882.0                  | 5140.9 µg/L        | 22.93    | 5140.9 ppb         | 22.93    | 0.45%  |
| QC value within limits for Ca 317.933Radial Recovery = 102.82% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 20874.1                  | 530.75 µg/L        | 39.277   | 530.75 ppb         | 39.277   | 7.40%  |
| QC value within limits for Cd 226.502 Recovery = 106.15%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11542.0                  | 527.59 µg/L        | 41.399   | 527.59 ppb         | 41.399   | 7.85%  |

|       |   |          |             |        |            |        |        |
|-------|---|----------|-------------|--------|------------|--------|--------|
| Cr    | 267.716†  | 22595.4  | 522.98 µg/L | 51.234 | 522.98 ppb | 51.234 | 9.80%  |
|       | QC value within limits for Cr 267.716 Recovery = 104.60%        |          |             |        |            |        |        |
| Cu    | 324.752†  | 71934.5  | 505.98 µg/L | 38.668 | 505.98 ppb | 38.668 | 7.64%  |
|       | QC value within limits for Cu 324.752 Recovery = 101.20%        |          |             |        |            |        |        |
| Fe    | 238.204 Radial†   | 438.5    | 5002.8 µg/L | 65.01  | 5002.8 ppb | 65.01  | 1.30%  |
|       | QC value within limits for Fe 238.204 Radial Recovery = 100.06% |          |             |        |            |        |        |
| K     | 766.490 Radial†   | 9744.0   | 4932.3 µg/L | 18.69  | 4932.3 ppb | 18.69  | 0.38%  |
|       | QC value within limits for K 766.490 Radial Recovery = 98.65%   |          |             |        |            |        |        |
| Mg    | 279.077 IEC†  | 410.6    | 5208.8 µg/L | 72.85  | 5208.8 ppb | 72.85  | 1.40%  |
|       | QC value within limits for Mg 279.077 IEC Recovery = 104.18%    |          |             |        |            |        |        |
| Mn    | 257.610†  | 161623.5 | 530.59 µg/L | 30.242 | 530.59 ppb | 30.242 | 5.70%  |
|       | QC value within limits for Mn 257.610 Recovery = 106.12%        |          |             |        |            |        |        |
| Mo    | 202.031†  | 4967.4   | 521.58 µg/L | 65.988 | 521.58 ppb | 65.988 | 12.65% |
|       | QC value within limits for Mo 202.031 Recovery = 104.32%        |          |             |        |            |        |        |
| Na    | 589.592 Radial†   | 20386.6  | 9721.2 µg/L | 39.28  | 9721.2 ppb | 39.28  | 0.40%  |
|       | QC value within limits for Na 589.592 Radial Recovery = 97.21%  |          |             |        |            |        |        |
| Ni    | 231.604†  | 8965.3   | 530.16 µg/L | 41.967 | 530.16 ppb | 41.967 | 7.92%  |
|       | QC value within limits for Ni 231.604 Recovery = 106.03%        |          |             |        |            |        |        |
| P     | 214.914†  | 1545.2   | 2587.2 µg/L | 295.11 | 2587.2 ppb | 295.11 | 11.41% |
|       | QC value within limits for P 214.914 Recovery = 103.49%         |          |             |        |            |        |        |
| Pb    | 220.353†  | 1888.5   | 530.22 µg/L | 54.834 | 530.22 ppb | 54.834 | 10.34% |
|       | QC value within limits for Pb 220.353 Recovery = 106.04%        |          |             |        |            |        |        |
| S     | 181.975 Axial†  | 318.8    | 1052.2 µg/L | 111.56 | 1052.2 ppb | 111.56 | 10.60% |
|       | QC value within limits for S 181.975 Axial Recovery = 105.22%   |          |             |        |            |        |        |
| Sb    | 206.836†  | 542.4    | 512.02 µg/L | 57.516 | 512.02 ppb | 57.516 | 11.23% |
|       | QC value within limits for Sb 206.836 Recovery = 102.40%        |          |             |        |            |        |        |
| Se    | 196.026†  | 522.2    | 528.59 µg/L | 46.323 | 528.59 ppb | 46.323 | 8.76%  |
|       | QC value within limits for Se 196.026 Recovery = 105.72%        |          |             |        |            |        |        |
| SiO2† |   | 29072.7  | 5494.5 µg/L | 329.84 | 5494.5 ppb | 329.84 | 6.00%  |
|       | QC value within limits for SiO2 Recovery = 102.75%              |          |             |        |            |        |        |
| Si    | 251.611†  | 36226.5  | 2577.9 µg/L | 152.50 | 2577.9 ppb | 152.50 | 5.92%  |
|       | QC value within limits for Si 251.611 Recovery = 103.12%        |          |             |        |            |        |        |
| Sn    | 189.927†  | 1252.9   | 528.34 µg/L | 73.029 | 528.34 ppb | 73.029 | 13.82% |
|       | QC value within limits for Sn 189.927 Recovery = 105.67%        |          |             |        |            |        |        |
| Sr    | 421.552†  | 79538.8  | 484.05 µg/L | 2.111  | 484.05 ppb | 2.111  | 0.44%  |
|       | QC value within limits for Sr 421.552 Recovery = 96.81%         |          |             |        |            |        |        |
| Ti    | 334.940†  | 205010.6 | 515.82 µg/L | 32.357 | 515.82 ppb | 32.357 | 6.27%  |
|       | QC value within limits for Ti 334.940 Recovery = 103.16%        |          |             |        |            |        |        |
| Tl    | 190.801†  | 497.2    | 525.85 µg/L | 40.549 | 525.85 ppb | 40.549 | 7.71%  |
|       | QC value within limits for Tl 190.801 Recovery = 105.17%        |          |             |        |            |        |        |
| U     | 409.014†  | 5331.5   | 507.82 µg/L | 42.849 | 507.82 ppb | 42.849 | 8.44%  |
|       | QC value within limits for U 409.014 Recovery = 101.56%         |          |             |        |            |        |        |
| V     | 292.402†  | 40655.2  | 520.05 µg/L | 43.056 | 520.05 ppb | 43.056 | 8.28%  |
|       | QC value within limits for V 292.402 Recovery = 104.01%         |          |             |        |            |        |        |
| Zn    | 213.857†  | 21623.2  | 520.28 µg/L | 39.935 | 520.28 ppb | 39.935 | 7.68%  |
|       | QC value within limits for Zn 213.857 Recovery = 104.06%        |          |             |        |            |        |        |

All analyte(s) passed QC.



Sequence No.: 7

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 11:47:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84365.5          | 84365.5                | 98.3 %                |                       | 11:47:58         |
| 1     | Al 396.153Radial†  | -265.6           | -13.0                  | -6.7755 µg/L          | -6.7755 ppb           | 11:47:58         |
| 1     | Ca 317.933Radial†  | 347.9            | 28.7                   | 10.619 µg/L           | 10.619 ppb            | 11:48:19         |
| 1     | Fe 238.204 Radial† | 17.1             | 2.4                    | 27.276 µg/L           | 27.276 ppb            | 11:48:19         |
| 1     | K 766.490 Radial†  | 393.7            | 26.7                   | 13.497 µg/L           | 13.497 ppb            | 11:47:58         |
| 1     | Mg 279.077 IEC†    | 8.1              | 2.3                    | 29.166 µg/L           | 29.166 ppb            | 11:48:19         |
| 1     | Na 589.592 Radial† | 234.0            | 25.6                   | 12.196 µg/L           | 12.196 ppb            | 11:47:58         |
| 1     | Sr 421.552†        | 140.3            | 24.2                   | 0.1474 µg/L           | 0.1474 ppb            | 11:47:58         |
| 1     | Sc 361.383         | 1825966.4        | 1825966.4              | 100.27 %              |                       | 11:49:21         |
| 1     | Y 371.029          | 1262379.8        | 1262379.8              | 100.26 %              |                       | 11:49:21         |
| 1     | Ag 328.068†        | -580.1           | -41.1                  | -0.3585 µg/L          | -0.3585 ppb           | 11:49:27         |
| 1     | As 188.979†        | -6.5             | -4.0                   | -6.0833 µg/L          | -6.0833 ppb           | 11:49:47         |
| 1     | B 249.677†         | 319.8            | 9.9                    | 0.4709 µg/L           | 0.4709 ppb            | 11:49:47         |
| 1     | Ba 233.527†        | -18.8            | 0.5                    | 0.0104 µg/L           | 0.0104 ppb            | 11:49:47         |
| 1     | Be 313.107†        | -1444.7          | 94.7                   | 0.0595 µg/L           | 0.0595 ppb            | 11:49:27         |
| 1     | Cd 226.502†        | -178.8           | -12.1                  | -0.3116 µg/L          | -0.3116 ppb           | 11:49:47         |
| 1     | Co 228.616†        | 18.1             | -6.8                   | -0.3103 µg/L          | -0.3103 ppb           | 11:49:47         |
| 1     | Cr 267.716†        | 66.3             | 6.2                    | 0.1416 µg/L           | 0.1416 ppb            | 11:49:47         |
| 1     | Cu 324.752†        | 4151.8           | -127.9                 | -0.8928 µg/L          | -0.8928 ppb           | 11:49:27         |
| 1     | Mn 257.610†        | -804.4           | -53.6                  | -0.1764 µg/L          | -0.1764 ppb           | 11:49:47         |
| 1     | Mo 202.031†        | 16.4             | 6.5                    | 0.6818 µg/L           | 0.6818 ppb            | 11:49:47         |
| 1     | Ni 231.604†        | 356.5            | 1.8                    | 0.1067 µg/L           | 0.1067 ppb            | 11:49:47         |
| 1     | P 214.914†         | 290.3            | 2.5                    | 4.4082 µg/L           | 4.4082 ppb            | 11:49:47         |
| 1     | Pb 220.353†        | 49.2             | 5.7                    | 1.6007 µg/L           | 1.6007 ppb            | 11:49:47         |
| 1     | S 181.975 Axial†   | 23.0             | 1.0                    | 3.2554 µg/L           | 3.2554 ppb            | 11:49:47         |
| 1     | Sb 206.836†        | 25.2             | -1.9                   | -1.7901 µg/L          | -1.7901 ppb           | 11:49:47         |
| 1     | Se 196.026†        | 14.7             | -12.1                  | -11.910 µg/L          | -11.910 ppb           | 11:49:47         |
| 1     | SiO2†              | 2770.5           | -84.8                  | -16.026 µg/L          | -16.026 ppb           | 11:49:27         |
| 1     | Si 251.611†        | 428.0            | 5.4                    | 0.3853 µg/L           | 0.3853 ppb            | 11:49:47         |
| 1     | Sn 189.927†        | 9.9              | 11.7                   | 4.9325 µg/L           | 4.9325 ppb            | 11:49:47         |
| 1     | Ti 334.940†        | -672.8           | 36.4                   | 0.0896 µg/L           | 0.0896 ppb            | 11:49:27         |
| 1     | Tl 190.801†        | -41.7            | -4.6                   | -4.8363 µg/L          | -4.8363 ppb           | 11:49:47         |
| 1     | U 409.014†         | -11.3            | 46.6                   | 4.4417 µg/L           | 4.4417 ppb            | 11:49:27         |
| 1     | V 292.402†         | 29.9             | -89.1                  | -1.1244 µg/L          | -1.1244 ppb           | 11:49:27         |
| 1     | Zn 213.857†        | 620.0            | -14.1                  | -0.3432 µg/L          | -0.3432 ppb           | 11:49:47         |
| 2     | Sc RADIAL          | 84060.9          | 84060.9                | 98.0 %                |                       | 11:48:24         |
| 2     | Al 396.153Radial†  | -239.6           | 12.6                   | 6.5575 µg/L           | 6.5575 ppb            | 11:48:24         |
| 2     | Ca 317.933Radial†  | 355.4            | 37.6                   | 13.919 µg/L           | 13.919 ppb            | 11:48:45         |
| 2     | Fe 238.204 Radial† | 14.3             | -0.4                   | -4.5227 µg/L          | -4.5227 ppb           | 11:48:45         |
| 2     | K 766.490 Radial†  | 403.7            | 38.4                   | 19.438 µg/L           | 19.438 ppb            | 11:48:24         |
| 2     | Mg 279.077 IEC†    | 5.5              | -0.3                   | -4.3562 µg/L          | -4.3562 ppb           | 11:48:45         |
| 2     | Na 589.592 Radial† | 215.3            | 7.4                    | 3.5422 µg/L           | 3.5422 ppb            | 11:48:24         |
| 2     | Sr 421.552†        | 144.9            | 29.5                   | 0.1793 µg/L           | 0.1793 ppb            | 11:48:24         |
| 2     | Sc 361.383         | 1833351.3        | 1833351.3              | 100.67 %              |                       | 11:49:53         |
| 2     | Y 371.029          | 1268960.9        | 1268960.9              | 100.78 %              |                       | 11:49:53         |
| 2     | Ag 328.068†        | -617.7           | -76.1                  | -0.6540 µg/L          | -0.6540 ppb           | 11:49:59         |
| 2     | As 188.979†        | -3.4             | -0.8                   | -1.1611 µg/L          | -1.1611 ppb           | 11:50:20         |
| 2     | B 249.677†         | 333.1            | 21.8                   | 1.0688 µg/L           | 1.0688 ppb            | 11:50:20         |
| 2     | Ba 233.527†        | -24.3            | -4.8                   | -0.1124 µg/L          | -0.1124 ppb           | 11:50:20         |
| 2     | Be 313.107†        | -1529.4          | 16.4                   | 0.0103 µg/L           | 0.0103 ppb            | 11:49:59         |
| 2     | Cd 226.502†        | -173.5           | -6.1                   | -0.1550 µg/L          | -0.1550 ppb           | 11:50:20         |
| 2     | Co 228.616†        | 35.8             | 10.7                   | 0.4915 µg/L           | 0.4915 ppb            | 11:50:20         |
| 2     | Cr 267.716†        | 78.1             | 17.5                   | 0.4055 µg/L           | 0.4055 ppb            | 11:50:20         |
| 2     | Cu 324.752†        | 4154.0           | -142.3                 | -1.0001 µg/L          | -1.0001 ppb           | 11:49:59         |
| 2     | Mn 257.610†        | -802.3           | -48.3                  | -0.1587 µg/L          | -0.1587 ppb           | 11:50:20         |
| 2     | Mo 202.031†        | 13.8             | 3.9                    | 0.4073 µg/L           | 0.4073 ppb            | 11:50:20         |
| 2     | Ni 231.604†        | 361.8            | 5.6                    | 0.3299 µg/L           | 0.3299 ppb            | 11:50:20         |
| 2     | P 214.914†         | 281.1            | -7.7                   | -13.060 µg/L          | -13.060 ppb           | 11:50:20         |
| 2     | Pb 220.353†        | 49.6             | 5.9                    | 1.6571 µg/L           | 1.6571 ppb            | 11:50:20         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.6      | -2.5      | -8.2120 µg/L | -8.2120 ppb | 11:50:20 |
| 2 | Sb 206.836†        | 26.3      | -0.9      | -0.8395 µg/L | -0.8395 ppb | 11:50:20 |
| 2 | Se 196.026†        | 21.9      | -4.9      | -4.9029 µg/L | -4.9029 ppb | 11:50:20 |
| 2 | SiO2†              | 2805.7    | -61.0     | -11.522 µg/L | -11.522 ppb | 11:49:59 |
| 2 | Si 251.611†        | 433.3     | 9.0       | 0.6377 µg/L  | 0.6377 ppb  | 11:50:20 |
| 2 | Sn 189.927†        | 2.8       | 4.6       | 1.9393 µg/L  | 1.9393 ppb  | 11:50:20 |
| 2 | Ti 334.940†        | -711.9    | 0.3       | 0.0012 µg/L  | 0.0012 ppb  | 11:49:59 |
| 2 | Tl 190.801†        | -34.0     | 3.2       | 3.3917 µg/L  | 3.3917 ppb  | 11:50:20 |
| 2 | U 409.014†         | 45.7      | 103.3     | 9.8544 µg/L  | 9.8544 ppb  | 11:49:59 |
| 2 | V 292.402†         | 122.9     | 3.1       | 0.0544 µg/L  | 0.0544 ppb  | 11:49:59 |
| 2 | Zn 213.857†        | 615.2     | -21.3     | -0.5160 µg/L | -0.5160 ppb | 11:50:20 |
| 3 | Sc RADIAL          | 84663.0   | 84663.0   | 98.7 %       |             | 11:48:50 |
| 3 | Al 396.153Radial†  | -286.1    | -32.8     | -17.108 µg/L | -17.108 ppb | 11:48:50 |
| 3 | Ca 317.933Radial†  | 349.7     | 29.3      | 10.839 µg/L  | 10.839 ppb  | 11:49:11 |
| 3 | Fe 238.204 Radial† | 16.3      | 1.5       | 17.501 µg/L  | 17.501 ppb  | 11:49:11 |
| 3 | K 766.490 Radial†  | 397.5     | 29.1      | 14.753 µg/L  | 14.753 ppb  | 11:48:50 |
| 3 | Mg 279.077 IEC†    | 10.2      | 4.4       | 55.293 µg/L  | 55.293 ppb  | 11:49:11 |
| 3 | Na 589.592 Radial† | 221.2     | 11.8      | 5.6165 µg/L  | 5.6165 ppb  | 11:48:50 |
| 3 | Sr 421.552†        | 204.9     | 89.2      | 0.5428 µg/L  | 0.5428 ppb  | 11:48:50 |
| 3 | Sc 361.383         | 1840654.8 | 1840654.8 | 101.07 %     |             | 11:50:26 |
| 3 | Y 371.029          | 1271296.2 | 1271296.2 | 100.97 %     |             | 11:50:26 |
| 3 | Ag 328.068†        | -593.9    | -50.1     | -0.4310 µg/L | -0.4310 ppb | 11:50:31 |
| 3 | As 188.979†        | -2.7      | -0.1      | -0.1036 µg/L | -0.1036 ppb | 11:50:52 |
| 3 | B 249.677†         | 326.1     | 13.6      | 0.6560 µg/L  | 0.6560 ppb  | 11:50:52 |
| 3 | Ba 233.527†        | -23.7     | -4.1      | -0.0973 µg/L | -0.0973 ppb | 11:50:52 |
| 3 | Be 313.107†        | -1503.3   | 48.2      | 0.0303 µg/L  | 0.0303 ppb  | 11:50:31 |
| 3 | Cd 226.502†        | -169.7    | -1.7      | -0.0443 µg/L | -0.0443 ppb | 11:50:52 |
| 3 | Co 228.616†        | 34.6      | 9.4       | 0.4303 µg/L  | 0.4303 ppb  | 11:50:52 |
| 3 | Cr 267.716†        | 76.6      | 15.8      | 0.3642 µg/L  | 0.3642 ppb  | 11:50:52 |
| 3 | Cu 324.752†        | 4142.1    | -170.5    | -1.1938 µg/L | -1.1938 ppb | 11:50:31 |
| 3 | Mn 257.610†        | -779.1    | -22.2     | -0.0754 µg/L | -0.0754 ppb | 11:50:52 |
| 3 | Mo 202.031†        | 18.3      | 8.3       | 0.8702 µg/L  | 0.8702 ppb  | 11:50:52 |
| 3 | Ni 231.604†        | 360.7     | 3.1       | 0.1831 µg/L  | 0.1831 ppb  | 11:50:52 |
| 3 | P 214.914†         | 288.1     | -2.0      | -3.2563 µg/L | -3.2563 ppb | 11:50:52 |
| 3 | Pb 220.353†        | 51.0      | 7.1       | 2.0026 µg/L  | 2.0026 ppb  | 11:50:52 |
| 3 | S 181.975 Axial†   | 24.6      | 2.3       | 7.7252 µg/L  | 7.7252 ppb  | 11:50:52 |
| 3 | Sb 206.836†        | 25.5      | -1.8      | -1.6924 µg/L | -1.6924 ppb | 11:50:52 |
| 3 | Se 196.026†        | 28.2      | 1.1       | 1.1386 µg/L  | 1.1386 ppb  | 11:50:52 |
| 3 | SiO2†              | 2813.7    | -64.1     | -12.116 µg/L | -12.116 ppb | 11:50:31 |
| 3 | Si 251.611†        | 438.8     | 12.6      | 0.8975 µg/L  | 0.8975 ppb  | 11:50:52 |
| 3 | Sn 189.927†        | 4.1       | 5.8       | 2.4526 µg/L  | 2.4526 ppb  | 11:50:52 |
| 3 | Ti 334.940†        | -689.3    | 25.5      | 0.0599 µg/L  | 0.0599 ppb  | 11:50:31 |
| 3 | Tl 190.801†        | -37.3     | 0.1       | 0.1389 µg/L  | 0.1389 ppb  | 11:50:52 |
| 3 | U 409.014†         | -34.8     | 23.4      | 2.2336 µg/L  | 2.2336 ppb  | 11:50:31 |
| 3 | V 292.402†         | 98.9      | -21.2     | -0.2616 µg/L | -0.2616 ppb | 11:50:31 |
| 3 | Zn 213.857†        | 656.4     | 17.1      | 0.4105 µg/L  | 0.4105 ppb  | 11:50:52 |

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Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1833324.1                | 100.67 %     |              | 0.403    |                    |          | 0.40%   |
| Sc RADIAL   | 84363.1                  | 98.3 %       |              | 0.35     |                    |          | 0.36%   |
| Y 371.029   | 1267545.6                | 100.67 %     |              | 0.367    |                    |          | 0.36%   |
| Ag 328.068†   | -55.8                    | -0.4812 µg/L |              | 0.15402  | -0.4812 ppb        | 0.15402  | 32.01%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |              |          |                    |          |         |
| Al 396.153Radial†   | -11.1                    | -5.7753 µg/L |              | 11.86442 | -5.7753 ppb        | 11.86442 | 205.43% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |              |          |                    |          |         |
| As 188.979†   | -1.6                     | -2.4493 µg/L |              | 3.19118  | -2.4493 ppb        | 3.19118  | 130.29% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |              |          |                    |          |         |
| B 249.677†  | 15.1                     | 0.7319 µg/L  |              | 0.30609  | 0.7319 ppb         | 0.30609  | 41.82%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |              |          |                    |          |         |
| Ba 233.527†   | -2.8                     | -0.0664 µg/L |              | 0.06695  | -0.0664 ppb        | 0.06695  | 100.77% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |              |          |                    |          |         |
| Be 313.107†   | 53.1                     | 0.0334 µg/L  |              | 0.02476  | 0.0334 ppb         | 0.02476  | 74.17%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |              |          |                    |          |         |
| Ca 317.933Radial†   | 31.8                     | 11.792 µg/L  |              | 1.8448   | 11.792 ppb         | 1.8448   | 15.64%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |              |              |          |                    |          |         |
| Cd 226.502†   | -6.6                     | -0.1703 µg/L |              | 0.13431  | -0.1703 ppb        | 0.13431  | 78.87%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |              |              |          |                    |          |         |
| Co 228.616†   | 4.4                      | 0.2039 µg/L  |              | 0.44631  | 0.2039 ppb         | 0.44631  | 218.93% |

|  |                           |                     |                 |
|--|---------------------------|---------------------|-----------------|
| QC value within limits for Co 228.616        | Recovery = Not calculated |                     |                 |
| Cr 267.716†                                  | 13.1 0.3038 µg/L          | 0.14199 0.3038 ppb  | 0.14199 46.74%  |
| QC value within limits for Cr 267.716        | Recovery = Not calculated |                     |                 |
| Cu 324.752†                                  | -146.9 -1.0289 µg/L       | 0.15257 -1.0289 ppb | 0.15257 14.83%  |
| QC value within limits for Cu 324.752        | Recovery = Not calculated |                     |                 |
| Fe 238.204 Radial†                           | 1.2 13.418 µg/L           | 16.2876 13.418 ppb  | 16.2876 121.39% |
| QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |                     |                 |
| K 766.490 Radial†                            | 31.4 15.896 µg/L          | 3.1310 15.896 ppb   | 3.1310 19.70%   |
| QC value within limits for K 766.490 Radial  | Recovery = Not calculated |                     |                 |
| Mg 279.077 IEC†                              | 2.1 26.701 µg/L           | 29.9009 26.701 ppb  | 29.9009 111.98% |
| QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |                     |                 |
| Mn 257.610†                                  | -41.4 -0.1368 µg/L        | 0.05390 -0.1368 ppb | 0.05390 39.39%  |
| QC value within limits for Mn 257.610        | Recovery = Not calculated |                     |                 |
| Mo 202.031†                                  | 6.2 0.6531 µg/L           | 0.23280 0.6531 ppb  | 0.23280 35.64%  |
| QC value within limits for Mo 202.031        | Recovery = Not calculated |                     |                 |
| Na 589.592 Radial†                           | 14.9 7.1183 µg/L          | 4.51818 7.1183 ppb  | 4.51818 63.47%  |
| QC value within limits for Na 589.592 Radial | Recovery = Not calculated |                     |                 |
| Ni 231.604†                                  | 3.5 0.2066 µg/L           | 0.11344 0.2066 ppb  | 0.11344 54.92%  |
| QC value within limits for Ni 231.604        | Recovery = Not calculated |                     |                 |
| P 214.914†                                   | -2.4 -3.9694 µg/L         | 8.75593 -3.9694 ppb | 8.75593 220.59% |
| QC value within limits for P 214.914         | Recovery = Not calculated |                     |                 |
| Pb 220.353†                                  | 6.3 1.7535 µg/L           | 0.21756 1.7535 ppb  | 0.21756 12.41%  |
| QC value within limits for Pb 220.353        | Recovery = Not calculated |                     |                 |
| S 181.975 Axial†                             | 0.3 0.9229 µg/L           | 8.22065 0.9229 ppb  | 8.22065 890.77% |
| QC value within limits for S 181.975 Axial   | Recovery = Not calculated |                     |                 |
| Sb 206.836†                                  | -1.5 -1.4407 µg/L         | 0.52293 -1.4407 ppb | 0.52293 36.30%  |
| QC value within limits for Sb 206.836        | Recovery = Not calculated |                     |                 |
| Se 196.026†                                  | -5.3 -5.2246 µg/L         | 6.53005 -5.2246 ppb | 6.53005 124.99% |
| QC value within limits for Se 196.026        | Recovery = Not calculated |                     |                 |
| SiO2†  | -70.0 -13.221 µg/L        | 2.4473 -13.221 ppb  | 2.4473 18.51%   |
| QC value within limits for SiO2              | Recovery = Not calculated |                     |                 |
| Si 251.611†                                  | 9.0 0.6402 µg/L           | 0.25613 0.6402 ppb  | 0.25613 40.01%  |
| QC value within limits for Si 251.611        | Recovery = Not calculated |                     |                 |
| Sn 189.927†                                  | 7.4 3.1081 µg/L           | 1.60062 3.1081 ppb  | 1.60062 51.50%  |
| QC value within limits for Sn 189.927        | Recovery = Not calculated |                     |                 |
| Sr 421.552†                                  | 47.6 0.2898 µg/L          | 0.21965 0.2898 ppb  | 0.21965 75.78%  |
| QC value within limits for Sr 421.552        | Recovery = Not calculated |                     |                 |
| Ti 334.940†                                  | 20.7 0.0502 µg/L          | 0.04498 0.0502 ppb  | 0.04498 89.53%  |
| QC value within limits for Ti 334.940        | Recovery = Not calculated |                     |                 |
| Tl 190.801†                                  | -0.4 -0.4352 µg/L         | 4.14391 -0.4352 ppb | 4.14391 952.14% |
| QC value within limits for Tl 190.801        | Recovery = Not calculated |                     |                 |
| U 409.014†                                   | 57.8 5.5099 µg/L          | 3.92113 5.5099 ppb  | 3.92113 71.17%  |
| QC value within limits for U 409.014         | Recovery = Not calculated |                     |                 |
| V 292.402†                                   | -35.7 -0.4439 µg/L        | 0.61013 -0.4439 ppb | 0.61013 137.46% |
| QC value within limits for V 292.402         | Recovery = Not calculated |                     |                 |
| Zn 213.857†                                  | -6.1 -0.1496 µg/L         | 0.49267 -0.1496 ppb | 0.49267 329.40% |
| QC value within limits for Zn 213.857        | Recovery = Not calculated |                     |                 |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: 1202046587|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 306

Date Collected: 3/11/2010 11:51:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046587|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86180.9          | 86180.9                | 100 %                 |                       | 11:51:40         |
| 1     | Al 396.153Radial†  | -243.0           | 15.2                   | 7.9222 µg/L           | 7.9222 ppb            | 11:51:40         |
| 1     | Ca 317.933Radial†  | 547.6            | 220.1                  | 81.494 µg/L           | 81.494 ppb            | 11:52:00         |
| 1     | Fe 238.204 Radial† | 22.7             | 7.7                    | 87.147 µg/L           | 87.147 ppb            | 11:52:00         |
| 1     | K 766.490 Radial†  | 369.4            | -5.9                   | -2.9871 µg/L          | -2.9871 ppb           | 11:51:40         |
| 1     | Mg 279.077 IEC†    | 6.0              | 0.0                    | 0.0125 µg/L           | 0.0125 ppb            | 11:52:00         |
| 1     | Na 589.592 Radial† | 264.5            | 51.0                   | 24.316 µg/L           | 24.316 ppb            | 11:51:40         |
| 1     | Sr 421.552†        | 230.4            | 110.9                  | 0.6751 µg/L           | 0.6751 ppb            | 11:51:40         |
| 1     | Sc 361.383         | 1863155.2        | 1863155.2              | 102.31 %              |                       | 11:53:02         |
| 1     | Y 371.029          | 1282671.0        | 1282671.0              | 101.87 %              |                       | 11:53:02         |
| 1     | Ag 328.068†        | -542.3           | 7.4                    | 0.0677 µg/L           | 0.0677 ppb            | 11:53:07         |
| 1     | As 188.979†        | -1.8             | 0.8                    | 1.1624 µg/L           | 1.1624 ppb            | 11:53:28         |
| 1     | B 249.677†         | 337.8            | 21.1                   | 0.9888 µg/L           | 0.9888 ppb            | 11:53:28         |
| 1     | Ba 233.527†        | -0.8             | 18.5                   | 0.4323 µg/L           | 0.4323 ppb            | 11:53:28         |
| 1     | Be 313.107†        | -1588.1          | -16.7                  | -0.0107 µg/L          | -0.0107 ppb           | 11:53:07         |
| 1     | Cd 226.502†        | -169.3           | 0.7                    | 0.0076 µg/L           | 0.0076 ppb            | 11:53:28         |
| 1     | Co 228.616†        | 35.6             | 10.0                   | 0.4566 µg/L           | 0.4566 ppb            | 11:53:28         |
| 1     | Cr 267.716†        | 91.7             | 29.7                   | 0.6857 µg/L           | 0.6857 ppb            | 11:53:28         |
| 1     | Cu 324.752†        | 4189.2           | -174.0                 | -1.2052 µg/L          | -1.2052 ppb           | 11:53:07         |
| 1     | Mn 257.610†        | -498.9           | 261.0                  | 0.8620 µg/L           | 0.8620 ppb            | 11:53:28         |
| 1     | Mo 202.031†        | 13.9             | 3.7                    | 0.3939 µg/L           | 0.3939 ppb            | 11:53:28         |
| 1     | Ni 231.604†        | 363.6            | 1.6                    | 0.0955 µg/L           | 0.0955 ppb            | 11:53:28         |
| 1     | P 214.914†         | 289.1            | -4.4                   | -7.4608 µg/L          | -7.4608 ppb           | 11:53:28         |
| 1     | Pb 220.353†        | 61.4             | 16.7                   | 4.6760 µg/L           | 4.6760 ppb            | 11:53:28         |
| 1     | S 181.975 Axial†   | 32.3             | 9.6                    | 31.627 µg/L           | 31.627 ppb            | 11:53:28         |
| 1     | Sb 206.836†        | 25.9             | -1.7                   | -1.5591 µg/L          | -1.5591 ppb           | 11:53:28         |
| 1     | Se 196.026†        | 17.5             | -9.6                   | -9.2690 µg/L          | -9.2690 ppb           | 11:53:28         |
| 1     | SiO2†              | 3061.4           | 144.4                  | 27.292 µg/L           | 27.292 ppb            | 11:53:07         |
| 1     | Si 251.611†        | 665.2            | 228.7                  | 16.273 µg/L           | 16.273 ppb            | 11:53:28         |
| 1     | Sn 189.927†        | 0.7              | 2.5                    | 1.0663 µg/L           | 1.0663 ppb            | 11:53:28         |
| 1     | Ti 334.940†        | -523.2           | 196.1                  | 0.4949 µg/L           | 0.4949 ppb            | 11:53:07         |
| 1     | Tl 190.801†        | -33.7            | 4.0                    | 4.2276 µg/L           | 4.2276 ppb            | 11:53:28         |
| 1     | U 409.014†         | -30.6            | 27.9                   | 2.6463 µg/L           | 2.6463 ppb            | 11:53:07         |
| 1     | V 292.402†         | 92.3             | -28.7                  | -0.3731 µg/L          | -0.3731 ppb           | 11:53:07         |
| 1     | Zn 213.857†        | 688.4            | 40.5                   | 0.9788 µg/L           | 0.9788 ppb            | 11:53:28         |
| 2     | Sc RADIAL          | 86415.1          | 86415.1                | 101 %                 |                       | 11:52:06         |
| 2     | Al 396.153Radial†  | -254.5           | 4.5                    | 2.3431 µg/L           | 2.3431 ppb            | 11:52:06         |
| 2     | Ca 317.933Radial†  | 553.4            | 224.3                  | 83.070 µg/L           | 83.070 ppb            | 11:52:26         |
| 2     | Fe 238.204 Radial† | 24.1             | 9.0                    | 102.05 µg/L           | 102.05 ppb            | 11:52:26         |
| 2     | K 766.490 Radial†  | 410.8            | 34.2                   | 17.324 µg/L           | 17.324 ppb            | 11:52:06         |
| 2     | Mg 279.077 IEC†    | 9.5              | 3.5                    | 43.730 µg/L           | 43.730 ppb            | 11:52:26         |
| 2     | Na 589.592 Radial† | 206.3            | -7.5                   | -3.5796 µg/L          | -3.5796 ppb           | 11:52:06         |
| 2     | Sr 421.552†        | 208.1            | 88.2                   | 0.5368 µg/L           | 0.5368 ppb            | 11:52:06         |
| 2     | Sc 361.383         | 1858931.1        | 1858931.1              | 102.08 %              |                       | 11:53:34         |
| 2     | Y 371.029          | 1280936.9        | 1280936.9              | 101.73 %              |                       | 11:53:34         |
| 2     | Ag 328.068†        | -576.0           | -26.8                  | -0.2266 µg/L          | -0.2266 ppb           | 11:53:39         |
| 2     | As 188.979†        | -2.6             | 0.0                    | -0.0057 µg/L          | -0.0057 ppb           | 11:54:00         |
| 2     | B 249.677†         | 329.6            | 13.8                   | 0.6230 µg/L           | 0.6230 ppb            | 11:54:00         |
| 2     | Ba 233.527†        | -0.0             | 19.3                   | 0.4501 µg/L           | 0.4501 ppb            | 11:54:00         |
| 2     | Be 313.107†        | -1529.7          | 36.9                   | 0.0231 µg/L           | 0.0231 ppb            | 11:53:39         |
| 2     | Cd 226.502†        | -166.0           | 3.6                    | 0.0789 µg/L           | 0.0789 ppb            | 11:54:00         |
| 2     | Co 228.616†        | 35.5             | 10.0                   | 0.4574 µg/L           | 0.4574 ppb            | 11:54:00         |
| 2     | Cr 267.716†        | 107.7            | 45.5                   | 1.0520 µg/L           | 1.0520 ppb            | 11:54:00         |
| 2     | Cu 324.752†        | 4163.8           | -189.6                 | -1.3118 µg/L          | -1.3118 ppb           | 11:53:39         |
| 2     | Mn 257.610†        | -488.0           | 270.5                  | 0.8913 µg/L           | 0.8913 ppb            | 11:54:00         |
| 2     | Mo 202.031†        | 6.2              | -3.7                   | -0.3869 µg/L          | -0.3869 ppb           | 11:54:00         |
| 2     | Ni 231.604†        | 354.5            | -6.5                   | -0.3816 µg/L          | -0.3816 ppb           | 11:54:00         |
| 2     | P 214.914†         | 284.6            | -8.2                   | -13.869 µg/L          | -13.869 ppb           | 11:54:00         |
| 2     | Pb 220.353†        | 54.8             | 10.3                   | 2.8865 µg/L           | 2.8865 ppb            | 11:54:00         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 28.5      | 5.9       | 19.477 µg/L  | 19.477 ppb  | 11:54:00 |
| 2 | Sb 206.836†        | 32.3      | 4.6       | 4.3362 µg/L  | 4.3362 ppb  | 11:54:00 |
| 2 | Se 196.026†        | 16.6      | -10.5     | -10.076 µg/L | -10.076 ppb | 11:54:00 |
| 2 | SiO2†              | 2978.3    | 69.8      | 13.183 µg/L  | 13.183 ppb  | 11:53:39 |
| 2 | Si 251.611†        | 664.4     | 229.4     | 16.322 µg/L  | 16.322 ppb  | 11:54:00 |
| 2 | Sn 189.927†        | 2.1       | 3.9       | 1.6494 µg/L  | 1.6494 ppb  | 11:54:00 |
| 2 | Ti 334.940†        | -604.5    | 115.2     | 0.2880 µg/L  | 0.2880 ppb  | 11:53:39 |
| 2 | Tl 190.801†        | -34.0     | 3.7       | 3.8647 µg/L  | 3.8647 ppb  | 11:54:00 |
| 2 | U 409.014†         | -68.3     | -9.1      | -0.8855 µg/L | -0.8855 ppb | 11:53:39 |
| 2 | V 292.402†         | 70.2      | -50.2     | -0.6565 µg/L | -0.6565 ppb | 11:53:39 |
| 2 | Zn 213.857†        | 669.4     | 23.4      | 0.5625 µg/L  | 0.5625 ppb  | 11:54:00 |
| 3 | Sc RADIAL          | 86786.1   | 86786.1   | 101 %        |             | 11:52:31 |
| 3 | Al 396.153Radial†  | -265.8    | -5.6      | -2.9109 µg/L | -2.9109 ppb | 11:52:31 |
| 3 | Ca 317.933Radial†  | 538.6     | 207.3     | 76.783 µg/L  | 76.783 ppb  | 11:52:52 |
| 3 | Fe 238.204 Radial† | 24.2      | 8.9       | 101.65 µg/L  | 101.65 ppb  | 11:52:52 |
| 3 | K 766.490 Radial†  | 401.2     | 22.9      | 11.598 µg/L  | 11.598 ppb  | 11:52:31 |
| 3 | Mg 279.077 IEC†    | 10.1      | 4.0       | 50.867 µg/L  | 50.867 ppb  | 11:52:52 |
| 3 | Na 589.592 Radial† | 221.9     | 7.1       | 3.3634 µg/L  | 3.3634 ppb  | 11:52:31 |
| 3 | Sr 421.552†        | 203.7     | 82.9      | 0.5047 µg/L  | 0.5047 ppb  | 11:52:31 |
| 3 | Sc 361.383         | 1834513.2 | 1834513.2 | 100.73 %     |             | 11:54:06 |
| 3 | Y 371.029          | 1263249.4 | 1263249.4 | 100.33 %     |             | 11:54:06 |
| 3 | Ag 328.068†        | -569.0    | -27.3     | -0.2293 µg/L | -0.2293 ppb | 11:54:12 |
| 3 | As 188.979†        | -1.0      | 1.6       | 2.4830 µg/L  | 2.4830 ppb  | 11:54:32 |
| 3 | B 249.677†         | 335.2     | 23.6      | 1.1051 µg/L  | 1.1051 ppb  | 11:54:32 |
| 3 | Ba 233.527†        | -23.9     | -4.5      | -0.1055 µg/L | -0.1055 ppb | 11:54:32 |
| 3 | Be 313.107†        | -1612.5   | -65.1     | -0.0411 µg/L | -0.0411 ppb | 11:54:12 |
| 3 | Cd 226.502†        | -171.2    | -3.8      | -0.1061 µg/L | -0.1061 ppb | 11:54:32 |
| 3 | Co 228.616†        | 35.4      | 10.3      | 0.4701 µg/L  | 0.4701 ppb  | 11:54:32 |
| 3 | Cr 267.716†        | 94.9      | 34.1      | 0.7895 µg/L  | 0.7895 ppb  | 11:54:32 |
| 3 | Cu 324.752†        | 4205.7    | -93.7     | -0.6387 µg/L | -0.6387 ppb | 11:54:12 |
| 3 | Mn 257.610†        | -475.3    | 276.8     | 0.9115 µg/L  | 0.9115 ppb  | 11:54:32 |
| 3 | Mo 202.031†        | 5.6       | -4.3      | -0.4436 µg/L | -0.4436 ppb | 11:54:32 |
| 3 | Ni 231.604†        | 372.7     | 16.2      | 0.9589 µg/L  | 0.9589 ppb  | 11:54:32 |
| 3 | P 214.914†         | 291.1     | 2.0       | 3.4716 µg/L  | 3.4716 ppb  | 11:54:32 |
| 3 | Pb 220.353†        | 33.1      | -10.5     | -2.9521 µg/L | -2.9521 ppb | 11:54:32 |
| 3 | S 181.975 Axial†   | 31.6      | 9.4       | 30.901 µg/L  | 30.901 ppb  | 11:54:32 |
| 3 | Sb 206.836†        | 23.6      | -3.5      | -3.3326 µg/L | -3.3326 ppb | 11:54:32 |
| 3 | Se 196.026†        | 22.0      | -4.9      | -4.6126 µg/L | -4.6126 ppb | 11:54:32 |
| 3 | SiO2†              | 3011.3    | 141.4     | 26.719 µg/L  | 26.719 ppb  | 11:54:12 |
| 3 | Si 251.611†        | 667.6     | 241.2     | 17.168 µg/L  | 17.168 ppb  | 11:54:32 |
| 3 | Sn 189.927†        | 9.0       | 10.7      | 4.5217 µg/L  | 4.5217 ppb  | 11:54:32 |
| 3 | Ti 334.940†        | -620.2    | 91.7      | 0.2281 µg/L  | 0.2281 ppb  | 11:54:12 |
| 3 | Tl 190.801†        | -32.2     | 5.1       | 5.3182 µg/L  | 5.3182 ppb  | 11:54:32 |
| 3 | U 409.014†         | 2.4       | 60.3      | 5.7314 µg/L  | 5.7314 ppb  | 11:54:12 |
| 3 | V 292.402†         | 94.7      | -25.0     | -0.3314 µg/L | -0.3314 ppb | 11:54:12 |
| 3 | Zn 213.857†        | 699.7     | 62.2      | 1.4953 µg/L  | 1.4953 ppb  | 11:54:32 |

Mean Data: 1202046587|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1852199.8                | 101.71 %           | 0.849    |                    |          | 0.83%   |
| Sc RADIAL          | 86460.7                  | 101 %              | 0.4      |                    |          | 0.35%   |
| Y 371.029          | 1275619.1                | 101.31 %           | 0.854    |                    |          | 0.84%   |
| Ag 328.068†        | -15.6                    | -0.1294 µg/L       | 0.17070  | -0.1294 ppb        | 0.17070  | 131.93% |
| Al 396.153Radial†  | 4.7                      | 2.4515 µg/L        | 5.41734  | 2.4515 ppb         | 5.41734  | 220.98% |
| As 188.979†        | 0.8                      | 1.2132 µg/L        | 1.24513  | 1.2132 ppb         | 1.24513  | 102.63% |
| B 249.677†         | 19.5                     | 0.9056 µg/L        | 0.25156  | 0.9056 ppb         | 0.25156  | 27.78%  |
| Ba 233.527†        | 11.1                     | 0.2590 µg/L        | 0.31580  | 0.2590 ppb         | 0.31580  | 121.94% |
| Be 313.107†        | -15.0                    | -0.0095 µg/L       | 0.03212  | -0.0095 ppb        | 0.03212  | 336.32% |
| Ca 317.933Radial†  | 217.2                    | 80.449 µg/L        | 3.2712   | 80.449 ppb         | 3.2712   | 4.07%   |
| Cd 226.502†        | 0.2                      | -0.0065 µg/L       | 0.09331  | -0.0065 ppb        | 0.09331  | >999.9% |
| Co 228.616†        | 10.1                     | 0.4614 µg/L        | 0.00755  | 0.4614 ppb         | 0.00755  | 1.64%   |
| Cr 267.716†        | 36.4                     | 0.8424 µg/L        | 0.18878  | 0.8424 ppb         | 0.18878  | 22.41%  |
| Cu 324.752†        | -152.4                   | -1.0519 µg/L       | 0.36181  | -1.0519 ppb        | 0.36181  | 34.40%  |
| Fe 238.204 Radial† | 8.5                      | 96.950 µg/L        | 8.4915   | 96.950 ppb         | 8.4915   | 8.76%   |
| K 766.490 Radial†  | 17.1                     | 8.6452 µg/L        | 10.47275 | 8.6452 ppb         | 10.47275 | 121.14% |
| Mg 279.077 IEC†    | 2.5                      | 31.537 µg/L        | 27.5331  | 31.537 ppb         | 27.5331  | 87.30%  |
| Mn 257.610†        | 269.4                    | 0.8883 µg/L        | 0.02492  | 0.8883 ppb         | 0.02492  | 2.81%   |
| Mo 202.031†        | -1.4                     | -0.1455 µg/L       | 0.46800  | -0.1455 ppb        | 0.46800  | 321.57% |
| Na 589.592 Radial† | 16.8                     | 8.0333 µg/L        | 14.52227 | 8.0333 ppb         | 14.52227 | 180.78% |

|                  |       |              |         |             |         |         |
|------------------|-------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 3.8   | 0.2242 µg/L  | 0.67947 | 0.2242 ppb  | 0.67947 | 303.00% |
| P 214.914†       | -3.5  | -5.9528 µg/L | 8.76826 | -5.9528 ppb | 8.76826 | 147.30% |
| Pb 220.353†      | 5.5   | 1.5368 µg/L  | 3.98912 | 1.5368 ppb  | 3.98912 | 259.57% |
| S 181.975 Axial† | 8.3   | 27.335 µg/L  | 6.8148  | 27.335 ppb  | 6.8148  | 24.93%  |
| Sb 206.836†      | -0.2  | -0.1852 µg/L | 4.01477 | -0.1852 ppb | 4.01477 | >999.9% |
| Se 196.026†      | -8.3  | -7.9858 µg/L | 2.94906 | -7.9858 ppb | 2.94906 | 36.93%  |
| SiO2†            | 118.5 | 22.398 µg/L  | 7.9856  | 22.398 ppb  | 7.9856  | 35.65%  |
| Si 251.611†      | 233.1 | 16.587 µg/L  | 0.5030  | 16.587 ppb  | 0.5030  | 3.03%   |
| Sn 189.927†      | 5.7   | 2.4125 µg/L  | 1.84979 | 2.4125 ppb  | 1.84979 | 76.68%  |
| Sr 421.552†      | 94.0  | 0.5722 µg/L  | 0.09056 | 0.5722 ppb  | 0.09056 | 15.83%  |
| Ti 334.940†      | 134.3 | 0.3370 µg/L  | 0.14000 | 0.3370 ppb  | 0.14000 | 41.54%  |
| Tl 190.801†      | 4.3   | 4.4702 µg/L  | 0.75649 | 4.4702 ppb  | 0.75649 | 16.92%  |
| U 409.014†       | 26.4  | 2.4974 µg/L  | 3.31095 | 2.4974 ppb  | 3.31095 | 132.58% |
| V 292.402†       | -34.6 | -0.4537 µg/L | 0.17689 | -0.4537 ppb | 0.17689 | 38.99%  |
| Zn 213.857†      | 42.0  | 1.0122 µg/L  | 0.46730 | 1.0122 ppb  | 0.46730 | 46.17%  |

Sequence No.: 9

Sample ID: 1202046592|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 307

Date Collected: 3/11/2010 11:54:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046592|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 90865.9       | 90865.9             | 106 %        |                    |                    | 11:55:15      |
| 1     | Al 396.153Radial†  | 186591.7      | 176460.2            | 91874 µg/L   |                    | 91874 ppb          | 11:55:15      |
| 1     | Ca 317.933Radial†  | 276115.3      | 260417.1            | 96439 µg/L   |                    | 96439 ppb          | 11:55:15      |
| 1     | Fe 238.204 Radial† | 17044.2       | 16080.3             | 183060 µg/L  |                    | 183060 ppb         | 11:55:20      |
| 1     | K 766.490 Radial†  | 83399.9       | 78382.8             | 39676 µg/L   |                    | 39676 ppb          | 11:55:15      |
| 1     | Mg 279.077 IEC†    | 3211.4        | 3026.7              | 38185 µg/L   |                    | 38185 ppb          | 11:55:20      |
| 1     | Na 589.592 Radial† | 21294.9       | 19896.9             | 9487.7 µg/L  |                    | 9487.7 ppb         | 11:55:20      |
| 1     | Sr 421.552†        | 372605.1      | 351741.5            | 2140.6 µg/L  |                    | 2140.6 ppb         | 11:55:15      |
| 1     | Sc 361.383         | 1884816.1     | 1884816.1           | 103.50 %     |                    |                    | 11:56:00      |
| 1     | Y 371.029          | 1317089.1     | 1317089.1           | 104.60 %     |                    |                    | 11:56:00      |
| 1     | Ag 328.068†        | 33355.3       | 32765.9             | 304.02 µg/L  |                    | 304.02 ppb         | 11:56:00      |
| 1     | As 188.979†        | 735.5         | 713.2               | 1061.0 µg/L  |                    | 1061.0 ppb         | 11:56:20      |
| 1     | B 249.677†         | 32998.0       | 31574.1             | 1453.1 µg/L  |                    | 1453.1 ppb         | 11:56:00      |
| 1     | Ba 233.527†        | 87854.5       | 84905.7             | 1989.6 µg/L  |                    | 1989.6 ppb         | 11:56:00      |
| 1     | Be 313.107†        | 1296603.7     | 1254334.3           | 786.87 µg/L  |                    | 786.87 ppb         | 11:56:00      |
| 1     | Cd 226.502†        | 24653.9       | 23987.2             | 590.60 µg/L  |                    | 590.60 ppb         | 11:56:20      |
| 1     | Co 228.616†        | 21088.5       | 20351.2             | 919.07 µg/L  |                    | 919.07 ppb         | 11:56:20      |
| 1     | Cr 267.716†        | 109462.9      | 105704.7            | 2445.9 µg/L  |                    | 2445.9 ppb         | 11:56:00      |
| 1     | Cu 324.752†        | 271033.3      | 257607.9            | 1843.0 µg/L  |                    | 1843.0 ppb         | 11:56:00      |
| 1     | Mn 257.610†        | 1708833.0     | 1651849.7           | 5431.7 µg/L  |                    | 5431.7 ppb         | 11:56:00      |
| 1     | Mo 202.031†        | 5160.0        | 4975.8              | 529.23 µg/L  |                    | 529.23 ppb         | 11:56:20      |
| 1     | Ni 231.604†        | 23889.9       | 22729.1             | 1346.8 µg/L  |                    | 1346.8 ppb         | 11:56:20      |
| 1     | P 214.914†         | 5293.1        | 4827.3              | 7935.9 µg/L  |                    | 7935.9 ppb         | 11:56:20      |
| 1     | Pb 220.353†        | 3183.5        | 3032.6              | 859.07 µg/L  |                    | 859.07 ppb         | 11:56:20      |
| 1     | S 181.975 Axial†   | 1171.9        | 1110.3              | 3664.8 µg/L  |                    | 3664.8 ppb         | 11:56:20      |
| 1     | Sb 206.836†        | 1383.7        | 1309.9              | 1210.0 µg/L  |                    | 1210.0 ppb         | 11:56:20      |
| 1     | Se 196.026†        | 2999.6        | 2871.5              | 3387.2 µg/L  |                    | 3387.2 ppb         | 11:56:20      |
| 1     | SiO2†              | 458317.4      | 439985.4            | 83154 µg/L   |                    | 83154 ppb          | 11:56:00      |
| 1     | Si 251.611†        | 562902.2      | 543463.4            | 38674 µg/L   |                    | 38674 ppb          | 11:56:00      |
| 1     | Sn 189.927†        | 2707.9        | 2618.2              | 1111.8 µg/L  |                    | 1111.8 ppb         | 11:56:20      |
| 1     | Ti 334.940†        | 2504718.4     | 2420805.4           | 6093.3 µg/L  |                    | 6093.3 ppb         | 11:56:00      |
| 1     | Tl 190.801†        | 1153.2        | 1151.3              | 1284.4 µg/L  |                    | 1284.4 ppb         | 11:56:20      |
| 1     | U 409.014†         | -1204.7       | -1106.2             | -136.90 µg/L |                    | -136.90 ppb        | 11:56:00      |
| 1     | V 292.402†         | 103048.0      | 99447.6             | 1235.9 µg/L  |                    | 1235.9 ppb         | 11:56:00      |
| 1     | Zn 213.857†        | 251344.9      | 242221.0            | 5849.8 µg/L  |                    | 5849.8 ppb         | 11:56:00      |
| 2     | Sc RADIAL          | 90987.6       | 90987.6             | 106 %        |                    |                    | 11:55:26      |
| 2     | Al 396.153Radial†  | 188154.7      | 177698.5            | 92518 µg/L   |                    | 92518 ppb          | 11:55:26      |
| 2     | Ca 317.933Radial†  | 278186.0      | 262021.1            | 97033 µg/L   |                    | 97033 ppb          | 11:55:26      |
| 2     | Fe 238.204 Radial† | 16965.8       | 15984.8             | 181970 µg/L  |                    | 181970 ppb         | 11:55:32      |
| 2     | K 766.490 Radial†  | 84021.0       | 78863.2             | 39919 µg/L   |                    | 39919 ppb          | 11:55:26      |
| 2     | Mg 279.077 IEC†    | 3168.4        | 2982.0              | 37621 µg/L   |                    | 37621 ppb          | 11:55:32      |
| 2     | Na 589.592 Radial† | 21197.7       | 19778.4             | 9431.2 µg/L  |                    | 9431.2 ppb         | 11:55:32      |
| 2     | Sr 421.552†        | 375907.8      | 354385.4            | 2156.7 µg/L  |                    | 2156.7 ppb         | 11:55:26      |
| 2     | Sc 361.383         | 1851969.4     | 1851969.4           | 101.69 %     |                    |                    | 11:56:30      |
| 2     | Y 371.029          | 1297220.7     | 1297220.7           | 103.02 %     |                    |                    | 11:56:30      |
| 2     | Ag 328.068†        | 32942.8       | 32931.8             | 305.38 µg/L  |                    | 305.38 ppb         | 11:56:30      |
| 2     | As 188.979†        | 753.1         | 743.1               | 1107.0 µg/L  |                    | 1107.0 ppb         | 11:56:51      |
| 2     | B 249.677†         | 32569.1       | 31717.8             | 1460.7 µg/L  |                    | 1460.7 ppb         | 11:56:30      |
| 2     | Ba 233.527†        | 86465.0       | 85044.9             | 1992.8 µg/L  |                    | 1992.8 ppb         | 11:56:30      |
| 2     | Be 313.107†        | 1277373.6     | 1257644.0           | 788.95 µg/L  |                    | 788.95 ppb         | 11:56:30      |
| 2     | Cd 226.502†        | 25009.7       | 24759.6             | 610.41 µg/L  |                    | 610.41 ppb         | 11:56:51      |
| 2     | Co 228.616†        | 21407.4       | 21026.2             | 949.95 µg/L  |                    | 949.95 ppb         | 11:56:51      |
| 2     | Cr 267.716†        | 107708.2      | 105855.1            | 2449.3 µg/L  |                    | 2449.3 ppb         | 11:56:30      |
| 2     | Cu 324.752†        | 267457.2      | 258736.0            | 1850.7 µg/L  |                    | 1850.7 ppb         | 11:56:30      |
| 2     | Mn 257.610†        | 1683679.1     | 1656398.7           | 5446.6 µg/L  |                    | 5446.6 ppb         | 11:56:30      |
| 2     | Mo 202.031†        | 5235.3        | 5138.3              | 546.24 µg/L  |                    | 546.24 ppb         | 11:56:51      |
| 2     | Ni 231.604†        | 24215.0       | 23458.1             | 1389.9 µg/L  |                    | 1389.9 ppb         | 11:56:51      |
| 2     | P 214.914†         | 5372.9        | 4996.5              | 8225.2 µg/L  |                    | 8225.2 ppb         | 11:56:51      |
| 2     | Pb 220.353†        | 3235.0        | 3137.8              | 888.63 µg/L  |                    | 888.63 ppb         | 11:56:51      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 1204.7    | 1162.6    | 3837.3 µg/L  | 3837.3 ppb  | 11:56:51 |
| 2 | Sb 206.836†        | 1410.8    | 1360.3    | 1257.5 µg/L  | 1257.5 ppb  | 11:56:51 |
| 2 | Se 196.026†        | 3055.0    | 2977.4    | 3489.0 µg/L  | 3489.0 ppb  | 11:56:51 |
| 2 | SiO2†              | 451443.8  | 441080.4  | 83361 µg/L   | 83361 ppb   | 11:56:30 |
| 2 | Si 251.611†        | 554255.4  | 544606.9  | 38755 µg/L   | 38755 ppb   | 11:56:30 |
| 2 | Sn 189.927†        | 2736.2    | 2692.5    | 1143.1 µg/L  | 1143.1 ppb  | 11:56:51 |
| 2 | Ti 334.940†        | 2467162.9 | 2426798.2 | 6108.4 µg/L  | 6108.4 ppb  | 11:56:30 |
| 2 | Tl 190.801†        | 1174.9    | 1192.3    | 1327.2 µg/L  | 1327.2 ppb  | 11:56:51 |
| 2 | U 409.014†         | -1112.0   | -1035.6   | -130.05 µg/L | -130.05 ppb | 11:56:30 |
| 2 | V 292.402†         | 101524.7  | 99715.6   | 1239.7 µg/L  | 1239.7 ppb  | 11:56:30 |
| 2 | Zn 213.857†        | 247429.7  | 242678.2  | 5860.8 µg/L  | 5860.8 ppb  | 11:56:30 |
| 3 | Sc RADIAL          | 90998.3   | 90998.3   | 106 %        |             | 11:55:38 |
| 3 | Al 396.153Radial†  | 188655.6  | 178149.8  | 92753 µg/L   | 92753 ppb   | 11:55:38 |
| 3 | Ca 317.933Radial†  | 279417.8  | 263151.6  | 97452 µg/L   | 97452 ppb   | 11:55:38 |
| 3 | Fe 238.204 Radial† | 17009.6   | 16024.2   | 182420 µg/L  | 182420 ppb  | 11:55:43 |
| 3 | K 766.490 Radial†  | 84157.5   | 78982.5   | 39980 µg/L   | 39980 ppb   | 11:55:38 |
| 3 | Mg 279.077 IEC†    | 3194.4    | 3006.2    | 37926 µg/L   | 37926 ppb   | 11:55:43 |
| 3 | Na 589.592 Radial† | 21391.3   | 19958.5   | 9517.1 µg/L  | 9517.1 ppb  | 11:55:43 |
| 3 | Sr 421.552†        | 376860.4  | 355241.8  | 2161.9 µg/L  | 2161.9 ppb  | 11:55:38 |
| 3 | Sc 361.383         | 1872697.8 | 1872697.8 | 102.83 %     |             | 11:57:01 |
| 3 | Y 371.029          | 1312261.3 | 1312261.3 | 104.22 %     |             | 11:57:01 |
| 3 | Ag 328.068†        | 33411.5   | 33029.1   | 306.28 µg/L  | 306.28 ppb  | 11:57:01 |
| 3 | As 188.979†        | 754.0     | 735.8     | 1095.7 µg/L  | 1095.7 ppb  | 11:57:22 |
| 3 | B 249.677†         | 33066.8   | 31847.3   | 1466.8 µg/L  | 1466.8 ppb  | 11:57:01 |
| 3 | Ba 233.527†        | 87790.6   | 85392.9   | 2001.0 µg/L  | 2001.0 ppb  | 11:57:01 |
| 3 | Be 313.107†        | 1297286.7 | 1263105.3 | 792.38 µg/L  | 792.38 ppb  | 11:57:01 |
| 3 | Cd 226.502†        | 24927.6   | 24407.5   | 601.39 µg/L  | 601.39 ppb  | 11:57:22 |
| 3 | Co 228.616†        | 21381.6   | 20768.1   | 938.09 µg/L  | 938.09 ppb  | 11:57:22 |
| 3 | Cr 267.716†        | 109352.3  | 106281.6  | 2459.2 µg/L  | 2459.2 ppb  | 11:57:01 |
| 3 | Cu 324.752†        | 271280.1  | 259542.6  | 1856.5 µg/L  | 1856.5 ppb  | 11:57:01 |
| 3 | Mn 257.610†        | 1709833.9 | 1663507.3 | 5469.9 µg/L  | 5469.9 ppb  | 11:57:01 |
| 3 | Mo 202.031†        | 5232.4    | 5078.5    | 539.98 µg/L  | 539.98 ppb  | 11:57:22 |
| 3 | Ni 231.604†        | 24210.3   | 23190.0   | 1374.0 µg/L  | 1374.0 ppb  | 11:57:22 |
| 3 | P 214.914†         | 5364.0    | 4929.3    | 8109.6 µg/L  | 8109.6 ppb  | 11:57:22 |
| 3 | Pb 220.353†        | 3219.6    | 3087.6    | 874.55 µg/L  | 874.55 ppb  | 11:57:22 |
| 3 | S 181.975 Axial†   | 1199.8    | 1144.7    | 3778.3 µg/L  | 3778.3 ppb  | 11:57:22 |
| 3 | Sb 206.836†        | 1404.0    | 1338.4    | 1236.7 µg/L  | 1236.7 ppb  | 11:57:22 |
| 3 | Se 196.026†        | 3050.9    | 2940.2    | 3453.3 µg/L  | 3453.3 ppb  | 11:57:22 |
| 3 | SiO2†              | 457921.7  | 442466.2  | 83623 µg/L   | 83623 ppb   | 11:57:01 |
| 3 | Si 251.611†        | 562215.2  | 546314.7  | 38877 µg/L   | 38877 ppb   | 11:57:01 |
| 3 | Sn 189.927†        | 2741.8    | 2668.1    | 1132.9 µg/L  | 1132.9 ppb  | 11:57:22 |
| 3 | Ti 334.940†        | 2503380.0 | 2435164.3 | 6129.5 µg/L  | 6129.5 ppb  | 11:57:01 |
| 3 | Tl 190.801†        | 1177.9    | 1182.5    | 1317.2 µg/L  | 1317.2 ppb  | 11:57:22 |
| 3 | U 409.014†         | -1135.6   | -1046.5   | -131.18 µg/L | -131.18 ppb | 11:57:01 |
| 3 | V 292.402†         | 103044.5  | 100088.5  | 1244.3 µg/L  | 1244.3 ppb  | 11:57:01 |
| 3 | Zn 213.857†        | 251244.0  | 243694.3  | 5885.4 µg/L  | 5885.4 ppb  | 11:57:01 |

Mean Data: 1202046592|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383         | 1869827.8                | 102.67 %           | 0.912    |                    |          | 0.89% |
| Sc RADIAL          | 90950.6                  | 106 %              | 0.1      |                    |          | 0.08% |
| Y 371.029          | 1308857.1                | 103.95 %           | 0.823    |                    |          | 0.79% |
| Ag 328.068†        | 32908.9                  | 305.23 µg/L        | 1.141    | 305.23 ppb         | 1.141    | 0.37% |
| Al 396.153Radial†  | 177436.1                 | 92382 µg/L         | 455.4    | 92382 ppb          | 455.4    | 0.49% |
| As 188.979†        | 730.7                    | 1087.9 µg/L        | 23.97    | 1087.9 ppb         | 23.97    | 2.20% |
| B 249.677†         | 31713.1                  | 1460.2 µg/L        | 6.87     | 1460.2 ppb         | 6.87     | 0.47% |
| Ba 233.527†        | 85114.5                  | 1994.4 µg/L        | 5.88     | 1994.4 ppb         | 5.88     | 0.29% |
| Be 313.107†        | 1258361.2                | 789.40 µg/L        | 2.780    | 789.40 ppb         | 2.780    | 0.35% |
| Ca 317.933Radial†  | 261863.3                 | 96975 µg/L         | 508.9    | 96975 ppb          | 508.9    | 0.52% |
| Cd 226.502†        | 24384.8                  | 600.80 µg/L        | 9.916    | 600.80 ppb         | 9.916    | 1.65% |
| Co 228.616†        | 20715.2                  | 935.70 µg/L        | 15.574   | 935.70 ppb         | 15.574   | 1.66% |
| Cr 267.716†        | 105947.1                 | 2451.5 µg/L        | 6.92     | 2451.5 ppb         | 6.92     | 0.28% |
| Cu 324.752†        | 258628.8                 | 1850.1 µg/L        | 6.76     | 1850.1 ppb         | 6.76     | 0.37% |
| Fe 238.204 Radial† | 16029.8                  | 182480 µg/L        | 545.6    | 182480 ppb         | 545.6    | 0.30% |
| K 766.490 Radial†  | 78742.9                  | 39858 µg/L         | 160.7    | 39858 ppb          | 160.7    | 0.40% |
| Mg 279.077 IEC†    | 3005.0                   | 37911 µg/L         | 282.5    | 37911 ppb          | 282.5    | 0.75% |
| Mn 257.610†        | 1657251.9                | 5449.4 µg/L        | 19.28    | 5449.4 ppb         | 19.28    | 0.35% |
| Mo 202.031†        | 5064.2                   | 538.48 µg/L        | 8.604    | 538.48 ppb         | 8.604    | 1.60% |
| Na 589.592 Radial† | 19877.9                  | 9478.7 µg/L        | 43.66    | 9478.7 ppb         | 43.66    | 0.46% |



|                  |           |              |        |             |        |       |
|------------------|-----------|--------------|--------|-------------|--------|-------|
| Ni 231.604†      | 23125.7   | 1370.2 µg/L  | 21.80  | 1370.2 ppb  | 21.80  | 1.59% |
| P 214.914†       | 4917.7    | 8090.2 µg/L  | 145.61 | 8090.2 ppb  | 145.61 | 1.80% |
| Pb 220.353†      | 3086.0    | 874.08 µg/L  | 14.787 | 874.08 ppb  | 14.787 | 1.69% |
| S 181.975 Axial† | 1139.2    | 3760.1 µg/L  | 87.71  | 3760.1 ppb  | 87.71  | 2.33% |
| Sb 206.836†      | 1336.2    | 1234.7 µg/L  | 23.85  | 1234.7 ppb  | 23.85  | 1.93% |
| Se 196.026†      | 2929.7    | 3443.2 µg/L  | 51.64  | 3443.2 ppb  | 51.64  | 1.50% |
| SiO2†            | 441177.3  | 83379 µg/L   | 235.0  | 83379 ppb   | 235.0  | 0.28% |
| Si 251.611†      | 544795.0  | 38769 µg/L   | 102.1  | 38769 ppb   | 102.1  | 0.26% |
| Sn 189.927†      | 2659.6    | 1129.3 µg/L  | 15.98  | 1129.3 ppb  | 15.98  | 1.42% |
| Sr 421.552†      | 353789.6  | 2153.1 µg/L  | 11.10  | 2153.1 ppb  | 11.10  | 0.52% |
| Ti 334.940†      | 2427589.3 | 6110.4 µg/L  | 18.17  | 6110.4 ppb  | 18.17  | 0.30% |
| Tl 190.801†      | 1175.4    | 1309.6 µg/L  | 22.40  | 1309.6 ppb  | 22.40  | 1.71% |
| U 409.014†       | -1062.8   | -132.71 µg/L | 3.672  | -132.71 ppb | 3.672  | 2.77% |
| V 292.402†       | 99750.6   | 1240.0 µg/L  | 4.19   | 1240.0 ppb  | 4.19   | 0.34% |
| Zn 213.857†      | 242864.5  | 5865.3 µg/L  | 18.24  | 5865.3 ppb  | 18.24  | 0.31% |

Sequence No.: 10  
 Sample ID: 247188001|954676|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 308  
 Date Collected: 3/11/2010 11:57:31  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 247188001|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 85980.2          | 85980.2                | 100 %                 |                       | 11:58:04         |
| 1     | Al 396.153Radial†  | 18200.8          | 18421.3                | 9591.8 µg/L           | 9591.8 ppb            | 11:58:04         |
| 1     | Ca 317.933Radial†  | 17254.9          | 16894.9                | 6256.6 µg/L           | 6256.6 ppb            | 11:58:04         |
| 1     | Fe 238.204 Radial† | 5453.3           | 5427.3                 | 61778 µg/L            | 61778 ppb             | 11:58:24         |
| 1     | K 766.490 Radial†  | 10939.7          | 10544.0                | 5337.2 µg/L           | 5337.2 ppb            | 11:58:04         |
| 1     | Mg 279.077 IEC†    | 111.8            | 105.7                  | 1273.6 µg/L           | 1273.6 ppb            | 11:58:24         |
| 1     | Na 589.592 Radial† | 8230.5           | 8001.5                 | 3815.5 µg/L           | 3815.5 ppb            | 11:58:04         |
| 1     | Sr 421.552†        | 2785.1           | 2661.0                 | 16.194 µg/L           | 16.194 ppb            | 11:58:04         |
| 1     | Sc 361.383         | 1802502.6        | 1802502.6              | 98.977 %              |                       | 11:59:29         |
| 1     | Y 371.029          | 1386961.1        | 1386961.1              | 110.15 %              |                       | 11:59:29         |
| 1     | Ag 328.068†        | -1184.3          | -659.1                 | -0.7006 µg/L          | -0.7006 ppb           | 11:59:35         |
| 1     | As 188.979†        | 7.6              | 10.3                   | 7.4141 µg/L           | 7.4141 ppb            | 11:59:56         |
| 1     | B 249.677†         | 806.1            | 505.3                  | -7.2363 µg/L          | -7.2363 ppb           | 11:59:35         |
| 1     | Ba 233.527†        | 6070.7           | 6152.8                 | 144.07 µg/L           | 144.07 ppb            | 11:59:35         |
| 1     | Be 313.107†        | 9324.2           | 10956.2                | 5.7561 µg/L           | 5.7561 ppb            | 11:59:35         |
| 1     | Cd 226.502†        | 146.1            | 313.8                  | 1.0045 µg/L           | 1.0045 ppb            | 11:59:56         |
| 1     | Co 228.616†        | 273.3            | 251.3                  | 5.2822 µg/L           | 5.2822 ppb            | 11:59:56         |
| 1     | Cr 267.716†        | 7460.5           | 7477.6                 | 172.99 µg/L           | 172.99 ppb            | 11:59:35         |
| 1     | Cu 324.752†        | 5037.6           | 821.0                  | 17.379 µg/L           | 17.379 ppb            | 11:59:35         |
| 1     | Mn 257.610†        | 889557.4         | 899503.2               | 2956.9 µg/L           | 2956.9 ppb            | 11:59:29         |
| 1     | Mo 202.031†        | 140.1            | 131.7                  | 16.175 µg/L           | 16.175 ppb            | 11:59:56         |
| 1     | Ni 231.604†        | 456.2            | 107.1                  | 7.1306 µg/L           | 7.1306 ppb            | 11:59:56         |
| 1     | P 214.914†         | 540.2            | 258.8                  | 393.25 µg/L           | 393.25 ppb            | 11:59:56         |
| 1     | Pb 220.353†        | 213.0            | 171.8                  | 50.136 µg/L           | 50.136 ppb            | 11:59:56         |
| 1     | S 181.975 Axial†   | 30.6             | 9.0                    | 29.586 µg/L           | 29.586 ppb            | 11:59:56         |
| 1     | Sb 206.836†        | 22.6             | -4.1                   | -5.7053 µg/L          | -5.7053 ppb           | 11:59:56         |
| 1     | Se 196.026†        | -26.9            | -53.9                  | 141.48 µg/L           | 141.48 ppb            | 11:59:56         |
| 1     | SiO2†              | 276141.4         | 276148.5               | 52190 µg/L            | 52190 ppb             | 11:59:29         |
| 1     | Si 251.611†        | 338004.6         | 341077.7               | 24272 µg/L            | 24272 ppb             | 11:59:29         |
| 1     | Sn 189.927†        | -23.7            | -22.1                  | -8.9915 µg/L          | -8.9915 ppb           | 11:59:56         |
| 1     | Ti 334.940†        | 1172797.1        | 1185630.0              | 2985.0 µg/L           | 2985.0 ppb            | 11:59:29         |
| 1     | Tl 190.801†        | -74.9            | -38.7                  | 4.9455 µg/L           | 4.9455 ppb            | 11:59:56         |
| 1     | U 409.014†         | -1707.2          | -1667.0                | -168.06 µg/L          | -168.06 ppb           | 11:59:29         |
| 1     | V 292.402†         | 2642.4           | 2550.7                 | 21.272 µg/L           | 21.272 ppb            | 11:59:35         |
| 1     | Zn 213.857†        | 20490.2          | 20069.6                | 483.28 µg/L           | 483.28 ppb            | 11:59:35         |
| 2     | Sc RADIAL          | 85211.0          | 85211.0                | 99.3 %                |                       | 11:58:30         |
| 2     | Al 396.153Radial†  | 18199.6          | 18584.0                | 9676.6 µg/L           | 9676.6 ppb            | 11:58:30         |
| 2     | Ca 317.933Radial†  | 17145.6          | 16940.4                | 6273.4 µg/L           | 6273.4 ppb            | 11:58:30         |
| 2     | Fe 238.204 Radial† | 5464.1           | 5487.4                 | 62462 µg/L            | 62462 ppb             | 11:58:50         |
| 2     | K 766.490 Radial†  | 10810.9          | 10512.8                | 5321.4 µg/L           | 5321.4 ppb            | 11:58:30         |
| 2     | Mg 279.077 IEC†    | 113.7            | 108.6                  | 1309.9 µg/L           | 1309.9 ppb            | 11:58:50         |
| 2     | Na 589.592 Radial† | 8217.3           | 8062.4                 | 3844.5 µg/L           | 3844.5 ppb            | 11:58:30         |
| 2     | Sr 421.552†        | 2710.6           | 2611.1                 | 15.890 µg/L           | 15.890 ppb            | 11:58:30         |
| 2     | Sc 361.383         | 1796104.2        | 1796104.2              | 98.625 %              |                       | 12:00:03         |
| 2     | Y 371.029          | 1378410.6        | 1378410.6              | 109.47 %              |                       | 12:00:03         |
| 2     | Ag 328.068†        | -1208.7          | -688.1                 | -0.9046 µg/L          | -0.9046 ppb           | 12:00:09         |
| 2     | As 188.979†        | 9.6              | 12.3                   | 10.349 µg/L           | 10.349 ppb            | 12:00:29         |
| 2     | B 249.677†         | 808.8            | 511.0                  | -7.3132 µg/L          | -7.3132 ppb           | 12:00:09         |
| 2     | Ba 233.527†        | 6073.7           | 6177.6                 | 144.65 µg/L           | 144.65 ppb            | 12:00:09         |
| 2     | Be 313.107†        | 9290.3           | 10955.3                | 5.7513 µg/L           | 5.7513 ppb            | 12:00:09         |
| 2     | Cd 226.502†        | 139.5            | 307.6                  | 0.7700 µg/L           | 0.7700 ppb            | 12:00:29         |
| 2     | Co 228.616†        | 259.6            | 238.4                  | 4.6691 µg/L           | 4.6691 ppb            | 12:00:29         |
| 2     | Cr 267.716†        | 7478.8           | 7523.0                 | 174.04 µg/L           | 174.04 ppb            | 12:00:09         |
| 2     | Cu 324.752†        | 4979.7           | 780.4                  | 17.222 µg/L           | 17.222 ppb            | 12:00:09         |
| 2     | Mn 257.610†        | 890776.1         | 903940.6               | 2971.5 µg/L           | 2971.5 ppb            | 12:00:03         |
| 2     | Mo 202.031†        | 133.8            | 125.8                  | 15.583 µg/L           | 15.583 ppb            | 12:00:29         |
| 2     | Ni 231.604†        | 460.7            | 113.4                  | 7.5091 µg/L           | 7.5091 ppb            | 12:00:29         |
| 2     | P 214.914†         | 524.6            | 245.0                  | 369.11 µg/L           | 369.11 ppb            | 12:00:29         |
| 2     | Pb 220.353†        | 200.7            | 160.2                  | 46.886 µg/L           | 46.886 ppb            | 12:00:29         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 35.7      | 14.2      | 46.760 µg/L  | 46.760 ppb  | 12:00:29 |
| 2 | Sb 206.836†        | 20.8      | -6.0      | -7.4410 µg/L | -7.4410 ppb | 12:00:29 |
| 2 | Se 196.026†        | -22.1     | -49.2     | 148.30 µg/L  | 148.30 ppb  | 12:00:29 |
| 2 | SiO2†              | 276103.4  | 277103.8  | 52370 µg/L   | 52370 ppb   | 12:00:03 |
| 2 | Si 251.611†        | 338061.1  | 342351.5  | 24362 µg/L   | 24362 ppb   | 12:00:03 |
| 2 | Sn 189.927†        | -24.6     | -23.1     | -9.4243 µg/L | -9.4243 ppb | 12:00:29 |
| 2 | Ti 334.940†        | 1172951.1 | 1190007.3 | 2996.0 µg/L  | 2996.0 ppb  | 12:00:03 |
| 2 | Tl 190.801†        | -73.3     | -37.4     | 6.5944 µg/L  | 6.5944 ppb  | 12:00:29 |
| 2 | U 409.014†         | -1704.1   | -1670.0   | -168.44 µg/L | -168.44 ppb | 12:00:03 |
| 2 | V 292.402†         | 2547.0    | 2463.5    | 20.038 µg/L  | 20.038 ppb  | 12:00:09 |
| 2 | Zn 213.857†        | 20426.8   | 20079.1   | 483.48 µg/L  | 483.48 ppb  | 12:00:09 |
| 3 | Sc RADIAL          | 84965.2   | 84965.2   | 99.0 %       |             | 11:58:56 |
| 3 | Al 396.153Radial†  | 18141.8   | 18578.7   | 9673.9 µg/L  | 9673.9 ppb  | 11:58:56 |
| 3 | Ca 317.933Radial†  | 17051.9   | 16895.7   | 6256.9 µg/L  | 6256.9 ppb  | 11:58:56 |
| 3 | Fe 238.204 Radial† | 5447.7    | 5486.7    | 62454 µg/L   | 62454 ppb   | 11:59:16 |
| 3 | K 766.490 Radial†  | 10750.0   | 10482.7   | 5306.2 µg/L  | 5306.2 ppb  | 11:58:56 |
| 3 | Mg 279.077 IEC†    | 118.4     | 113.6     | 1373.6 µg/L  | 1373.6 ppb  | 11:59:16 |
| 3 | Na 589.592 Radial† | 8140.2    | 8008.4    | 3818.8 µg/L  | 3818.8 ppb  | 11:58:56 |
| 3 | Sr 421.552†        | 2678.1    | 2586.1    | 15.738 µg/L  | 15.738 ppb  | 11:58:56 |
| 3 | Sc 361.383         | 1790856.7 | 1790856.7 | 98.337 %     |             | 12:00:37 |
| 3 | Y 371.029          | 1369382.1 | 1369382.1 | 108.75 %     |             | 12:00:37 |
| 3 | Ag 328.068†        | -1211.5   | -694.5    | -0.9623 µg/L | -0.9623 ppb | 12:00:43 |
| 3 | As 188.979†        | 4.5       | 7.1       | 2.4575 µg/L  | 2.4575 ppb  | 12:01:03 |
| 3 | B 249.677†         | 742.4     | 445.9     | -10.515 µg/L | -10.515 ppb | 12:00:43 |
| 3 | Ba 233.527†        | 5770.7    | 5887.6    | 137.86 µg/L  | 137.86 ppb  | 12:00:43 |
| 3 | Be 313.107†        | 8530.5    | 10210.3   | 5.3345 µg/L  | 5.3345 ppb  | 12:00:43 |
| 3 | Cd 226.502†        | 121.3     | 289.5     | 0.3115 µg/L  | 0.3115 ppb  | 12:01:03 |
| 3 | Co 228.616†        | 242.9     | 222.3     | 4.2137 µg/L  | 4.2137 ppb  | 12:01:03 |
| 3 | Cr 267.716†        | 6904.8    | 6961.6    | 161.05 µg/L  | 161.05 ppb  | 12:00:43 |
| 3 | Cu 324.752†        | 4934.5    | 749.3     | 17.002 µg/L  | 17.002 ppb  | 12:00:43 |
| 3 | Mn 257.610†        | 852890.7  | 868061.0  | 2853.7 µg/L  | 2853.7 ppb  | 12:00:37 |
| 3 | Mo 202.031†        | 124.1     | 116.4     | 14.592 µg/L  | 14.592 ppb  | 12:01:03 |
| 3 | Ni 231.604†        | 459.0     | 113.0     | 7.4904 µg/L  | 7.4904 ppb  | 12:01:03 |
| 3 | P 214.914†         | 515.0     | 236.7     | 355.01 µg/L  | 355.01 ppb  | 12:01:03 |
| 3 | Pb 220.353†        | 185.6     | 145.3     | 42.729 µg/L  | 42.729 ppb  | 12:01:03 |
| 3 | S 181.975 Axial†   | 29.3      | 7.8       | 25.609 µg/L  | 25.609 ppb  | 12:01:03 |
| 3 | Sb 206.836†        | 20.8      | -5.8      | -7.1833 µg/L | -7.1833 ppb | 12:01:03 |
| 3 | Se 196.026†        | -16.4     | -43.4     | 153.95 µg/L  | 153.95 ppb  | 12:01:03 |
| 3 | SiO2†              | 267291.5  | 268963.2  | 50832 µg/L   | 50832 ppb   | 12:00:37 |
| 3 | Si 251.611†        | 327229.4  | 332341.1  | 23650 µg/L   | 23650 ppb   | 12:00:37 |
| 3 | Sn 189.927†        | -21.8     | -20.4     | -8.2839 µg/L | -8.2839 ppb | 12:01:03 |
| 3 | Ti 334.940†        | 1116270.8 | 1135853.4 | 2859.7 µg/L  | 2859.7 ppb  | 12:00:37 |
| 3 | Tl 190.801†        | -66.3     | -30.4     | 12.199 µg/L  | 12.199 ppb  | 12:01:03 |
| 3 | U 409.014†         | -1682.4   | -1653.0   | -166.82 µg/L | -166.82 ppb | 12:00:37 |
| 3 | V 292.402†         | 2520.3    | 2444.0    | 19.758 µg/L  | 19.758 ppb  | 12:00:43 |
| 3 | Zn 213.857†        | 19438.9   | 19135.2   | 460.60 µg/L  | 460.60 ppb  | 12:00:43 |

Mean Data: 247188001|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383         | 1796487.9                | 98.646 %           | 0.3203   |                    |          | 0.32%  |
| Sc RADIAL          | 85385.4                  | 99.5 %             | 0.62     |                    |          | 0.62%  |
| Y 371.029          | 1378251.3                | 109.46 %           | 0.698    |                    |          | 0.64%  |
| Ag 328.068†        | -680.5                   | -0.8558 µg/L       | 0.13749  | -0.8558 ppb        | 0.13749  | 16.07% |
| Al 396.153Radial†  | 18528.0                  | 9647.4 µg/L        | 48.15    | 9647.4 ppb         | 48.15    | 0.50%  |
| As 188.979†        | 9.9                      | 6.7402 µg/L        | 3.98867  | 6.7402 ppb         | 3.98867  | 59.18% |
| B 249.677†         | 487.4                    | -8.3549 µg/L       | 1.87122  | -8.3549 ppb        | 1.87122  | 22.40% |
| Ba 233.527†        | 6072.7                   | 142.19 µg/L        | 3.763    | 142.19 ppb         | 3.763    | 2.65%  |
| Be 313.107†        | 10707.3                  | 5.6140 µg/L        | 0.24202  | 5.6140 ppb         | 0.24202  | 4.31%  |
| Ca 317.933Radial†  | 16910.3                  | 6262.3 µg/L        | 9.63     | 6262.3 ppb         | 9.63     | 0.15%  |
| Cd 226.502†        | 303.6                    | 0.6953 µg/L        | 0.35249  | 0.6953 ppb         | 0.35249  | 50.70% |
| Co 228.616†        | 237.3                    | 4.7217 µg/L        | 0.53619  | 4.7217 ppb         | 0.53619  | 11.36% |
| Cr 267.716†        | 7320.7                   | 169.36 µg/L        | 7.215    | 169.36 ppb         | 7.215    | 4.26%  |
| Cu 324.752†        | 783.6                    | 17.201 µg/L        | 0.1892   | 17.201 ppb         | 0.1892   | 1.10%  |
| Fe 238.204 Radial† | 5467.1                   | 62231 µg/L         | 392.5    | 62231 ppb          | 392.5    | 0.63%  |
| K 766.490 Radial†  | 10513.2                  | 5321.6 µg/L        | 15.50    | 5321.6 ppb         | 15.50    | 0.29%  |
| Mg 279.077 IEC†    | 109.3                    | 1319.0 µg/L        | 50.67    | 1319.0 ppb         | 50.67    | 3.84%  |
| Mn 257.610†        | 890501.6                 | 2927.3 µg/L        | 64.22    | 2927.3 ppb         | 64.22    | 2.19%  |
| Mo 202.031†        | 124.7                    | 15.450 µg/L        | 0.7999   | 15.450 ppb         | 0.7999   | 5.18%  |
| Na 589.592 Radial† | 8024.1                   | 3826.2 µg/L        | 15.89    | 3826.2 ppb         | 15.89    | 0.42%  |

|                  |           |              |         |             |         |        |
|------------------|-----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 111.2     | 7.3767 µg/L  | 0.21333 | 7.3767 ppb  | 0.21333 | 2.89%  |
| P 214.914†       | 246.8     | 372.46 µg/L  | 19.336  | 372.46 ppb  | 19.336  | 5.19%  |
| Pb 220.353†      | 159.1     | 46.584 µg/L  | 3.7128  | 46.584 ppb  | 3.7128  | 7.97%  |
| S 181.975 Axial† | 10.3      | 33.985 µg/L  | 11.2404 | 33.985 ppb  | 11.2404 | 33.07% |
| Sb 206.836†      | -5.3      | -6.7766 µg/L | 0.93663 | -6.7766 ppb | 0.93663 | 13.82% |
| Se 196.026†      | -48.8     | 147.91 µg/L  | 6.241   | 147.91 ppb  | 6.241   | 4.22%  |
| SiO2†            | 274071.8  | 51797 µg/L   | 841.0   | 51797 ppb   | 841.0   | 1.62%  |
| Si 251.611†      | 338590.1  | 24095 µg/L   | 387.8   | 24095 ppb   | 387.8   | 1.61%  |
| Sn 189.927†      | -21.9     | -8.8999 µg/L | 0.57569 | -8.8999 ppb | 0.57569 | 6.47%  |
| Sr 421.552†      | 2619.4    | 15.941 µg/L  | 0.2322  | 15.941 ppb  | 0.2322  | 1.46%  |
| Ti 334.940†      | 1170496.9 | 2946.9 µg/L  | 75.74   | 2946.9 ppb  | 75.74   | 2.57%  |
| Tl 190.801†      | -35.5     | 7.9128 µg/L  | 3.80206 | 7.9128 ppb  | 3.80206 | 48.05% |
| U 409.014†       | -1663.3   | -167.77 µg/L | 0.849   | -167.77 ppb | 0.849   | 0.51%  |
| V 292.402†       | 2486.1    | 20.356 µg/L  | 0.8052  | 20.356 ppb  | 0.8052  | 3.96%  |
| Zn 213.857†      | 19761.3   | 475.79 µg/L  | 13.151  | 475.79 ppb  | 13.151  | 2.76%  |

Sequence No.: 11  
 Sample ID: 1202046588|954676|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 309  
 Date Collected: 3/11/2010 12:01:12  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 1202046588|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88682.2          | 88682.2                | 103 %                 |                       | 12:01:45         |
| 1     | Al 396.153Radial†  | 14915.6          | 14689.1                | 7648.6 µg/L           | 7648.6 ppb            | 12:01:45         |
| 1     | Ca 317.933Radial†  | 14155.0          | 13370.9                | 4951.6 µg/L           | 4951.6 ppb            | 12:01:45         |
| 1     | Fe 238.204 Radial† | 4891.1           | 4717.6                 | 53699 µg/L            | 53699 ppb             | 12:02:05         |
| 1     | K 766.490 Radial†  | 9096.9           | 8428.2                 | 4266.2 µg/L           | 4266.2 ppb            | 12:01:45         |
| 1     | Mg 279.077 IEC†    | 95.4             | 86.4                   | 1038.0 µg/L           | 1038.0 ppb            | 12:02:05         |
| 1     | Na 589.592 Radial† | 6658.4           | 6230.1                 | 2970.8 µg/L           | 2970.8 ppb            | 12:01:45         |
| 1     | Sr 421.552†        | 2308.6           | 2115.3                 | 12.873 µg/L           | 12.873 ppb            | 12:01:45         |
| 1     | Sc 361.383         | 1901390.9        | 1901390.9              | 104.41 %              |                       | 12:03:10         |
| 1     | Y 371.029          | 1431998.5        | 1431998.5              | 113.73 %              |                       | 12:03:10         |
| 1     | Ag 328.068†        | -1121.7          | -536.9                 | -0.3125 µg/L          | -0.3125 ppb           | 12:03:16         |
| 1     | As 188.979†        | 7.1              | 9.3                    | 7.1028 µg/L           | 7.1028 ppb            | 12:03:36         |
| 1     | B 249.677†         | 706.1            | 367.2                  | -10.002 µg/L          | -10.002 ppb           | 12:03:16         |
| 1     | Ba 233.527†        | 5354.6           | 5147.9                 | 120.54 µg/L           | 120.54 ppb            | 12:03:16         |
| 1     | Be 313.107†        | 7979.7           | 9178.5                 | 4.7898 µg/L           | 4.7898 ppb            | 12:03:16         |
| 1     | Cd 226.502†        | 109.7            | 271.3                  | 0.8329 µg/L           | 0.8329 ppb            | 12:03:36         |
| 1     | Co 228.616†        | 248.6            | 213.3                  | 4.3702 µg/L           | 4.3702 ppb            | 12:03:36         |
| 1     | Cr 267.716†        | 1530.8           | 1406.1                 | 32.542 µg/L           | 32.542 ppb            | 12:03:36         |
| 1     | Cu 324.752†        | 4804.0           | 332.6                  | 12.430 µg/L           | 12.430 ppb            | 12:03:16         |
| 1     | Mn 257.610†        | 822679.4         | 788705.1               | 2592.6 µg/L           | 2592.6 ppb            | 12:03:10         |
| 1     | Mo 202.031†        | 78.1             | 65.0                   | 8.8653 µg/L           | 8.8653 ppb            | 12:03:36         |
| 1     | Ni 231.604†        | 426.4            | 54.6                   | 3.9202 µg/L           | 3.9202 ppb            | 12:03:36         |
| 1     | P 214.914†         | 516.0            | 207.2                  | 311.65 µg/L           | 311.65 ppb            | 12:03:36         |
| 1     | Pb 220.353†        | 189.5            | 138.1                  | 40.377 µg/L           | 40.377 ppb            | 12:03:36         |
| 1     | S 181.975 Axial†   | 22.6             | -0.4                   | -1.2536 µg/L          | -1.2536 ppb           | 12:03:36         |
| 1     | Sb 206.836†        | 13.4             | -14.2                  | -13.680 µg/L          | -13.680 ppb           | 12:03:36         |
| 1     | Se 196.026†        | -13.9            | -40.0                  | 129.82 µg/L           | 129.82 ppb            | 12:03:36         |
| 1     | SiO2†              | 224144.7         | 211836.2               | 40035 µg/L            | 40035 ppb             | 12:03:10         |
| 1     | Si 251.611†        | 273951.7         | 261967.5               | 18642 µg/L            | 18642 ppb             | 12:03:10         |
| 1     | Sn 189.927†        | -23.6            | -20.8                  | -8.5371 µg/L          | -8.5371 ppb           | 12:03:36         |
| 1     | Ti 334.940†        | 1071432.1        | 1026917.5              | 2585.4 µg/L           | 2585.4 ppb            | 12:03:10         |
| 1     | Tl 190.801†        | -70.3            | -30.3                  | 7.8822 µg/L           | 7.8822 ppb            | 12:03:36         |
| 1     | U 409.014†         | -1600.5          | -1475.1                | -148.55 µg/L          | -148.55 ppb           | 12:03:10         |
| 1     | V 292.402†         | 2274.9           | 2059.9                 | 16.204 µg/L           | 16.204 ppb            | 12:03:16         |
| 1     | Zn 213.857†        | 18508.6          | 17095.0                | 411.62 µg/L           | 411.62 ppb            | 12:03:16         |
| 2     | Sc RADIAL          | 89432.3          | 89432.3                | 104 %                 |                       | 12:02:11         |
| 2     | Al 396.153Radial†  | 14973.9          | 14624.0                | 7614.7 µg/L           | 7614.7 ppb            | 12:02:11         |
| 2     | Ca 317.933Radial†  | 14319.5          | 13413.9                | 4967.5 µg/L           | 4967.5 ppb            | 12:02:11         |
| 2     | Fe 238.204 Radial† | 4873.6           | 4661.0                 | 53056 µg/L            | 53056 ppb             | 12:02:31         |
| 2     | K 766.490 Radial†  | 9139.9           | 8395.6                 | 4249.7 µg/L           | 4249.7 ppb            | 12:02:11         |
| 2     | Mg 279.077 IEC†    | 97.0             | 87.1                   | 1047.5 µg/L           | 1047.5 ppb            | 12:02:31         |
| 2     | Na 589.592 Radial† | 6757.5           | 6271.2                 | 2990.4 µg/L           | 2990.4 ppb            | 12:02:11         |
| 2     | Sr 421.552†        | 2291.3           | 2079.9                 | 12.658 µg/L           | 12.658 ppb            | 12:02:11         |
| 2     | Sc 361.383         | 1899296.3        | 1899296.3              | 104.29 %              |                       | 12:03:44         |
| 2     | Y 371.029          | 1430245.2        | 1430245.2              | 113.59 %              |                       | 12:03:44         |
| 2     | Ag 328.068†        | -1268.3          | -678.6                 | -1.5717 µg/L          | -1.5717 ppb           | 12:03:50         |
| 2     | As 188.979†        | 8.9              | 11.1                   | 9.9469 µg/L           | 9.9469 ppb            | 12:04:10         |
| 2     | B 249.677†         | 697.7            | 359.9                  | -10.023 µg/L          | -10.023 ppb           | 12:03:50         |
| 2     | Ba 233.527†        | 5364.6           | 5163.1                 | 120.90 µg/L           | 120.90 ppb            | 12:03:50         |
| 2     | Be 313.107†        | 7938.1           | 9147.0                 | 4.7697 µg/L           | 4.7697 ppb            | 12:03:50         |
| 2     | Cd 226.502†        | 105.1            | 267.0                  | 0.7962 µg/L           | 0.7962 ppb            | 12:04:10         |
| 2     | Co 228.616†        | 232.2            | 197.9                  | 3.6624 µg/L           | 3.6624 ppb            | 12:04:10         |
| 2     | Cr 267.716†        | 1523.9           | 1401.1                 | 32.427 µg/L           | 32.427 ppb            | 12:04:10         |
| 2     | Cu 324.752†        | 4833.7           | 366.1                  | 12.545 µg/L           | 12.545 ppb            | 12:03:50         |
| 2     | Mn 257.610†        | 821801.3         | 788732.2               | 2592.7 µg/L           | 2592.7 ppb            | 12:03:44         |
| 2     | Mo 202.031†        | 71.6             | 58.9                   | 8.1937 µg/L           | 8.1937 ppb            | 12:04:10         |
| 2     | Ni 231.604†        | 404.4            | 34.0                   | 2.6923 µg/L           | 2.6923 ppb            | 12:04:10         |
| 2     | P 214.914†         | 499.9            | 192.3                  | 286.72 µg/L           | 286.72 ppb            | 12:04:10         |
| 2     | Pb 220.353†        | 194.0            | 142.6                  | 41.621 µg/L           | 41.621 ppb            | 12:04:10         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 26.0      | 2.9       | 9.5997 µg/L  | 9.5997 ppb  | 12:04:10 |
| 2 | Sb 206.836†        | 14.8      | -12.8     | -12.369 µg/L | -12.369 ppb | 12:04:10 |
| 2 | Se 196.026†        | -27.8     | -53.4     | 114.57 µg/L  | 114.57 ppb  | 12:04:10 |
| 2 | SiO2†              | 223840.9  | 211781.7  | 40025 µg/L   | 40025 ppb   | 12:03:44 |
| 2 | Si 251.611†        | 273787.2  | 262099.1  | 18651 µg/L   | 18651 ppb   | 12:03:44 |
| 2 | Sn 189.927†        | -26.8     | -23.9     | -9.8398 µg/L | -9.8398 ppb | 12:04:10 |
| 2 | Ti 334.940†        | 1070641.9 | 1027291.5 | 2586.4 µg/L  | 2586.4 ppb  | 12:03:44 |
| 2 | Tl 190.801†        | -72.2     | -32.3     | 5.7477 µg/L  | 5.7477 ppb  | 12:04:10 |
| 2 | U 409.014†         | -1559.0   | -1437.0   | -144.82 µg/L | -144.82 ppb | 12:03:44 |
| 2 | V 292.402†         | 2380.0    | 2163.1    | 17.629 µg/L  | 17.629 ppb  | 12:03:50 |
| 2 | Zn 213.857†        | 18474.3   | 17081.7   | 411.33 µg/L  | 411.33 ppb  | 12:03:50 |
| 3 | Sc RADIAL          | 89799.3   | 89799.3   | 105 %        |             | 12:02:37 |
| 3 | Al 396.153Radial†  | 15079.5   | 14666.2   | 7636.7 µg/L  | 7636.7 ppb  | 12:02:37 |
| 3 | Ca 317.933Radial†  | 14394.3   | 13429.2   | 4973.2 µg/L  | 4973.2 ppb  | 12:02:37 |
| 3 | Fe 238.204 Radial† | 4885.6    | 4653.4    | 52969 µg/L   | 52969 ppb   | 12:02:57 |
| 3 | K 766.490 Radial†  | 9136.9    | 8357.0    | 4230.2 µg/L  | 4230.2 ppb  | 12:02:37 |
| 3 | Mg 279.077 IEC†    | 96.7      | 86.4      | 1039.3 µg/L  | 1039.3 ppb  | 12:02:57 |
| 3 | Na 589.592 Radial† | 6710.0    | 6199.3    | 2956.1 µg/L  | 2956.1 ppb  | 12:02:37 |
| 3 | Sr 421.552†        | 2294.4    | 2073.9    | 12.621 µg/L  | 12.621 ppb  | 12:02:37 |
| 3 | Sc 361.383         | 1906035.5 | 1906035.5 | 104.66 %     |             | 12:04:18 |
| 3 | Y 371.029          | 1429354.9 | 1429354.9 | 113.52 %     |             | 12:04:18 |
| 3 | Ag 328.068†        | -1157.0   | -568.0    | -0.6445 µg/L | -0.6445 ppb | 12:04:23 |
| 3 | As 188.979†        | 6.8       | 9.1       | 6.8545 µg/L  | 6.8545 ppb  | 12:04:44 |
| 3 | B 249.677†         | 677.4     | 338.2     | -11.049 µg/L | -11.049 ppb | 12:04:23 |
| 3 | Ba 233.527†        | 5079.5    | 4872.5    | 114.09 µg/L  | 114.09 ppb  | 12:04:23 |
| 3 | Be 313.107†        | 7362.2    | 8569.8    | 4.4539 µg/L  | 4.4539 ppb  | 12:04:23 |
| 3 | Cd 226.502†        | 87.8      | 250.1     | 0.3760 µg/L  | 0.3760 ppb  | 12:04:44 |
| 3 | Co 228.616†        | 218.9     | 184.4     | 3.3052 µg/L  | 3.3052 ppb  | 12:04:44 |
| 3 | Cr 267.716†        | 1361.4    | 1240.8    | 28.716 µg/L  | 28.716 ppb  | 12:04:44 |
| 3 | Cu 324.752†        | 4752.6    | 272.3     | 11.870 µg/L  | 11.870 ppb  | 12:04:23 |
| 3 | Mn 257.610†        | 790524.9  | 756062.7  | 2485.4 µg/L  | 2485.4 ppb  | 12:04:18 |
| 3 | Mo 202.031†        | 68.2      | 55.3      | 7.8205 µg/L  | 7.8205 ppb  | 12:04:44 |
| 3 | Ni 231.604†        | 413.5     | 41.3      | 3.1235 µg/L  | 3.1235 ppb  | 12:04:44 |
| 3 | P 214.914†         | 491.2     | 182.3     | 269.81 µg/L  | 269.81 ppb  | 12:04:44 |
| 3 | Pb 220.353†        | 194.6     | 142.5     | 41.587 µg/L  | 41.587 ppb  | 12:04:44 |
| 3 | S 181.975 Axial†   | 24.6      | 1.5       | 4.8585 µg/L  | 4.8585 ppb  | 12:04:44 |
| 3 | Sb 206.836†        | 19.8      | -8.1      | -7.9180 µg/L | -7.9180 ppb | 12:04:44 |
| 3 | Se 196.026†        | -20.8     | -46.6     | 121.00 µg/L  | 121.00 ppb  | 12:04:44 |
| 3 | SiO2†              | 217834.7  | 205284.1  | 38797 µg/L   | 38797 ppb   | 12:04:18 |
| 3 | Si 251.611†        | 265997.3  | 253728.0  | 18056 µg/L   | 18056 ppb   | 12:04:18 |
| 3 | Sn 189.927†        | -16.8     | -14.2     | -5.7530 µg/L | -5.7530 ppb | 12:04:44 |
| 3 | Ti 334.940†        | 1022772.5 | 977924.5  | 2462.1 µg/L  | 2462.1 ppb  | 12:04:18 |
| 3 | Tl 190.801†        | -71.2     | -31.0     | 5.5164 µg/L  | 5.5164 ppb  | 12:04:44 |
| 3 | U 409.014†         | -1465.3   | -1342.2   | -135.76 µg/L | -135.76 ppb | 12:04:18 |
| 3 | V 292.402†         | 2177.1    | 1961.2    | 15.085 µg/L  | 15.085 ppb  | 12:04:23 |
| 3 | Zn 213.857†        | 17523.9   | 16111.0   | 387.81 µg/L  | 387.81 ppb  | 12:04:23 |

Mean Data: 1202046588|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383         | 1902240.9                | 104.45 %           | 0.189    |                    |          | 0.18%  |
| Sc RADIAL          | 89304.6                  | 104 %              | 0.7      |                    |          | 0.64%  |
| Y 371.029          | 1430532.9                | 113.61 %           | 0.107    |                    |          | 0.09%  |
| Ag 328.068†        | -594.5                   | -0.8429 µg/L       | 0.65263  | -0.8429 ppb        | 0.65263  | 77.43% |
| Al 396.153Radial†  | 14659.8                  | 7633.4 µg/L        | 17.19    | 7633.4 ppb         | 17.19    | 0.23%  |
| As 188.979†        | 9.9                      | 7.9680 µg/L        | 1.71822  | 7.9680 ppb         | 1.71822  | 21.56% |
| B 249.677†         | 355.1                    | -10.358 µg/L       | 0.5983   | -10.358 ppb        | 0.5983   | 5.78%  |
| Ba 233.527†        | 5061.2                   | 118.51 µg/L        | 3.830    | 118.51 ppb         | 3.830    | 3.23%  |
| Be 313.107†        | 8965.1                   | 4.6711 µg/L        | 0.18840  | 4.6711 ppb         | 0.18840  | 4.03%  |
| Ca 317.933Radial†  | 13404.6                  | 4964.1 µg/L        | 11.19    | 4964.1 ppb         | 11.19    | 0.23%  |
| Cd 226.502†        | 262.8                    | 0.6683 µg/L        | 0.25387  | 0.6683 ppb         | 0.25387  | 37.99% |
| Co 228.616†        | 198.5                    | 3.7793 µg/L        | 0.54202  | 3.7793 ppb         | 0.54202  | 14.34% |
| Cr 267.716†        | 1349.3                   | 31.228 µg/L        | 2.1766   | 31.228 ppb         | 2.1766   | 6.97%  |
| Cu 324.752†        | 323.6                    | 12.282 µg/L        | 0.3612   | 12.282 ppb         | 0.3612   | 2.94%  |
| Fe 238.204 Radial† | 4677.3                   | 53241 µg/L         | 399.1    | 53241 ppb          | 399.1    | 0.75%  |
| K 766.490 Radial†  | 8393.6                   | 4248.7 µg/L        | 18.06    | 4248.7 ppb         | 18.06    | 0.43%  |
| Mg 279.077 IEC†    | 86.7                     | 1041.6 µg/L        | 5.18     | 1041.6 ppb         | 5.18     | 0.50%  |
| Mn 257.610†        | 777833.3                 | 2556.9 µg/L        | 61.92    | 2556.9 ppb         | 61.92    | 2.42%  |
| Mo 202.031†        | 59.7                     | 8.2932 µg/L        | 0.52946  | 8.2932 ppb         | 0.52946  | 6.38%  |
| Na 589.592 Radial† | 6233.5                   | 2972.4 µg/L        | 17.21    | 2972.4 ppb         | 17.21    | 0.58%  |

|                  |           |              |         |             |         |         |
|------------------|-----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 43.3      | 3.2453 µg/L  | 0.62297 | 3.2453 ppb  | 0.62297 | 19.20%  |
| P 214.914†       | 194.0     | 289.39 µg/L  | 21.049  | 289.39 ppb  | 21.049  | 7.27%   |
| Pb 220.353†      | 141.1     | 41.195 µg/L  | 0.7086  | 41.195 ppb  | 0.7086  | 1.72%   |
| S 181.975 Axial† | 1.3       | 4.4015 µg/L  | 5.44106 | 4.4015 ppb  | 5.44106 | 123.62% |
| Sb 206.836†      | -11.7     | -11.322 µg/L | 3.0200  | -11.322 ppb | 3.0200  | 26.67%  |
| Se 196.026†      | -46.7     | 121.80 µg/L  | 7.658   | 121.80 ppb  | 7.658   | 6.29%   |
| SiO2†            | 209634.0  | 39619 µg/L   | 712.0   | 39619 ppb   | 712.0   | 1.80%   |
| Si 251.611†      | 259264.9  | 18450 µg/L   | 341.3   | 18450 ppb   | 341.3   | 1.85%   |
| Sn 189.927†      | -19.6     | -8.0433 µg/L | 2.08765 | -8.0433 ppb | 2.08765 | 25.96%  |
| Sr 421.552†      | 2089.7    | 12.717 µg/L  | 0.1362  | 12.717 ppb  | 0.1362  | 1.07%   |
| Ti 334.940†      | 1010711.2 | 2544.6 µg/L  | 71.49   | 2544.6 ppb  | 71.49   | 2.81%   |
| Tl 190.801†      | -31.2     | 6.3821 µg/L  | 1.30426 | 6.3821 ppb  | 1.30426 | 20.44%  |
| U 409.014†       | -1418.1   | -143.04 µg/L | 6.575   | -143.04 ppb | 6.575   | 4.60%   |
| V 292.402†       | 2061.4    | 16.306 µg/L  | 1.2753  | 16.306 ppb  | 1.2753  | 7.82%   |
| Zn 213.857†      | 16762.5   | 403.59 µg/L  | 13.662  | 403.59 ppb  | 13.662  | 3.39%   |

Sequence No.: 12

Sample ID: 1202046590|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 310

Date Collected: 3/11/2010 12:04:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046590|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib.<br>Units | Sample<br>Conc. | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|----------------|-----------------|-----------------|------------------|
| 1     | Sc RADIAL          | 91411.4          | 91411.4                | 107 %          |                 |                 | 12:05:26         |
| 1     | Al 396.153Radial†  | 40047.8          | 37849.5                | 19698 µg/L     |                 | 19698 ppb       | 12:05:26         |
| 1     | Ca 317.933Radial†  | 31390.9          | 29141.1                | 10792 µg/L     |                 | 10792 ppb       | 12:05:26         |
| 1     | Fe 238.204 Radial† | 5909.1           | 5531.8                 | 62978 µg/L     |                 | 62978 ppb       | 12:05:46         |
| 1     | K 766.490 Radial†  | 28329.8          | 26219.1                | 13272 µg/L     |                 | 13272 ppb       | 12:05:26         |
| 1     | Mg 279.077 IEC†    | 555.0            | 515.0                  | 6470.1 µg/L    |                 | 6470.1 ppb      | 12:05:46         |
| 1     | Na 589.592 Radial† | 24525.9          | 22809.8                | 10877 µg/L     |                 | 10877 ppb       | 12:05:26         |
| 1     | Sr 421.552†        | 82847.3          | 77649.4                | 472.55 µg/L    |                 | 472.55 ppb      | 12:05:26         |
| 1     | Sc 361.383         | 1908635.1        | 1908635.1              | 104.80 %       |                 |                 | 12:06:52         |
| 1     | Y 371.029          | 1462464.1        | 1462464.1              | 116.15 %       |                 |                 | 12:06:52         |
| 1     | Ag 328.068†        | 56556.0          | 54500.8                | 476.61 µg/L    |                 | 476.61 ppb      | 12:06:58         |
| 1     | As 188.979†        | 344.9            | 331.6                  | 499.77 µg/L    |                 | 499.77 ppb      | 12:07:18         |
| 1     | B 249.677†         | 11193.0          | 10370.8                | 475.34 µg/L    |                 | 475.34 ppb      | 12:06:58         |
| 1     | Ba 233.527†        | 29373.0          | 28045.8                | 657.34 µg/L    |                 | 657.34 ppb      | 12:06:58         |
| 1     | Be 313.107†        | 839881.6         | 802915.0               | 503.91 µg/L    |                 | 503.91 ppb      | 12:06:52         |
| 1     | Cd 226.502†        | 20865.2          | 20074.8                | 503.83 µg/L    |                 | 503.83 ppb      | 12:06:58         |
| 1     | Co 228.616†        | 11232.3          | 10692.6                | 482.87 µg/L    |                 | 482.87 ppb      | 12:07:18         |
| 1     | Cr 267.716†        | 23305.5          | 22177.1                | 513.30 µg/L    |                 | 513.30 ppb      | 12:06:58         |
| 1     | Cu 324.752†        | 79252.8          | 71350.9                | 512.78 µg/L    |                 | 512.78 ppb      | 12:06:58         |
| 1     | Mn 257.610†        | 1117158.1        | 1066693.5              | 3505.5 µg/L    |                 | 3505.5 ppb      | 12:06:52         |
| 1     | Mo 202.031†        | 4935.6           | 4699.5                 | 495.66 µg/L    |                 | 495.66 ppb      | 12:07:18         |
| 1     | Ni 231.604†        | 8941.2           | 8177.5                 | 484.32 µg/L    |                 | 484.32 ppb      | 12:07:18         |
| 1     | P 214.914†         | 960.7            | 629.7                  | 982.95 µg/L    |                 | 982.95 ppb      | 12:07:18         |
| 1     | Pb 220.353†        | 2172.9           | 2029.9                 | 572.09 µg/L    |                 | 572.09 ppb      | 12:07:18         |
| 1     | S 181.975 Axial†   | 1603.4           | 1507.9                 | 4976.9 µg/L    |                 | 4976.9 ppb      | 12:07:18         |
| 1     | Sb 206.836†        | 551.2            | 498.9                  | 470.75 µg/L    |                 | 470.75 ppb      | 12:07:18         |
| 1     | Se 196.026†        | 499.6            | 450.0                  | 639.89 µg/L    |                 | 639.89 ppb      | 12:07:18         |
| 1     | SiO2†              | 458536.5         | 434668.1               | 82149 µg/L     |                 | 82149 ppb       | 12:06:52         |
| 1     | Si 251.611†        | 562652.5         | 536437.6               | 38174 µg/L     |                 | 38174 ppb       | 12:06:52         |
| 1     | Sn 189.927†        | 1246.5           | 1191.1                 | 502.60 µg/L    |                 | 502.60 ppb      | 12:07:18         |
| 1     | Ti 334.940†        | 1375039.1        | 1312711.3              | 3304.6 µg/L    |                 | 3304.6 ppb      | 12:06:52         |
| 1     | Tl 190.801†        | 403.3            | 421.8                  | 490.67 µg/L    |                 | 490.67 ppb      | 12:07:18         |
| 1     | U 409.014†         | 3526.6           | 3422.8                 | 317.25 µg/L    |                 | 317.25 ppb      | 12:06:58         |
| 1     | V 292.402†         | 41885.2          | 39846.1                | 498.70 µg/L    |                 | 498.70 ppb      | 12:06:58         |
| 1     | Zn 213.857†        | 41770.2          | 39222.9                | 944.15 µg/L    |                 | 944.15 ppb      | 12:06:58         |
| 2     | Sc RADIAL          | 91904.5          | 91904.5                | 107 %          |                 |                 | 12:05:52         |
| 2     | Al 396.153Radial†  | 40387.5          | 37965.0                | 19759 µg/L     |                 | 19759 ppb       | 12:05:52         |
| 2     | Ca 317.933Radial†  | 31705.1          | 29276.4                | 10842 µg/L     |                 | 10842 ppb       | 12:05:52         |
| 2     | Fe 238.204 Radial† | 5937.3           | 5528.4                 | 62939 µg/L     |                 | 62939 ppb       | 12:06:12         |
| 2     | K 766.490 Radial†  | 28693.1          | 26415.6                | 13371 µg/L     |                 | 13371 ppb       | 12:05:52         |
| 2     | Mg 279.077 IEC†    | 559.6            | 516.5                  | 6489.3 µg/L    |                 | 6489.3 ppb      | 12:06:12         |
| 2     | Na 589.592 Radial† | 24863.1          | 23001.1                | 10968 µg/L     |                 | 10968 ppb       | 12:05:52         |
| 2     | Sr 421.552†        | 83462.2          | 77806.2                | 473.51 µg/L    |                 | 473.51 ppb      | 12:05:52         |
| 2     | Sc 361.383         | 1905387.3        | 1905387.3              | 104.63 %       |                 |                 | 12:07:26         |
| 2     | Y 371.029          | 1458781.3        | 1458781.3              | 115.85 %       |                 |                 | 12:07:26         |
| 2     | Ag 328.068†        | 56138.5          | 54193.7                | 473.95 µg/L    |                 | 473.95 ppb      | 12:07:32         |
| 2     | As 188.979†        | 356.9            | 343.7                  | 518.28 µg/L    |                 | 518.28 ppb      | 12:07:52         |
| 2     | B 249.677†         | 11164.7          | 10362.0                | 474.92 µg/L    |                 | 474.92 ppb      | 12:07:32         |
| 2     | Ba 233.527†        | 29036.9          | 27772.3                | 650.94 µg/L    |                 | 650.94 ppb      | 12:07:32         |
| 2     | Be 313.107†        | 834973.0         | 799589.4               | 501.83 µg/L    |                 | 501.83 ppb      | 12:07:26         |
| 2     | Cd 226.502†        | 20683.1          | 19934.8                | 500.27 µg/L    |                 | 500.27 ppb      | 12:07:32         |
| 2     | Co 228.616†        | 11169.5          | 10650.8                | 480.98 µg/L    |                 | 480.98 ppb      | 12:07:52         |
| 2     | Cr 267.716†        | 23071.7          | 21991.5                | 509.00 µg/L    |                 | 509.00 ppb      | 12:07:32         |
| 2     | Cu 324.752†        | 78846.1          | 71091.2                | 510.95 µg/L    |                 | 510.95 ppb      | 12:07:32         |
| 2     | Mn 257.610†        | 1112006.4        | 1063586.5              | 3495.3 µg/L    |                 | 3495.3 ppb      | 12:07:26         |
| 2     | Mo 202.031†        | 4899.5           | 4673.0                 | 492.88 µg/L    |                 | 492.88 ppb      | 12:07:52         |
| 2     | Ni 231.604†        | 8905.1           | 8157.6                 | 483.15 µg/L    |                 | 483.15 ppb      | 12:07:52         |
| 2     | P 214.914†         | 965.4            | 635.7                  | 993.45 µg/L    |                 | 993.45 ppb      | 12:07:52         |
| 2     | Pb 220.353†        | 2174.9           | 2035.4                 | 573.63 µg/L    |                 | 573.63 ppb      | 12:07:52         |



|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 1597.7    | 1505.1    | 4967.6 µg/L | 4967.6 ppb | 12:07:52 |
| 2 | Sb 206.836†        | 541.1     | 490.1     | 462.53 µg/L | 462.53 ppb | 12:07:52 |
| 2 | Se 196.026†        | 506.0     | 456.9     | 646.61 µg/L | 646.61 ppb | 12:07:52 |
| 2 | SiO2†              | 456197.4  | 433178.1  | 81867 µg/L  | 81867 ppb  | 12:07:26 |
| 2 | Si 251.611†        | 559532.6  | 534370.8  | 38027 µg/L  | 38027 ppb  | 12:07:26 |
| 2 | Sn 189.927†        | 1243.7    | 1190.5    | 502.36 µg/L | 502.36 ppb | 12:07:52 |
| 2 | Ti 334.940†        | 1367841.2 | 1308068.1 | 3292.9 µg/L | 3292.9 ppb | 12:07:26 |
| 2 | Tl 190.801†        | 407.6     | 426.6     | 495.54 µg/L | 495.54 ppb | 12:07:52 |
| 2 | U 409.014†         | 3509.5    | 3412.2    | 316.25 µg/L | 316.25 ppb | 12:07:32 |
| 2 | V 292.402†         | 41558.2   | 39601.7   | 495.58 µg/L | 495.58 ppb | 12:07:32 |
| 2 | Zn 213.857†        | 41474.5   | 39008.3   | 938.95 µg/L | 938.95 ppb | 12:07:32 |
| 3 | Sc RADIAL          | 91387.5   | 91387.5   | 107 %       |            | 12:06:18 |
| 3 | Al 396.153Radial†  | 40319.1   | 38114.1   | 19837 µg/L  | 19837 ppb  | 12:06:18 |
| 3 | Ca 317.933Radial†  | 31584.3   | 29330.4   | 10862 µg/L  | 10862 ppb  | 12:06:18 |
| 3 | Fe 238.204 Radial† | 5897.8    | 5522.7    | 62872 µg/L  | 62872 ppb  | 12:06:38 |
| 3 | K 766.490 Radial†  | 28562.6   | 26444.6   | 13386 µg/L  | 13386 ppb  | 12:06:18 |
| 3 | Mg 279.077 IEC†    | 550.8     | 511.2     | 6421.8 µg/L | 6421.8 ppb | 12:06:38 |
| 3 | Na 589.592 Radial† | 24806.0   | 23078.8   | 11005 µg/L  | 11005 ppb  | 12:06:18 |
| 3 | Sr 421.552†        | 83315.8   | 78109.6   | 475.35 µg/L | 475.35 ppb | 12:06:18 |
| 3 | Sc 361.383         | 1913959.7 | 1913959.7 | 105.10 %    |            | 12:08:00 |
| 3 | Y 371.029          | 1460571.5 | 1460571.5 | 116.00 %    |            | 12:08:00 |
| 3 | Ag 328.068†        | 54532.3   | 52425.1   | 458.50 µg/L | 458.50 ppb | 12:08:06 |
| 3 | As 188.979†        | 323.3     | 310.2     | 466.95 µg/L | 466.95 ppb | 12:08:26 |
| 3 | B 249.677†         | 10650.4   | 9824.8    | 448.62 µg/L | 448.62 ppb | 12:08:06 |
| 3 | Ba 233.527†        | 27428.8   | 26117.8   | 612.15 µg/L | 612.15 ppb | 12:08:06 |
| 3 | Be 313.107†        | 803973.7  | 766519.0  | 481.08 µg/L | 481.08 ppb | 12:08:00 |
| 3 | Cd 226.502†        | 19766.7   | 18974.3   | 475.81 µg/L | 475.81 ppb | 12:08:06 |
| 3 | Co 228.616†        | 10077.0   | 9563.5    | 431.49 µg/L | 431.49 ppb | 12:08:26 |
| 3 | Cr 267.716†        | 21376.9   | 20280.2   | 469.40 µg/L | 469.40 ppb | 12:08:06 |
| 3 | Cu 324.752†        | 74150.4   | 66285.7   | 477.20 µg/L | 477.20 ppb | 12:08:06 |
| 3 | Mn 257.610†        | 1072328.0 | 1021072.1 | 3355.7 µg/L | 3355.7 ppb | 12:08:00 |
| 3 | Mo 202.031†        | 4441.0    | 4215.8    | 444.89 µg/L | 444.89 ppb | 12:08:26 |
| 3 | Ni 231.604†        | 8111.7    | 7364.5    | 436.26 µg/L | 436.26 ppb | 12:08:26 |
| 3 | P 214.914†         | 906.6     | 575.6     | 893.95 µg/L | 893.95 ppb | 12:08:26 |
| 3 | Pb 220.353†        | 1995.3    | 1855.2    | 523.03 µg/L | 523.03 ppb | 12:08:26 |
| 3 | S 181.975 Axial†   | 1494.9    | 1400.5    | 4622.4 µg/L | 4622.4 ppb | 12:08:26 |
| 3 | Sb 206.836†        | 505.3     | 453.7     | 428.01 µg/L | 428.01 ppb | 12:08:26 |
| 3 | Se 196.026†        | 476.6     | 426.8     | 616.60 µg/L | 616.60 ppb | 12:08:26 |
| 3 | SiO2†              | 445012.7  | 420583.0  | 79487 µg/L  | 79487 ppb  | 12:08:00 |
| 3 | Si 251.611†        | 545752.1  | 518863.4  | 36923 µg/L  | 36923 ppb  | 12:08:00 |
| 3 | Sn 189.927†        | 1124.1    | 1071.4    | 452.17 µg/L | 452.17 ppb | 12:08:26 |
| 3 | Ti 334.940†        | 1311244.4 | 1248360.5 | 3142.6 µg/L | 3142.6 ppb | 12:08:00 |
| 3 | Tl 190.801†        | 385.1     | 403.4     | 469.49 µg/L | 469.49 ppb | 12:08:26 |
| 3 | U 409.014†         | 3286.2    | 3184.7    | 294.54 µg/L | 294.54 ppb | 12:08:06 |
| 3 | V 292.402†         | 38704.5   | 36708.4   | 458.44 µg/L | 458.44 ppb | 12:08:06 |
| 3 | Zn 213.857†        | 39252.1   | 36716.1   | 883.68 µg/L | 883.68 ppb | 12:08:06 |

Mean Data: 1202046590|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383         | 1909327.4                | 104.84 %           | 0.238    |                    |          | 0.23% |
| Sc RADIAL          | 91567.8                  | 107 %              | 0.3      |                    |          | 0.32% |
| Y 371.029          | 1460605.6                | 116.00 %           | 0.146    |                    |          | 0.13% |
| Ag 328.068†        | 53706.5                  | 469.69 µg/L        | 9.779    | 469.69 ppb         | 9.779    | 2.08% |
| Al 396.153Radial†  | 37976.2                  | 19765 µg/L         | 69.6     | 19765 ppb          | 69.6     | 0.35% |
| As 188.979†        | 328.5                    | 495.00 µg/L        | 25.997   | 495.00 ppb         | 25.997   | 5.25% |
| B 249.677†         | 10185.8                  | 466.29 µg/L        | 15.312   | 466.29 ppb         | 15.312   | 3.28% |
| Ba 233.527†        | 27312.0                  | 640.14 µg/L        | 24.456   | 640.14 ppb         | 24.456   | 3.82% |
| Be 313.107†        | 789674.5                 | 495.61 µg/L        | 12.626   | 495.61 ppb         | 12.626   | 2.55% |
| Ca 317.933Radial†  | 29249.3                  | 10832 µg/L         | 36.1     | 10832 ppb          | 36.1     | 0.33% |
| Cd 226.502†        | 19661.3                  | 493.30 µg/L        | 15.255   | 493.30 ppb         | 15.255   | 3.09% |
| Co 228.616†        | 10302.3                  | 465.11 µg/L        | 29.134   | 465.11 ppb         | 29.134   | 6.26% |
| Cr 267.716†        | 21482.9                  | 497.23 µg/L        | 24.203   | 497.23 ppb         | 24.203   | 4.87% |
| Cu 324.752†        | 69575.9                  | 500.31 µg/L        | 20.036   | 500.31 ppb         | 20.036   | 4.00% |
| Fe 238.204 Radial† | 5527.6                   | 62930 µg/L         | 53.4     | 62930 ppb          | 53.4     | 0.08% |
| K 766.490 Radial†  | 26359.8                  | 13343 µg/L         | 62.1     | 13343 ppb          | 62.1     | 0.47% |
| Mg 279.077 IEC†    | 514.3                    | 6460.4 µg/L        | 34.81    | 6460.4 ppb         | 34.81    | 0.54% |
| Mn 257.610†        | 1050450.7                | 3452.2 µg/L        | 83.69    | 3452.2 ppb         | 83.69    | 2.42% |
| Mo 202.031†        | 4529.4                   | 477.81 µg/L        | 28.545   | 477.81 ppb         | 28.545   | 5.97% |
| Na 589.592 Radial† | 22963.2                  | 10950 µg/L         | 66.0     | 10950 ppb          | 66.0     | 0.60% |

|                  |           |             |        |            |        |       |
|------------------|-----------|-------------|--------|------------|--------|-------|
| Ni 231.604†      | 7899.9    | 467.91 µg/L | 27.418 | 467.91 ppb | 27.418 | 5.86% |
| P 214.914†       | 613.7     | 956.79 µg/L | 54.668 | 956.79 ppb | 54.668 | 5.71% |
| Pb 220.353†      | 1973.5    | 556.25 µg/L | 28.779 | 556.25 ppb | 28.779 | 5.17% |
| S 181.975 Axial† | 1471.1    | 4855.6 µg/L | 202.06 | 4855.6 ppb | 202.06 | 4.16% |
| Sb 206.836†      | 480.9     | 453.76 µg/L | 22.680 | 453.76 ppb | 22.680 | 5.00% |
| Se 196.026†      | 444.5     | 634.37 µg/L | 15.752 | 634.37 ppb | 15.752 | 2.48% |
| SiO2†            | 429476.4  | 81168 µg/L  | 1462.4 | 81168 ppb  | 1462.4 | 1.80% |
| Si 251.611†      | 529890.6  | 37708 µg/L  | 683.6  | 37708 ppb  | 683.6  | 1.81% |
| Sn 189.927†      | 1151.0    | 485.71 µg/L | 29.049 | 485.71 ppb | 29.049 | 5.98% |
| Sr 421.552†      | 77855.1   | 473.81 µg/L | 1.424  | 473.81 ppb | 1.424  | 0.30% |
| Ti 334.940†      | 1289713.3 | 3246.7 µg/L | 90.35  | 3246.7 ppb | 90.35  | 2.78% |
| Tl 190.801†      | 417.3     | 485.23 µg/L | 13.848 | 485.23 ppb | 13.848 | 2.85% |
| U 409.014†       | 3339.9    | 309.35 µg/L | 12.830 | 309.35 ppb | 12.830 | 4.15% |
| V 292.402†       | 38718.8   | 484.24 µg/L | 22.397 | 484.24 ppb | 22.397 | 4.63% |
| Zn 213.857†      | 38315.8   | 922.26 µg/L | 33.513 | 922.26 ppb | 33.513 | 3.63% |

Sequence No.: 13

Sample ID: 1202046591|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 311

Date Collected: 3/11/2010 12:08:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046591|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 90136.7          | 90136.7                | 105 %                 |                       | 12:09:08         |
| 1     | Al 396.153Radial†  | 43131.0          | 41316.3                | 21503 µg/L            | 21503 ppb             | 12:09:08         |
| 1     | Ca 317.933Radial†  | 33545.0          | 31608.4                | 11705 µg/L            | 11705 ppb             | 12:09:08         |
| 1     | Fe 238.204 Radial† | 6044.1           | 5738.8                 | 65334 µg/L            | 65334 ppb             | 12:09:29         |
| 1     | K 766.490 Radial†  | 30587.4          | 28744.4                | 14550 µg/L            | 14550 ppb             | 12:09:08         |
| 1     | Mg 279.077 IEC†    | 559.7            | 526.9                  | 6618.6 µg/L           | 6618.6 ppb            | 12:09:29         |
| 1     | Na 589.592 Radial† | 25322.0          | 23893.2                | 11393 µg/L            | 11393 ppb             | 12:09:08         |
| 1     | Sr 421.552†        | 83462.5          | 79334.8                | 482.81 µg/L           | 482.81 ppb            | 12:09:08         |
| 1     | Sc 361.383         | 1890895.4        | 1890895.4              | 103.83 %              |                       | 12:10:34         |
| 1     | Y 371.029          | 1468895.2        | 1468895.2              | 116.66 %              |                       | 12:10:34         |
| 1     | Ag 328.068†        | 56761.3          | 55204.8                | 482.91 µg/L           | 482.91 ppb            | 12:10:40         |
| 1     | As 188.979†        | 362.3            | 351.5                  | 529.91 µg/L           | 529.91 ppb            | 12:11:01         |
| 1     | B 249.677†         | 11260.7          | 10536.2                | 482.27 µg/L           | 482.27 ppb            | 12:10:40         |
| 1     | Ba 233.527†        | 29091.9          | 28038.0                | 657.18 µg/L           | 657.18 ppb            | 12:10:40         |
| 1     | Be 313.107†        | 855442.9         | 825420.5               | 517.99 µg/L           | 517.99 ppb            | 12:10:34         |
| 1     | Cd 226.502†        | 21027.6          | 20418.1                | 512.31 µg/L           | 512.31 ppb            | 12:10:40         |
| 1     | Co 228.616†        | 11544.0          | 11093.3                | 500.77 µg/L           | 500.77 ppb            | 12:11:01         |
| 1     | Cr 267.716†        | 24855.8          | 23878.8                | 552.67 µg/L           | 552.67 ppb            | 12:10:40         |
| 1     | Cu 324.752†        | 80015.1          | 72794.6                | 523.36 µg/L           | 523.36 ppb            | 12:10:40         |
| 1     | Mn 257.610†        | 1092646.3        | 1053086.3              | 3461.0 µg/L           | 3461.0 ppb            | 12:10:34         |
| 1     | Mo 202.031†        | 5067.6           | 4870.8                 | 513.73 µg/L           | 513.73 ppb            | 12:11:01         |
| 1     | Ni 231.604†        | 9227.0           | 8532.8                 | 505.37 µg/L           | 505.37 ppb            | 12:11:01         |
| 1     | P 214.914†         | 968.8            | 646.1                  | 1008.8 µg/L           | 1008.8 ppb            | 12:11:01         |
| 1     | Pb 220.353†        | 2219.1           | 2093.9                 | 590.23 µg/L           | 590.23 ppb            | 12:11:01         |
| 1     | S 181.975 Axial†   | 1638.0           | 1555.6                 | 5134.5 µg/L           | 5134.5 ppb            | 12:11:01         |
| 1     | Sb 206.836†        | 567.8            | 519.9                  | 490.32 µg/L           | 490.32 ppb            | 12:11:01         |
| 1     | Se 196.026†        | 503.6            | 458.3                  | 655.38 µg/L           | 655.38 ppb            | 12:11:01         |
| 1     | SiO2†              | 491248.3         | 470277.8               | 88879 µg/L            | 88879 ppb             | 12:10:34         |
| 1     | Si 251.611†        | 602740.3         | 580083.2               | 41280 µg/L            | 41280 ppb             | 12:10:34         |
| 1     | Sn 189.927†        | 1286.3           | 1240.7                 | 523.56 µg/L           | 523.56 ppb            | 12:11:01         |
| 1     | Ti 334.940†        | 1450538.1        | 1397734.0              | 3518.7 µg/L           | 3518.7 ppb            | 12:10:34         |
| 1     | Tl 190.801†        | 414.9            | 436.6                  | 507.99 µg/L           | 507.99 ppb            | 12:11:01         |
| 1     | U 409.014†         | 3574.9           | 3500.8                 | 324.32 µg/L           | 324.32 ppb            | 12:10:40         |
| 1     | V 292.402†         | 42267.8          | 40589.5                | 507.92 µg/L           | 507.92 ppb            | 12:10:40         |
| 1     | Zn 213.857†        | 42317.8          | 40124.3                | 965.76 µg/L           | 965.76 ppb            | 12:10:40         |
| 2     | Sc RADIAL          | 90816.0          | 90816.0                | 106 %                 |                       | 12:09:34         |
| 2     | Al 396.153Radial†  | 43384.4          | 41248.6                | 21468 µg/L            | 21468 ppb             | 12:09:34         |
| 2     | Ca 317.933Radial†  | 33842.9          | 31651.0                | 11721 µg/L            | 11721 ppb             | 12:09:34         |
| 2     | Fe 238.204 Radial† | 6049.5           | 5700.8                 | 64902 µg/L            | 64902 ppb             | 12:09:55         |
| 2     | K 766.490 Radial†  | 30613.9          | 28551.5                | 14452 µg/L            | 14452 ppb             | 12:09:34         |
| 2     | Mg 279.077 IEC†    | 566.1            | 528.9                  | 6644.7 µg/L           | 6644.7 ppb            | 12:09:55         |
| 2     | Na 589.592 Radial† | 25499.9          | 23881.0                | 11388 µg/L            | 11388 ppb             | 12:09:34         |
| 2     | Sr 421.552†        | 84148.6          | 79388.7                | 483.14 µg/L           | 483.14 ppb            | 12:09:34         |
| 2     | Sc 361.383         | 1893942.2        | 1893942.2              | 104.00 %              |                       | 12:11:08         |
| 2     | Y 371.029          | 1469957.2        | 1469957.2              | 116.74 %              |                       | 12:11:08         |
| 2     | Ag 328.068†        | 57028.8          | 55374.1                | 484.34 µg/L           | 484.34 ppb            | 12:11:14         |
| 2     | As 188.979†        | 354.7            | 343.7                  | 517.87 µg/L           | 517.87 ppb            | 12:11:34         |
| 2     | B 249.677†         | 11332.4          | 10587.7                | 485.02 µg/L           | 485.02 ppb            | 12:11:14         |
| 2     | Ba 233.527†        | 29247.3          | 28142.3                | 659.62 µg/L           | 659.62 ppb            | 12:11:14         |
| 2     | Be 313.107†        | 856147.4         | 824772.5               | 517.59 µg/L           | 517.59 ppb            | 12:11:08         |
| 2     | Cd 226.502†        | 21163.4          | 20516.0                | 514.84 µg/L           | 514.84 ppb            | 12:11:14         |
| 2     | Co 228.616†        | 11392.4          | 10929.7                | 493.29 µg/L           | 493.29 ppb            | 12:11:34         |
| 2     | Cr 267.716†        | 24975.2          | 23955.2                | 554.43 µg/L           | 554.43 ppb            | 12:11:14         |
| 2     | Cu 324.752†        | 80386.7          | 73028.0                | 524.92 µg/L           | 524.92 ppb            | 12:11:14         |
| 2     | Mn 257.610†        | 1094874.9        | 1053536.3              | 3462.4 µg/L           | 3462.4 ppb            | 12:11:08         |
| 2     | Mo 202.031†        | 5019.7           | 4817.0                 | 508.06 µg/L           | 508.06 ppb            | 12:11:34         |
| 2     | Ni 231.604†        | 9127.1           | 8422.5                 | 498.84 µg/L           | 498.84 ppb            | 12:11:34         |
| 2     | P 214.914†         | 974.9            | 650.5                  | 1016.3 µg/L           | 1016.3 ppb            | 12:11:34         |
| 2     | Pb 220.353†        | 2209.4           | 2081.1                 | 586.60 µg/L           | 586.60 ppb            | 12:11:34         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 1625.0    | 1540.5    | 5084.7 µg/L | 5084.7 ppb | 12:11:34 |
| 2 | Sb 206.836†        | 560.2     | 511.7     | 482.50 µg/L | 482.50 ppb | 12:11:34 |
| 2 | Se 196.026†        | 499.9     | 454.0     | 649.75 µg/L | 649.75 ppb | 12:11:34 |
| 2 | SiO2†              | 491262.8  | 469530.5  | 88737 µg/L  | 88737 ppb  | 12:11:08 |
| 2 | Si 251.611†        | 602508.8  | 578926.8  | 41198 µg/L  | 41198 ppb  | 12:11:08 |
| 2 | Sn 189.927†        | 1259.7    | 1213.1    | 511.93 µg/L | 511.93 ppb | 12:11:34 |
| 2 | Ti 334.940†        | 1451647.2 | 1396553.0 | 3515.7 µg/L | 3515.7 ppb | 12:11:08 |
| 2 | Tl 190.801†        | 423.8     | 444.5     | 516.21 µg/L | 516.21 ppb | 12:11:34 |
| 2 | U 409.014†         | 3595.5    | 3515.1    | 325.74 µg/L | 325.74 ppb | 12:11:14 |
| 2 | V 292.402†         | 42491.7   | 40739.3   | 509.86 µg/L | 509.86 ppb | 12:11:14 |
| 2 | Zn 213.857†        | 42546.1   | 40278.2   | 969.54 µg/L | 969.54 ppb | 12:11:14 |
| 3 | Sc RADIAL          | 90567.3   | 90567.3   | 106 %       |            | 12:10:00 |
| 3 | Al 396.153Radial†  | 43203.7   | 41190.0   | 21439 µg/L  | 21439 ppb  | 12:10:00 |
| 3 | Ca 317.933Radial†  | 33629.5   | 31536.6   | 11679 µg/L  | 11679 ppb  | 12:10:00 |
| 3 | Fe 238.204 Radial† | 6093.3    | 5758.1    | 65552 µg/L  | 65552 ppb  | 12:10:21 |
| 3 | K 766.490 Radial†  | 30594.1   | 28612.2   | 14483 µg/L  | 14483 ppb  | 12:10:00 |
| 3 | Mg 279.077 IEC†    | 563.7     | 528.2     | 6633.7 µg/L | 6633.7 ppb | 12:10:21 |
| 3 | Na 589.592 Radial† | 25470.6   | 23919.4   | 11406 µg/L  | 11406 ppb  | 12:10:00 |
| 3 | Sr 421.552†        | 83806.2   | 79282.7   | 482.49 µg/L | 482.49 ppb | 12:10:00 |
| 3 | Sc 361.383         | 1897009.8 | 1897009.8 | 104.17 %    |            | 12:11:42 |
| 3 | Y 371.029          | 1464102.0 | 1464102.0 | 116.28 %    |            | 12:11:42 |
| 3 | Ag 328.068†        | 55311.6   | 53636.9   | 469.22 µg/L | 469.22 ppb | 12:11:48 |
| 3 | As 188.979†        | 335.5     | 324.7     | 488.75 µg/L | 488.75 ppb | 12:12:08 |
| 3 | B 249.677†         | 10902.8   | 10157.7   | 463.57 µg/L | 463.57 ppb | 12:11:48 |
| 3 | Ba 233.527†        | 27615.1   | 26529.9   | 621.82 µg/L | 621.82 ppb | 12:11:48 |
| 3 | Be 313.107†        | 821473.2  | 790153.8  | 495.87 µg/L | 495.87 ppb | 12:11:42 |
| 3 | Cd 226.502†        | 20115.7   | 19477.4   | 488.31 µg/L | 488.31 ppb | 12:11:48 |
| 3 | Co 228.616†        | 10361.6   | 9922.4    | 447.48 µg/L | 447.48 ppb | 12:12:08 |
| 3 | Cr 267.716†        | 23105.6   | 22121.5   | 512.00 µg/L | 512.00 ppb | 12:11:48 |
| 3 | Cu 324.752†        | 75718.1   | 68421.1   | 492.70 µg/L | 492.70 ppb | 12:11:48 |
| 3 | Mn 257.610†        | 1054184.9 | 1012771.2 | 3328.6 µg/L | 3328.6 ppb | 12:11:42 |
| 3 | Mo 202.031†        | 4572.9    | 4380.2    | 462.25 µg/L | 462.25 ppb | 12:12:08 |
| 3 | Ni 231.604†        | 8310.2    | 7624.1    | 451.64 µg/L | 451.64 ppb | 12:12:08 |
| 3 | P 214.914†         | 908.2     | 584.9     | 906.65 µg/L | 906.65 ppb | 12:12:08 |
| 3 | Pb 220.353†        | 2059.9    | 1934.2    | 545.36 µg/L | 545.36 ppb | 12:12:08 |
| 3 | S 181.975 Axial†   | 1529.7    | 1446.5    | 4774.4 µg/L | 4774.4 ppb | 12:12:08 |
| 3 | Sb 206.836†        | 515.3     | 467.7     | 440.92 µg/L | 440.92 ppb | 12:12:08 |
| 3 | Se 196.026†        | 472.6     | 427.0     | 625.11 µg/L | 625.11 ppb | 12:12:08 |
| 3 | SiO2†              | 477574.0  | 455625.3  | 86109 µg/L  | 86109 ppb  | 12:11:42 |
| 3 | Si 251.611†        | 585684.6  | 561838.6  | 39981 µg/L  | 39981 ppb  | 12:11:42 |
| 3 | Sn 189.927†        | 1146.3    | 1102.2    | 465.24 µg/L | 465.24 ppb | 12:12:08 |
| 3 | Ti 334.940†        | 1387829.8 | 1333030.8 | 3355.8 µg/L | 3355.8 ppb | 12:11:42 |
| 3 | Tl 190.801†        | 380.8     | 402.5     | 470.52 µg/L | 470.52 ppb | 12:12:08 |
| 3 | U 409.014†         | 3364.4    | 3287.7    | 303.95 µg/L | 303.95 ppb | 12:11:48 |
| 3 | V 292.402†         | 39618.5   | 37915.0   | 473.48 µg/L | 473.48 ppb | 12:11:48 |
| 3 | Zn 213.857†        | 40214.4   | 37973.7   | 913.92 µg/L | 913.92 ppb | 12:11:48 |

Mean Data: 1202046591|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383         | 1893949.1                | 104.00 %           | 0.168    |                    |          | 0.16% |
| Sc RADIAL          | 90506.7                  | 105 %              | 0.4      |                    |          | 0.38% |
| Y 371.029          | 1467651.5                | 116.56 %           | 0.248    |                    |          | 0.21% |
| Ag 328.068†        | 54738.6                  | 478.82 µg/L        | 8.345    | 478.82 ppb         | 8.345    | 1.74% |
| Al 396.153Radial†  | 41251.6                  | 21470 µg/L         | 32.4     | 21470 ppb          | 32.4     | 0.15% |
| As 188.979†        | 340.0                    | 512.17 µg/L        | 21.163   | 512.17 ppb         | 21.163   | 4.13% |
| B 249.677†         | 10427.2                  | 476.95 µg/L        | 11.670   | 476.95 ppb         | 11.670   | 2.45% |
| Ba 233.527†        | 27570.1                  | 646.21 µg/L        | 21.156   | 646.21 ppb         | 21.156   | 3.27% |
| Be 313.107†        | 813448.9                 | 510.48 µg/L        | 12.659   | 510.48 ppb         | 12.659   | 2.48% |
| Ca 317.933Radial†  | 31598.7                  | 11702 µg/L         | 21.4     | 11702 ppb          | 21.4     | 0.18% |
| Cd 226.502†        | 20137.2                  | 505.16 µg/L        | 14.642   | 505.16 ppb         | 14.642   | 2.90% |
| Co 228.616†        | 10648.4                  | 480.52 µg/L        | 28.849   | 480.52 ppb         | 28.849   | 6.00% |
| Cr 267.716†        | 23318.5                  | 539.70 µg/L        | 24.007   | 539.70 ppb         | 24.007   | 4.45% |
| Cu 324.752†        | 71414.5                  | 513.66 µg/L        | 18.170   | 513.66 ppb         | 18.170   | 3.54% |
| Fe 238.204 Radial† | 5732.6                   | 65263 µg/L         | 331.1    | 65263 ppb          | 331.1    | 0.51% |
| K 766.490 Radial†  | 28636.1                  | 14495 µg/L         | 49.9     | 14495 ppb          | 49.9     | 0.34% |
| Mg 279.077 IEC†    | 528.0                    | 6632.3 µg/L        | 13.13    | 6632.3 ppb         | 13.13    | 0.20% |
| Mn 257.610†        | 1039798.0                | 3417.3 µg/L        | 76.84    | 3417.3 ppb         | 76.84    | 2.25% |
| Mo 202.031†        | 4689.3                   | 494.68 µg/L        | 28.231   | 494.68 ppb         | 28.231   | 5.71% |
| Na 589.592 Radial† | 23897.9                  | 11396 µg/L         | 9.4      | 11396 ppb          | 9.4      | 0.08% |

|                  |           |             |        |            |        |       |
|------------------|-----------|-------------|--------|------------|--------|-------|
| Ni 231.604†      | 8193.1    | 485.28 µg/L | 29.319 | 485.28 ppb | 29.319 | 6.04% |
| P 214.914†       | 627.2     | 977.24 µg/L | 61.246 | 977.24 ppb | 61.246 | 6.27% |
| Pb 220.353†      | 2036.4    | 574.06 µg/L | 24.928 | 574.06 ppb | 24.928 | 4.34% |
| S 181.975 Axial† | 1514.2    | 4997.9 µg/L | 195.12 | 4997.9 ppb | 195.12 | 3.90% |
| Sb 206.836†      | 499.8     | 471.25 µg/L | 26.550 | 471.25 ppb | 26.550 | 5.63% |
| Se 196.026†      | 446.4     | 643.41 µg/L | 16.102 | 643.41 ppb | 16.102 | 2.50% |
| SiO2†            | 465144.5  | 87909 µg/L  | 1559.6 | 87909 ppb  | 1559.6 | 1.77% |
| Si 251.611†      | 573616.2  | 40820 µg/L  | 727.0  | 40820 ppb  | 727.0  | 1.78% |
| Sn 189.927†      | 1185.3    | 500.24 µg/L | 30.866 | 500.24 ppb | 30.866 | 6.17% |
| Sr 421.552†      | 79335.4   | 482.81 µg/L | 0.323  | 482.81 ppb | 0.323  | 0.07% |
| Ti 334.940†      | 1375772.6 | 3463.4 µg/L | 93.21  | 3463.4 ppb | 93.21  | 2.69% |
| Tl 190.801†      | 427.9     | 498.24 µg/L | 24.357 | 498.24 ppb | 24.357 | 4.89% |
| U 409.014†       | 3434.6    | 318.00 µg/L | 12.194 | 318.00 ppb | 12.194 | 3.83% |
| V 292.402†       | 39748.0   | 497.09 µg/L | 20.470 | 497.09 ppb | 20.470 | 4.12% |
| Zn 213.857†      | 39458.7   | 949.74 µg/L | 31.076 | 949.74 ppb | 31.076 | 3.27% |

Sequence No.: 14

Sample ID: 1202046589|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 312

Date Collected: 3/11/2010 12:12:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046589|954676|5

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88480.5       | 88480.5             | 103 %              |                    | 12:12:50      |
| 1     | Al 396.153Radial†  | 3240.3        | 3399.5              | 1770.1 µg/L        | 1770.1 ppb         | 12:12:50      |
| 1     | Ca 317.933Radial†  | 3854.3        | 3412.7              | 1263.8 µg/L        | 1263.8 ppb         | 12:12:50      |
| 1     | Fe 238.204 Radial† | 1074.8        | 1027.4              | 11694 µg/L         | 11694 ppb          | 12:13:11      |
| 1     | K 766.490 Radial†  | 2337.0        | 1892.6              | 958.02 µg/L        | 958.02 ppb         | 12:12:50      |
| 1     | Mg 279.077 IEC†    | 27.1          | 20.3                | 244.73 µg/L        | 244.73 ppb         | 12:13:11      |
| 1     | Na 589.592 Radial† | 1759.5        | 1493.9              | 712.37 µg/L        | 712.37 ppb         | 12:12:50      |
| 1     | Sr 421.552†        | 736.4         | 595.7               | 3.6251 µg/L        | 3.6251 ppb         | 12:12:50      |
| 1     | Sc 361.383         | 1877685.2     | 1877685.2           | 103.11 %           |                    | 12:14:13      |
| 1     | Y 371.029          | 1320255.0     | 1320255.0           | 104.85 %           |                    | 12:14:13      |
| 1     | Ag 328.068†        | -709.1        | -150.2              | -0.3506 µg/L       | -0.3506 ppb        | 12:14:19      |
| 1     | As 188.979†        | 1.1           | 3.6                 | 3.9658 µg/L        | 3.9658 ppb         | 12:14:40      |
| 1     | B 249.677†         | 416.8         | 95.1                | -1.3969 µg/L       | -1.3969 ppb        | 12:14:40      |
| 1     | Ba 233.527†        | 1127.2        | 1112.6              | 26.052 µg/L        | 26.052 ppb         | 12:14:40      |
| 1     | Be 313.107†        | 636.4         | 2152.8              | 1.1484 µg/L        | 1.1484 ppb         | 12:14:19      |
| 1     | Cd 226.502†        | -114.2        | 55.5                | 0.0896 µg/L        | 0.0896 ppb         | 12:14:40      |
| 1     | Co 228.616†        | 71.9          | 45.0                | 0.9313 µg/L        | 0.9313 ppb         | 12:14:40      |
| 1     | Cr 267.716†        | 1478.5        | 1373.9              | 31.784 µg/L        | 31.784 ppb         | 12:14:40      |
| 1     | Cu 324.752†        | 4353.7        | -46.1               | 1.8751 µg/L        | 1.8751 ppb         | 12:14:19      |
| 1     | Mn 257.610†        | 167916.0      | 163607.9            | 537.84 µg/L        | 537.84 ppb         | 12:14:13      |
| 1     | Mo 202.031†        | 32.1          | 21.3                | 2.6836 µg/L        | 2.6836 ppb         | 12:14:40      |
| 1     | Ni 231.604†        | 381.5         | 16.3                | 1.1129 µg/L        | 1.1129 ppb         | 12:14:40      |
| 1     | P 214.914†         | 340.6         | 43.3                | 64.890 µg/L        | 64.890 ppb         | 12:14:40      |
| 1     | Pb 220.353†        | 86.1          | 40.1                | 11.615 µg/L        | 11.615 ppb         | 12:14:40      |
| 1     | S 181.975 Axial†   | 46.0          | 22.7                | 74.825 µg/L        | 74.825 ppb         | 12:14:40      |
| 1     | Sb 206.836†        | 20.6          | -7.0                | -6.9623 µg/L       | -6.9623 ppb        | 12:14:40      |
| 1     | Se 196.026†        | 15.8          | -11.4               | 25.558 µg/L        | 25.558 ppb         | 12:14:40      |
| 1     | SiO2†              | 53399.6       | 48943.5             | 9249.9 µg/L        | 9249.9 ppb         | 12:14:19      |
| 1     | Si 251.611†        | 63218.4       | 60893.0             | 4333.3 µg/L        | 4333.3 ppb         | 12:14:19      |
| 1     | Sn 189.927†        | -1.7          | 0.1                 | 0.1150 µg/L        | 0.1150 ppb         | 12:14:40      |
| 1     | Ti 334.940†        | 220802.2      | 214860.1            | 540.95 µg/L        | 540.95 ppb         | 12:14:13      |
| 1     | Tl 190.801†        | -42.0         | -3.7                | 4.4286 µg/L        | 4.4286 ppb         | 12:14:40      |
| 1     | U 409.014†         | -363.7        | -294.9              | -29.845 µg/L       | -29.845 ppb        | 12:14:19      |
| 1     | V 292.402†         | 634.0         | 496.0               | 4.1902 µg/L        | 4.1902 ppb         | 12:14:19      |
| 1     | Zn 213.857†        | 4855.0        | 4076.4              | 98.205 µg/L        | 98.205 ppb         | 12:14:40      |
| 2     | Sc RADIAL          | 87596.8       | 87596.8             | 102 %              |                    | 12:13:16      |
| 2     | Al 396.153Radial†  | 3211.0        | 3402.6              | 1771.7 µg/L        | 1771.7 ppb         | 12:13:16      |
| 2     | Ca 317.933Radial†  | 3808.3        | 3405.4              | 1261.1 µg/L        | 1261.1 ppb         | 12:13:16      |
| 2     | Fe 238.204 Radial† | 1068.7        | 1031.9              | 11746 µg/L         | 11746 ppb          | 12:13:36      |
| 2     | K 766.490 Radial†  | 2368.3        | 1946.2              | 985.14 µg/L        | 985.14 ppb         | 12:13:16      |
| 2     | Mg 279.077 IEC†    | 27.8          | 21.2                | 256.67 µg/L        | 256.67 ppb         | 12:13:36      |
| 2     | Na 589.592 Radial† | 1755.9        | 1507.6              | 718.90 µg/L        | 718.90 ppb         | 12:13:16      |
| 2     | Sr 421.552†        | 729.7         | 596.3               | 3.6291 µg/L        | 3.6291 ppb         | 12:13:16      |
| 2     | Sc 361.383         | 1874987.8     | 1874987.8           | 102.96 %           |                    | 12:14:46      |
| 2     | Y 371.029          | 1318968.8     | 1318968.8           | 104.75 %           |                    | 12:14:46      |
| 2     | Ag 328.068†        | -716.8        | -158.8              | -0.4228 µg/L       | -0.4228 ppb        | 12:14:52      |
| 2     | As 188.979†        | -2.9          | -0.2                | -1.9719 µg/L       | -1.9719 ppb        | 12:15:12      |
| 2     | B 249.677†         | 403.1         | 82.4                | -2.0461 µg/L       | -2.0461 ppb        | 12:15:12      |
| 2     | Ba 233.527†        | 1119.0        | 1106.2              | 25.901 µg/L        | 25.901 ppb         | 12:15:12      |
| 2     | Be 313.107†        | 624.0         | 2141.6              | 1.1408 µg/L        | 1.1408 ppb         | 12:14:52      |
| 2     | Cd 226.502†        | -106.3        | 63.0                | 0.2754 µg/L        | 0.2754 ppb         | 12:15:12      |
| 2     | Co 228.616†        | 78.6          | 51.5                | 1.2272 µg/L        | 1.2272 ppb         | 12:15:12      |
| 2     | Cr 267.716†        | 1433.8        | 1332.6              | 30.829 µg/L        | 30.829 ppb         | 12:15:12      |
| 2     | Cu 324.752†        | 4313.6        | -78.9               | 1.6541 µg/L        | 1.6541 ppb         | 12:14:52      |
| 2     | Mn 257.610†        | 168677.8      | 164582.1            | 541.04 µg/L        | 541.04 ppb         | 12:14:46      |
| 2     | Mo 202.031†        | 27.8          | 17.2                | 2.2528 µg/L        | 2.2528 ppb         | 12:15:12      |
| 2     | Ni 231.604†        | 386.3         | 21.4                | 1.4179 µg/L        | 1.4179 ppb         | 12:15:12      |
| 2     | P 214.914†         | 338.7         | 42.0                | 62.567 µg/L        | 62.567 ppb         | 12:15:12      |
| 2     | Pb 220.353†        | 82.3          | 36.5                | 10.610 µg/L        | 10.610 ppb         | 12:15:12      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 41.8      | 18.6      | 61.447 µg/L  | 61.447 ppb  | 12:15:12 |
| 2 | Sb 206.836†        | 21.6      | -6.1      | -6.0357 µg/L | -6.0357 ppb | 12:15:12 |
| 2 | Se 196.026†        | 19.0      | -8.2      | 28.861 µg/L  | 28.861 ppb  | 12:15:12 |
| 2 | SiO2†              | 53466.7   | 49083.2   | 9276.3 µg/L  | 9276.3 ppb  | 12:14:52 |
| 2 | Si 251.611†        | 63324.6   | 61084.5   | 4346.9 µg/L  | 4346.9 ppb  | 12:14:52 |
| 2 | Sn 189.927†        | -6.1      | -4.1      | -1.6612 µg/L | -1.6612 ppb | 12:15:12 |
| 2 | Ti 334.940†        | 221063.9  | 215422.5  | 542.36 µg/L  | 542.36 ppb  | 12:14:46 |
| 2 | Tl 190.801†        | -38.1     | -0.0      | 8.2946 µg/L  | 8.2946 ppb  | 12:15:12 |
| 2 | U 409.014†         | -344.2    | -276.4    | -28.091 µg/L | -28.091 ppb | 12:14:52 |
| 2 | V 292.402†         | 596.5     | 460.4     | 3.7258 µg/L  | 3.7258 ppb  | 12:14:52 |
| 2 | Zn 213.857†        | 4789.6    | 4019.7    | 96.827 µg/L  | 96.827 ppb  | 12:15:12 |
| 3 | Sc RADIAL          | 88521.2   | 88521.2   | 103 %        |             | 12:13:42 |
| 3 | Al 396.153Radial†  | 3166.3    | 3326.3    | 1732.0 µg/L  | 1732.0 ppb  | 12:13:42 |
| 3 | Ca 317.933Radial†  | 3817.5    | 3375.3    | 1249.9 µg/L  | 1249.9 ppb  | 12:13:42 |
| 3 | Fe 238.204 Radial† | 1064.5    | 1016.9    | 11575 µg/L   | 11575 ppb   | 12:14:02 |
| 3 | K 766.490 Radial†  | 2316.2    | 1871.4    | 947.30 µg/L  | 947.30 ppb  | 12:13:42 |
| 3 | Mg 279.077 IEC†    | 28.6      | 21.8      | 264.17 µg/L  | 264.17 ppb  | 12:14:02 |
| 3 | Na 589.592 Radial† | 1800.3    | 1532.7    | 730.84 µg/L  | 730.84 ppb  | 12:13:42 |
| 3 | Sr 421.552†        | 720.8     | 580.2     | 3.5310 µg/L  | 3.5310 ppb  | 12:13:42 |
| 3 | Sc 361.383         | 1873140.2 | 1873140.2 | 102.86 %     |             | 12:15:19 |
| 3 | Y 371.029          | 1315523.9 | 1315523.9 | 104.48 %     |             | 12:15:19 |
| 3 | Ag 328.068†        | -697.7    | -140.9    | -0.2867 µg/L | -0.2867 ppb | 12:15:25 |
| 3 | As 188.979†        | -0.3      | 2.3       | 1.9199 µg/L  | 1.9199 ppb  | 12:15:45 |
| 3 | B 249.677†         | 381.3     | 61.7      | -2.9844 µg/L | -2.9844 ppb | 12:15:45 |
| 3 | Ba 233.527†        | 909.0     | 903.1     | 21.146 µg/L  | 21.146 ppb  | 12:15:45 |
| 3 | Be 313.107†        | 311.4     | 1838.3    | 0.9687 µg/L  | 0.9687 ppb  | 12:15:25 |
| 3 | Cd 226.502†        | -137.2    | 32.8      | -0.4718 µg/L | -0.4718 ppb | 12:15:45 |
| 3 | Co 228.616†        | 59.8      | 33.4      | 0.4984 µg/L  | 0.4984 ppb  | 12:15:45 |
| 3 | Cr 267.716†        | 1143.7    | 1051.9    | 24.336 µg/L  | 24.336 ppb  | 12:15:45 |
| 3 | Cu 324.752†        | 4376.4    | -13.8     | 2.0792 µg/L  | 2.0792 ppb  | 12:15:25 |
| 3 | Mn 257.610†        | 154749.4  | 151201.9  | 497.10 µg/L  | 497.10 ppb  | 12:15:19 |
| 3 | Mo 202.031†        | 22.0      | 11.6      | 1.6572 µg/L  | 1.6572 ppb  | 12:15:45 |
| 3 | Ni 231.604†        | 382.1     | 17.8      | 1.2002 µg/L  | 1.2002 ppb  | 12:15:45 |
| 3 | P 214.914†         | 329.4     | 33.3      | 47.798 µg/L  | 47.798 ppb  | 12:15:45 |
| 3 | Pb 220.353†        | 82.8      | 37.2      | 10.775 µg/L  | 10.775 ppb  | 12:15:45 |
| 3 | S 181.975 Axial†   | 44.2      | 21.0      | 69.156 µg/L  | 69.156 ppb  | 12:15:45 |
| 3 | Sb 206.836†        | 25.1      | -2.6      | -2.7069 µg/L | -2.7069 ppb | 12:15:45 |
| 3 | Se 196.026†        | 17.5      | -9.8      | 26.802 µg/L  | 26.802 ppb  | 12:15:45 |
| 3 | SiO2†              | 48340.4   | 44150.4   | 8344.1 µg/L  | 8344.1 ppb  | 12:15:25 |
| 3 | Si 251.611†        | 56902.1   | 54901.0   | 3906.9 µg/L  | 3906.9 ppb  | 12:15:25 |
| 3 | Sn 189.927†        | -6.8      | -4.8      | -1.9554 µg/L | -1.9554 ppb | 12:15:45 |
| 3 | Ti 334.940†        | 200812.0  | 195944.5  | 493.32 µg/L  | 493.32 ppb  | 12:15:19 |
| 3 | Tl 190.801†        | -38.8     | -0.8      | 6.9134 µg/L  | 6.9134 ppb  | 12:15:45 |
| 3 | U 409.014†         | -244.8    | -180.1    | -18.874 µg/L | -18.874 ppb | 12:15:25 |
| 3 | V 292.402†         | 544.2     | 410.1     | 3.1121 µg/L  | 3.1121 ppb  | 12:15:25 |
| 3 | Zn 213.857†        | 4070.5    | 3325.1    | 80.004 µg/L  | 80.004 ppb  | 12:15:45 |

## Mean Data: 1202046589|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1875271.1                | 102.97 %           | 0.126    |                    |          | 0.12%   |
| Sc RADIAL          | 88199.5                  | 103 %              | 0.6      |                    |          | 0.59%   |
| Y 371.029          | 1318249.2                | 104.69 %           | 0.194    |                    |          | 0.19%   |
| Ag 328.068†        | -150.0                   | -0.3533 µg/L       | 0.06809  | -0.3533 ppb        | 0.06809  | 19.27%  |
| Al 396.153Radial†  | 3376.1                   | 1758.0 µg/L        | 22.47    | 1758.0 ppb         | 22.47    | 1.28%   |
| As 188.979†        | 1.9                      | 1.3046 µg/L        | 3.01629  | 1.3046 ppb         | 3.01629  | 231.20% |
| B 249.677†         | 79.7                     | -2.1425 µg/L       | 0.79814  | -2.1425 ppb        | 0.79814  | 37.25%  |
| Ba 233.527†        | 1040.6                   | 24.367 µg/L        | 2.7900   | 24.367 ppb         | 2.7900   | 11.45%  |
| Be 313.107†        | 2044.3                   | 1.0860 µg/L        | 0.10165  | 1.0860 ppb         | 0.10165  | 9.36%   |
| Ca 317.933Radial†  | 3397.8                   | 1258.3 µg/L        | 7.34     | 1258.3 ppb         | 7.34     | 0.58%   |
| Cd 226.502†        | 50.4                     | -0.0356 µg/L       | 0.38902  | -0.0356 ppb        | 0.38902  | >999.9% |
| Co 228.616†        | 43.3                     | 0.8857 µg/L        | 0.36652  | 0.8857 ppb         | 0.36652  | 41.38%  |
| Cr 267.716†        | 1252.8                   | 28.983 µg/L        | 4.0527   | 28.983 ppb         | 4.0527   | 13.98%  |
| Cu 324.752†        | -46.3                    | 1.8695 µg/L        | 0.21257  | 1.8695 ppb         | 0.21257  | 11.37%  |
| Fe 238.204 Radial† | 1025.4                   | 11672 µg/L         | 87.9     | 11672 ppb          | 87.9     | 0.75%   |
| K 766.490 Radial†  | 1903.4                   | 963.49 µg/L        | 19.503   | 963.49 ppb         | 19.503   | 2.02%   |
| Mg 279.077 IEC†    | 21.1                     | 255.19 µg/L        | 9.801    | 255.19 ppb         | 9.801    | 3.84%   |
| Mn 257.610†        | 159797.3                 | 525.33 µg/L        | 24.498   | 525.33 ppb         | 24.498   | 4.66%   |
| Mo 202.031†        | 16.7                     | 2.1978 µg/L        | 0.51539  | 2.1978 ppb         | 0.51539  | 23.45%  |
| Na 589.592 Radial† | 1511.4                   | 720.70 µg/L        | 9.366    | 720.70 ppb         | 9.366    | 1.30%   |

|                  |          |              |         |             |         |        |
|------------------|----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 18.5     | 1.2437 µg/L  | 0.15711 | 1.2437 ppb  | 0.15711 | 12.63% |
| P 214.914†       | 39.5     | 58.419 µg/L  | 9.2706  | 58.419 ppb  | 9.2706  | 15.87% |
| Pb 220.353†      | 37.9     | 11.000 µg/L  | 0.5387  | 11.000 ppb  | 0.5387  | 4.90%  |
| S 181.975 Axial† | 20.7     | 68.476 µg/L  | 6.7151  | 68.476 ppb  | 6.7151  | 9.81%  |
| Sb 206.836†      | -5.2     | -5.2350 µg/L | 2.23788 | -5.2350 ppb | 2.23788 | 42.75% |
| Se 196.026†      | -9.8     | 27.074 µg/L  | 1.6681  | 27.074 ppb  | 1.6681  | 6.16%  |
| SiO2†            | 47392.3  | 8956.8 µg/L  | 530.78  | 8956.8 ppb  | 530.78  | 5.93%  |
| Si 251.611†      | 58959.5  | 4195.7 µg/L  | 250.21  | 4195.7 ppb  | 250.21  | 5.96%  |
| Sn 189.927†      | -2.9     | -1.1672 µg/L | 1.12013 | -1.1672 ppb | 1.12013 | 95.96% |
| Sr 421.552†      | 590.7    | 3.5951 µg/L  | 0.05551 | 3.5951 ppb  | 0.05551 | 1.54%  |
| Ti 334.940†      | 208742.4 | 525.54 µg/L  | 27.914  | 525.54 ppb  | 27.914  | 5.31%  |
| Tl 190.801†      | -1.5     | 6.5455 µg/L  | 1.95911 | 6.5455 ppb  | 1.95911 | 29.93% |
| U 409.014†       | -250.5   | -25.604 µg/L | 5.8938  | -25.604 ppb | 5.8938  | 23.02% |
| V 292.402†       | 455.5    | 3.6760 µg/L  | 0.54078 | 3.6760 ppb  | 0.54078 | 14.71% |
| Zn 213.857†      | 3807.0   | 91.679 µg/L  | 10.1340 | 91.679 ppb  | 10.1340 | 11.05% |



Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 12:15:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 90913.6       | 90913.6             | 106 %              |                    | 12:16:31      |
| 1     | Al 396.153Radial†  | 8919.8        | 8675.9              | 4507.3 µg/L        | 4507.3 ppb         | 12:16:31      |
| 1     | Ca 317.933Radial†  | 13983.2       | 12872.6             | 4767.0 µg/L        | 4767.0 ppb         | 12:16:31      |
| 1     | Fe 238.204 Radial† | 447.8         | 407.7               | 4650.9 µg/L        | 4650.9 ppb         | 12:16:51      |
| 1     | K 766.490 Radial†  | 9834.9        | 8908.7              | 4509.4 µg/L        | 4509.4 ppb         | 12:16:31      |
| 1     | Mg 279.077 IEC†    | 409.3         | 380.4               | 4825.9 µg/L        | 4825.9 ppb         | 12:16:51      |
| 1     | Na 589.592 Radial† | 20372.9       | 19016.1             | 9067.7 µg/L        | 9067.7 ppb         | 12:16:31      |
| 1     | Sr 421.552†        | 77745.4       | 73259.8             | 445.84 µg/L        | 445.84 ppb         | 12:16:31      |
| 1     | Sc 361.383         | 1920876.6     | 1920876.6           | 105.48 %           |                    | 12:17:55      |
| 1     | Y 371.029          | 1321195.8     | 1321195.8           | 104.93 %           |                    | 12:17:55      |
| 1     | Ag 328.068†        | 55963.3       | 53594.9             | 464.16 µg/L        | 464.16 ppb         | 12:18:01      |
| 1     | As 188.979†        | 340.3         | 325.2               | 497.85 µg/L        | 497.85 ppb         | 12:18:21      |
| 1     | B 249.677†         | 10386.2       | 9537.8              | 464.99 µg/L        | 464.99 ppb         | 12:18:01      |
| 1     | Ba 233.527†        | 21838.6       | 20724.0             | 485.92 µg/L        | 485.92 ppb         | 12:18:01      |
| 1     | Be 313.107†        | 806046.0      | 765729.1            | 481.60 µg/L        | 481.60 ppb         | 12:17:55      |
| 1     | Cd 226.502†        | 20252.2       | 19366.8             | 492.42 µg/L        | 492.42 ppb         | 12:18:01      |
| 1     | Co 228.616†        | 11341.5       | 10727.8             | 490.40 µg/L        | 490.40 ppb         | 12:18:01      |
| 1     | Cr 267.716†        | 22382.6       | 21160.4             | 489.77 µg/L        | 489.77 ppb         | 12:18:01      |
| 1     | Cu 324.752†        | 73907.8       | 65801.6             | 462.85 µg/L        | 462.85 ppb         | 12:18:01      |
| 1     | Mn 257.610†        | 155313.9      | 147998.1            | 485.86 µg/L        | 485.86 ppb         | 12:17:55      |
| 1     | Mo 202.031†        | 5065.8        | 4792.9              | 503.25 µg/L        | 503.25 ppb         | 12:18:21      |
| 1     | Ni 231.604†        | 9165.9        | 8336.2              | 492.96 µg/L        | 492.96 ppb         | 12:18:01      |
| 1     | P 214.914†         | 1844.3        | 1461.5              | 2448.9 µg/L        | 2448.9 ppb         | 12:18:21      |
| 1     | Pb 220.353†        | 1947.3        | 1802.8              | 506.23 µg/L        | 506.23 ppb         | 12:18:21      |
| 1     | S 181.975 Axial†   | 338.4         | 298.9               | 986.41 µg/L        | 986.41 ppb         | 12:18:21      |
| 1     | Sb 206.836†        | 567.3         | 510.9               | 482.51 µg/L        | 482.51 ppb         | 12:18:21      |
| 1     | Se 196.026†        | 539.0         | 484.3               | 490.23 µg/L        | 490.23 ppb         | 12:18:21      |
| 1     | SiO2†              | 31251.2       | 26780.6             | 5061.3 µg/L        | 5061.3 ppb         | 12:18:01      |
| 1     | Si 251.611†        | 35905.4       | 33619.6             | 2392.4 µg/L        | 2392.4 ppb         | 12:18:01      |
| 1     | Sn 189.927†        | 1286.1        | 1221.1              | 514.93 µg/L        | 514.93 ppb         | 12:18:21      |
| 1     | Ti 334.940†        | 197269.3      | 187733.9            | 472.35 µg/L        | 472.35 ppb         | 12:17:55      |
| 1     | Tl 190.801†        | 453.2         | 466.7               | 493.40 µg/L        | 493.40 ppb         | 12:18:21      |
| 1     | U 409.014†         | 5070.6        | 4865.1              | 463.38 µg/L        | 463.38 ppb         | 12:18:01      |
| 1     | V 292.402†         | 39917.1       | 37725.5             | 482.73 µg/L        | 482.73 ppb         | 12:18:01      |
| 1     | Zn 213.857†        | 21767.4       | 20004.7             | 481.34 µg/L        | 481.34 ppb         | 12:18:01      |
| 2     | Sc RADIAL          | 90901.4       | 90901.4             | 106 %              |                    | 12:16:57      |
| 2     | Al 396.153Radial†  | 8983.2        | 8736.9              | 4539.1 µg/L        | 4539.1 ppb         | 12:16:57      |
| 2     | Ca 317.933Radial†  | 13947.4       | 12840.6             | 4755.2 µg/L        | 4755.2 ppb         | 12:16:57      |
| 2     | Fe 238.204 Radial† | 454.6         | 414.1               | 4724.5 µg/L        | 4724.5 ppb         | 12:17:18      |
| 2     | K 766.490 Radial†  | 9863.4        | 8936.9              | 4523.7 µg/L        | 4523.7 ppb         | 12:16:57      |
| 2     | Mg 279.077 IEC†    | 411.4         | 382.4               | 4851.3 µg/L        | 4851.3 ppb         | 12:17:18      |
| 2     | Na 589.592 Radial† | 20353.3       | 19000.2             | 9060.1 µg/L        | 9060.1 ppb         | 12:16:57      |
| 2     | Sr 421.552†        | 77777.4       | 73299.9             | 446.08 µg/L        | 446.08 ppb         | 12:16:57      |
| 2     | Sc 361.383         | 1899201.0     | 1899201.0           | 104.29 %           |                    | 12:18:28      |
| 2     | Y 371.029          | 1307008.2     | 1307008.2           | 103.80 %           |                    | 12:18:28      |
| 2     | Ag 328.068†        | 56156.2       | 54385.5             | 471.02 µg/L        | 471.02 ppb         | 12:18:34      |
| 2     | As 188.979†        | 345.1         | 333.5               | 510.52 µg/L        | 510.52 ppb         | 12:18:54      |
| 2     | B 249.677†         | 10471.1       | 9731.6              | 474.44 µg/L        | 474.44 ppb         | 12:18:34      |
| 2     | Ba 233.527†        | 21921.7       | 21039.9             | 493.33 µg/L        | 493.33 ppb         | 12:18:34      |
| 2     | Be 313.107†        | 806713.6      | 775091.0            | 487.48 µg/L        | 487.48 ppb         | 12:18:28      |
| 2     | Cd 226.502†        | 20432.6       | 19758.9             | 502.39 µg/L        | 502.39 ppb         | 12:18:34      |
| 2     | Co 228.616†        | 11391.5       | 10898.5             | 498.20 µg/L        | 498.20 ppb         | 12:18:34      |
| 2     | Cr 267.716†        | 22481.8       | 21497.7             | 497.57 µg/L        | 497.57 ppb         | 12:18:34      |
| 2     | Cu 324.752†        | 74366.2       | 67040.9             | 471.57 µg/L        | 471.57 ppb         | 12:18:34      |
| 2     | Mn 257.610†        | 155286.2      | 149652.2            | 491.30 µg/L        | 491.30 ppb         | 12:18:28      |
| 2     | Mo 202.031†        | 4990.1        | 4775.1              | 501.39 µg/L        | 501.39 ppb         | 12:18:54      |
| 2     | Ni 231.604†        | 9163.6        | 8433.2              | 498.69 µg/L        | 498.69 ppb         | 12:18:34      |
| 2     | P 214.914†         | 1832.6        | 1470.3              | 2462.9 µg/L        | 2462.9 ppb         | 12:18:54      |
| 2     | Pb 220.353†        | 1942.5        | 1819.3              | 510.83 µg/L        | 510.83 ppb         | 12:18:54      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 335.0     | 299.3     | 987.82 µg/L | 987.82 ppb | 12:18:54 |
| 2 | Sb 206.836†        | 563.4     | 513.3     | 484.65 µg/L | 484.65 ppb | 12:18:54 |
| 2 | Se 196.026†        | 540.0     | 491.1     | 497.17 µg/L | 497.17 ppb | 12:18:54 |
| 2 | SiO2†              | 31485.6   | 27343.5   | 5167.7 µg/L | 5167.7 ppb | 12:18:34 |
| 2 | Si 251.611†        | 36165.8   | 34257.7   | 2437.8 µg/L | 2437.8 ppb | 12:18:34 |
| 2 | Sn 189.927†        | 1265.3    | 1215.1    | 512.38 µg/L | 512.38 ppb | 12:18:54 |
| 2 | Ti 334.940†        | 197527.1  | 190115.6  | 478.34 µg/L | 478.34 ppb | 12:18:28 |
| 2 | Tl 190.801†        | 464.4     | 482.3     | 509.85 µg/L | 509.85 ppb | 12:18:54 |
| 2 | U 409.014†         | 5088.7    | 4937.4    | 470.27 µg/L | 470.27 ppb | 12:18:34 |
| 2 | V 292.402†         | 40127.5   | 38359.1   | 490.75 µg/L | 490.75 ppb | 12:18:34 |
| 2 | Zn 213.857†        | 21835.2   | 20305.3   | 488.58 µg/L | 488.58 ppb | 12:18:34 |
| 3 | Sc RADIAL          | 91294.7   | 91294.7   | 106 %       |            | 12:17:23 |
| 3 | Al 396.153Radial†  | 8957.5    | 8676.2    | 4509.3 µg/L | 4509.3 ppb | 12:17:23 |
| 3 | Ca 317.933Radial†  | 13917.3   | 12755.5   | 4723.7 µg/L | 4723.7 ppb | 12:17:23 |
| 3 | Fe 238.204 Radial† | 455.3     | 413.0     | 4710.5 µg/L | 4710.5 ppb | 12:17:44 |
| 3 | K 766.490 Radial†  | 9796.1    | 8833.5    | 4471.4 µg/L | 4471.4 ppb | 12:17:23 |
| 3 | Mg 279.077 IEC†    | 414.2     | 383.3     | 4861.6 µg/L | 4861.6 ppb | 12:17:44 |
| 3 | Na 589.592 Radial† | 20279.2   | 18847.8   | 8987.4 µg/L | 8987.4 ppb | 12:17:23 |
| 3 | Sr 421.552†        | 77543.9   | 72764.1   | 442.82 µg/L | 442.82 ppb | 12:17:23 |
| 3 | Sc 361.383         | 1890688.5 | 1890688.5 | 103.82 %    |            | 12:19:02 |
| 3 | Y 371.029          | 1301775.4 | 1301775.4 | 103.39 %    |            | 12:19:02 |
| 3 | Ag 328.068†        | 52524.3   | 51129.6   | 442.66 µg/L | 442.66 ppb | 12:19:07 |
| 3 | As 188.979†        | 282.7     | 274.9     | 420.67 µg/L | 420.67 ppb | 12:19:28 |
| 3 | B 249.677†         | 9692.9    | 9027.3    | 439.89 µg/L | 439.89 ppb | 12:19:07 |
| 3 | Ba 233.527†        | 19766.8   | 19058.9   | 446.86 µg/L | 446.86 ppb | 12:19:07 |
| 3 | Be 313.107†        | 743904.9  | 718075.6  | 451.63 µg/L | 451.63 ppb | 12:19:02 |
| 3 | Cd 226.502†        | 18277.4   | 17771.3   | 451.80 µg/L | 451.80 ppb | 12:19:07 |
| 3 | Co 228.616†        | 10118.8   | 9721.8    | 444.35 µg/L | 444.35 ppb | 12:19:07 |
| 3 | Cr 267.716†        | 19389.6   | 18616.3   | 430.89 µg/L | 430.89 ppb | 12:19:07 |
| 3 | Cu 324.752†        | 66462.2   | 59748.7   | 420.37 µg/L | 420.37 ppb | 12:19:07 |
| 3 | Mn 257.610†        | 143675.7  | 139139.1  | 456.78 µg/L | 456.78 ppb | 12:19:02 |
| 3 | Mo 202.031†        | 4069.4    | 3909.9    | 410.57 µg/L | 410.57 ppb | 12:19:28 |
| 3 | Ni 231.604†        | 8204.4    | 7548.8    | 446.40 µg/L | 446.40 ppb | 12:19:07 |
| 3 | P 214.914†         | 1574.4    | 1229.5    | 2056.1 µg/L | 2056.1 ppb | 12:19:28 |
| 3 | Pb 220.353†        | 1649.0    | 1545.0    | 433.76 µg/L | 433.76 ppb | 12:19:28 |
| 3 | S 181.975 Axial†   | 291.1     | 258.4     | 853.02 µg/L | 853.02 ppb | 12:19:28 |
| 3 | Sb 206.836†        | 483.3     | 438.5     | 413.73 µg/L | 413.73 ppb | 12:19:28 |
| 3 | Se 196.026†        | 473.0     | 428.9     | 435.53 µg/L | 435.53 ppb | 12:19:28 |
| 3 | SiO2†              | 29165.6   | 25244.8   | 4771.1 µg/L | 4771.1 ppb | 12:19:07 |
| 3 | Si 251.611†        | 33163.0   | 31521.5   | 2243.1 µg/L | 2243.1 ppb | 12:19:07 |
| 3 | Sn 189.927†        | 1015.3    | 979.7     | 413.23 µg/L | 413.23 ppb | 12:19:28 |
| 3 | Ti 334.940†        | 180333.1  | 174406.9  | 438.79 µg/L | 438.79 ppb | 12:19:02 |
| 3 | Tl 190.801†        | 399.9     | 422.2     | 446.59 µg/L | 446.59 ppb | 12:19:28 |
| 3 | U 409.014†         | 4485.9    | 4378.7    | 416.95 µg/L | 416.95 ppb | 12:19:07 |
| 3 | V 292.402†         | 35293.9   | 33876.6   | 433.04 µg/L | 433.04 ppb | 12:19:07 |
| 3 | Zn 213.857†        | 19574.7   | 18222.3   | 438.42 µg/L | 438.42 ppb | 12:19:07 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1903588.7                | 104.53 %           | 0.855    |                    |          | 0.82%  |
| Sc RADIAL   | 91036.6                  | 106 %              | 0.3      |                    |          | 0.25%  |
| Y 371.029   | 1309993.1                | 104.04 %           | 0.798    |                    |          | 0.77%  |
| Ag 328.068†   | 53036.7                  | 459.28 µg/L        | 14.798   | 459.28 ppb         | 14.798   | 3.22%  |
| QC value within limits for Ag 328.068 Recovery = 91.86%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 8696.3                   | 4518.6 µg/L        | 17.79    | 4518.6 ppb         | 17.79    | 0.39%  |
| QC value within limits for Al 396.153Radial Recovery = 90.37% |                          |                    |          |                    |          |        |
| As 188.979†   | 311.2                    | 476.35 µg/L        | 48.633   | 476.35 ppb         | 48.633   | 10.21% |
| QC value within limits for As 188.979 Recovery = 95.27%       |                          |                    |          |                    |          |        |
| B 249.677†  | 9432.3                   | 459.77 µg/L        | 17.860   | 459.77 ppb         | 17.860   | 3.88%  |
| QC value within limits for B 249.677 Recovery = 91.95%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 20274.3                  | 475.37 µg/L        | 24.967   | 475.37 ppb         | 24.967   | 5.25%  |
| QC value within limits for Ba 233.527 Recovery = 95.07%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 752965.2                 | 473.57 µg/L        | 19.229   | 473.57 ppb         | 19.229   | 4.06%  |
| QC value within limits for Be 313.107 Recovery = 94.71%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 12822.9                  | 4748.6 µg/L        | 22.40    | 4748.6 ppb         | 22.40    | 0.47%  |
| QC value within limits for Ca 317.933Radial Recovery = 94.97% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 18965.7                  | 482.21 µg/L        | 26.799   | 482.21 ppb         | 26.799   | 5.56%  |
| QC value within limits for Cd 226.502 Recovery = 96.44%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 10449.4                  | 477.65 µg/L        | 29.101   | 477.65 ppb         | 29.101   | 6.09%  |

|   |                   |             |        |                          |
|---|-------------------|-------------|--------|--------------------------|
| QC value within limits for Co 228.616             | Recovery = 95.53% |             |        |                          |
| Cr 267.716†                                       | 20424.8           | 472.74 µg/L | 36.457 | 472.74 ppb 36.457 7.71%  |
| QC value within limits for Cr 267.716             | Recovery = 94.55% |             |        |                          |
| Cu 324.752†                                       | 64197.0           | 451.60 µg/L | 27.393 | 451.60 ppb 27.393 6.07%  |
| QC value within limits for Cu 324.752             | Recovery = 90.32% |             |        |                          |
| Fe 238.204 Radial†                                | 411.6             | 4695.3 µg/L | 39.09  | 4695.3 ppb 39.09 0.83%   |
| QC value within limits for Fe 238.204 Radial      | Recovery = 93.91% |             |        |                          |
| K 766.490 Radial†                                 | 8893.0            | 4501.5 µg/L | 27.05  | 4501.5 ppb 27.05 0.60%   |
| QC value within limits for K 766.490 Radial       | Recovery = 90.03% |             |        |                          |
| Mg 279.077 IEC†                                   | 382.0             | 4846.2 µg/L | 18.37  | 4846.2 ppb 18.37 0.38%   |
| QC value within limits for Mg 279.077 IEC         | Recovery = 96.92% |             |        |                          |
| Mn 257.610†                                       | 145596.5          | 477.98 µg/L | 18.561 | 477.98 ppb 18.561 3.88%  |
| QC value within limits for Mn 257.610             | Recovery = 95.60% |             |        |                          |
| Mo 202.031†                                       | 4492.7            | 471.74 µg/L | 52.979 | 471.74 ppb 52.979 11.23% |
| QC value within limits for Mo 202.031             | Recovery = 94.35% |             |        |                          |
| Na 589.592 Radial†                                | 18954.7           | 9038.4 µg/L | 44.32  | 9038.4 ppb 44.32 0.49%   |
| QC value within limits for Na 589.592 Radial      | Recovery = 90.38% |             |        |                          |
| Ni 231.604†                                       | 8106.1            | 479.35 µg/L | 28.679 | 479.35 ppb 28.679 5.98%  |
| QC value within limits for Ni 231.604             | Recovery = 95.87% |             |        |                          |
| P 214.914†  | 1387.1            | 2322.7 µg/L | 230.91 | 2322.7 ppb 230.91 9.94%  |
| QC value within limits for P 214.914              | Recovery = 92.91% |             |        |                          |
| Pb 220.353†                                       | 1722.4            | 483.61 µg/L | 43.230 | 483.61 ppb 43.230 8.94%  |
| QC value within limits for Pb 220.353             | Recovery = 96.72% |             |        |                          |
| S 181.975 Axial†                                  | 285.5             | 942.41 µg/L | 77.420 | 942.41 ppb 77.420 8.22%  |
| QC value within limits for S 181.975 Axial        | Recovery = 94.24% |             |        |                          |
| Sb 206.836†                                       | 487.6             | 460.30 µg/L | 40.341 | 460.30 ppb 40.341 8.76%  |
| QC value within limits for Sb 206.836             | Recovery = 92.06% |             |        |                          |
| Se 196.026†                                       | 468.1             | 474.31 µg/L | 33.761 | 474.31 ppb 33.761 7.12%  |
| QC value within limits for Se 196.026             | Recovery = 94.86% |             |        |                          |
| SiO2†   | 26456.3           | 5000.0 µg/L | 205.30 | 5000.0 ppb 205.30 4.11%  |
| QC value within limits for SiO2                   | Recovery = 93.50% |             |        |                          |
| Si 251.611†                                       | 33133.0           | 2357.8 µg/L | 101.87 | 2357.8 ppb 101.87 4.32%  |
| QC value within limits for Si 251.611             | Recovery = 94.31% |             |        |                          |
| Sn 189.927†                                       | 1138.6            | 480.18 µg/L | 57.991 | 480.18 ppb 57.991 12.08% |
| QC value within limits for Sn 189.927             | Recovery = 96.04% |             |        |                          |
| Sr 421.552†                                       | 73107.9           | 444.92 µg/L | 1.816  | 444.92 ppb 1.816 0.41%   |
| QC value less than the lower limit for Sr 421.552 | Recovery = 88.98% |             |        |                          |
| Ti 334.940†                                       | 184085.5          | 463.16 µg/L | 21.316 | 463.16 ppb 21.316 4.60%  |
| QC value within limits for Ti 334.940             | Recovery = 92.63% |             |        |                          |
| Tl 190.801†                                       | 457.1             | 483.28 µg/L | 32.825 | 483.28 ppb 32.825 6.79%  |
| QC value within limits for Tl 190.801             | Recovery = 96.66% |             |        |                          |
| U 409.014†  | 4727.1            | 450.20 µg/L | 29.000 | 450.20 ppb 29.000 6.44%  |
| QC value within limits for U 409.014              | Recovery = 90.04% |             |        |                          |
| V 292.402†  | 36653.7           | 468.84 µg/L | 31.262 | 468.84 ppb 31.262 6.67%  |
| QC value within limits for V 292.402              | Recovery = 93.77% |             |        |                          |
| Zn 213.857†                                       | 19510.8           | 469.44 µg/L | 27.114 | 469.44 ppb 27.114 5.78%  |
| QC value within limits for Zn 213.857             | Recovery = 93.89% |             |        |                          |
| QC Failed. Continue with analysis.                |                   |             |        |                          |

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 12:19:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 82664.8          | 82664.8                | 96.3 %                |                       | 12:20:11         |
| 1     | Al 396.153Radial†  | -281.2           | -34.7                  | -18.077 µg/L          | -18.077 ppb           | 12:20:11         |
| 1     | Ca 317.933Radial†  | 349.6            | 37.7                   | 13.980 µg/L           | 13.980 ppb            | 12:20:31         |
| 1     | Fe 238.204 Radial† | 18.6             | 4.3                    | 49.080 µg/L           | 49.080 ppb            | 12:20:31         |
| 1     | K 766.490 Radial†  | 437.6            | 80.5                   | 40.757 µg/L           | 40.757 ppb            | 12:20:11         |
| 1     | Mg 279.077 IEC†    | 8.2              | 2.6                    | 32.665 µg/L           | 32.665 ppb            | 12:20:31         |
| 1     | Na 589.592 Radial† | 221.5            | 17.5                   | 8.3439 µg/L           | 8.3439 ppb            | 12:20:11         |
| 1     | Sr 421.552†        | 179.2            | 67.5                   | 0.4110 µg/L           | 0.4110 ppb            | 12:20:11         |
| 1     | Sc 361.383         | 1809550.0        | 1809550.0              | 99.364 %              |                       | 12:21:33         |
| 1     | Y 371.029          | 1250135.3        | 1250135.3              | 99.284 %              |                       | 12:21:33         |
| 1     | Ag 328.068†        | -576.0           | -42.2                  | -0.3579 µg/L          | -0.3579 ppb           | 12:21:38         |
| 1     | As 188.979†        | -2.9             | -0.4                   | -0.5541 µg/L          | -0.5541 ppb           | 12:21:59         |
| 1     | B 249.677†         | 328.8            | 21.8                   | 1.0428 µg/L           | 1.0428 ppb            | 12:21:59         |
| 1     | Ba 233.527†        | -19.1            | 0.1                    | 0.0030 µg/L           | 0.0030 ppb            | 12:21:59         |
| 1     | Be 313.107†        | -1609.9          | -84.6                  | -0.0534 µg/L          | -0.0534 ppb           | 12:21:38         |
| 1     | Cd 226.502†        | -172.9           | -7.8                   | -0.2042 µg/L          | -0.2042 ppb           | 12:21:59         |
| 1     | Co 228.616†        | 26.1             | 1.5                    | 0.0672 µg/L           | 0.0672 ppb            | 12:21:59         |
| 1     | Cr 267.716†        | 69.0             | 9.4                    | 0.2179 µg/L           | 0.2179 ppb            | 12:21:59         |
| 1     | Cu 324.752†        | 4176.9           | -65.0                  | -0.4475 µg/L          | -0.4475 ppb           | 12:21:38         |
| 1     | Mn 257.610†        | -777.1           | -33.4                  | -0.1091 µg/L          | -0.1091 ppb           | 12:21:59         |
| 1     | Mo 202.031†        | 13.7             | 3.9                    | 0.4132 µg/L           | 0.4132 ppb            | 12:21:59         |
| 1     | Ni 231.604†        | 361.5            | 10.0                   | 0.5921 µg/L           | 0.5921 ppb            | 12:21:59         |
| 1     | P 214.914†         | 274.4            | -10.9                  | -18.531 µg/L          | -18.531 ppb           | 12:21:59         |
| 1     | Pb 220.353†        | 46.2             | 3.1                    | 0.8639 µg/L           | 0.8639 ppb            | 12:21:59         |
| 1     | S 181.975 Axial†   | 27.3             | 5.5                    | 18.005 µg/L           | 18.005 ppb            | 12:21:59         |
| 1     | Sb 206.836†        | 30.9             | 4.1                    | 3.8921 µg/L           | 3.8921 ppb            | 12:21:59         |
| 1     | Se 196.026†        | 18.9             | -7.7                   | -7.4615 µg/L          | -7.4615 ppb           | 12:21:59         |
| 1     | SiO2†              | 2808.6           | -21.5                  | -4.0543 µg/L          | -4.0543 ppb           | 12:21:38         |
| 1     | Si 251.611†        | 491.7            | 73.3                   | 5.2184 µg/L           | 5.2184 ppb            | 12:21:59         |
| 1     | Sn 189.927†        | -2.6             | -0.8                   | -0.3461 µg/L          | -0.3461 ppb           | 12:21:59         |
| 1     | Ti 334.940†        | -546.8           | 157.1                  | 0.3931 µg/L           | 0.3931 ppb            | 12:21:38         |
| 1     | Tl 190.801†        | -41.5            | -4.8                   | -5.0158 µg/L          | -5.0158 ppb           | 12:21:59         |
| 1     | U 409.014†         | -2.3             | 55.5                   | 5.2923 µg/L           | 5.2923 ppb            | 12:21:38         |
| 1     | V 292.402†         | 132.9            | 14.8                   | 0.1874 µg/L           | 0.1874 ppb            | 12:21:38         |
| 1     | Zn 213.857†        | 619.1            | -9.4                   | -0.2329 µg/L          | -0.2329 ppb           | 12:21:59         |
| 2     | Sc RADIAL          | 83352.1          | 83352.1                | 97.1 %                |                       | 12:20:36         |
| 2     | Al 396.153Radial†  | -252.8           | -3.0                   | -1.6041 µg/L          | -1.6041 ppb           | 12:20:36         |
| 2     | Ca 317.933Radial†  | 349.6            | 34.7                   | 12.841 µg/L           | 12.841 ppb            | 12:20:57         |
| 2     | Fe 238.204 Radial† | 14.6             | 0.0                    | 0.2015 µg/L           | 0.2015 ppb            | 12:20:57         |
| 2     | K 766.490 Radial†  | 338.4            | -25.4                  | -12.843 µg/L          | -12.843 ppb           | 12:20:36         |
| 2     | Mg 279.077 IEC†    | 11.8             | 6.2                    | 78.079 µg/L           | 78.079 ppb            | 12:20:57         |
| 2     | Na 589.592 Radial† | 196.8            | -9.8                   | -4.6545 µg/L          | -4.6545 ppb           | 12:20:36         |
| 2     | Sr 421.552†        | 146.1            | 31.9                   | 0.1941 µg/L           | 0.1941 ppb            | 12:20:36         |
| 2     | Sc 361.383         | 1830308.3        | 1830308.3              | 100.50 %              |                       | 12:22:05         |
| 2     | Y 371.029          | 1263809.9        | 1263809.9              | 100.37 %              |                       | 12:22:05         |
| 2     | Ag 328.068†        | -595.2           | -54.7                  | -0.4702 µg/L          | -0.4702 ppb           | 12:22:11         |
| 2     | As 188.979†        | -3.3             | -0.7                   | -1.1000 µg/L          | -1.1000 ppb           | 12:22:31         |
| 2     | B 249.677†         | 320.8            | 10.1                   | 0.4936 µg/L           | 0.4936 ppb            | 12:22:31         |
| 2     | Ba 233.527†        | -22.4            | -3.0                   | -0.0698 µg/L          | -0.0698 ppb           | 12:22:31         |
| 2     | Be 313.107†        | -1442.1          | 100.7                  | 0.0633 µg/L           | 0.0633 ppb            | 12:22:11         |
| 2     | Cd 226.502†        | -171.9           | -4.8                   | -0.1234 µg/L          | -0.1234 ppb           | 12:22:31         |
| 2     | Co 228.616†        | 35.3             | 10.3                   | 0.4734 µg/L           | 0.4734 ppb            | 12:22:31         |
| 2     | Cr 267.716†        | 73.8             | 13.5                   | 0.3111 µg/L           | 0.3111 ppb            | 12:22:31         |
| 2     | Cu 324.752†        | 4203.6           | -86.1                  | -0.6047 µg/L          | -0.6047 ppb           | 12:22:11         |
| 2     | Mn 257.610†        | -780.7           | -28.1                  | -0.0977 µg/L          | -0.0977 ppb           | 12:22:31         |
| 2     | Mo 202.031†        | 17.5             | 7.6                    | 0.7983 µg/L           | 0.7983 ppb            | 12:22:31         |
| 2     | Ni 231.604†        | 345.0            | -10.5                  | -0.6210 µg/L          | -0.6210 ppb           | 12:22:31         |
| 2     | P 214.914†         | 290.2            | 1.7                    | 3.0535 µg/L           | 3.0535 ppb            | 12:22:31         |
| 2     | Pb 220.353†        | 40.8             | -2.8                   | -0.7859 µg/L          | -0.7859 ppb           | 12:22:31         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.3      | -0.8      | -2.5871 µg/L | -2.5871 ppb | 12:22:31 |
| 2 | Sb 206.836†        | 30.7      | 3.5       | 3.3210 µg/L  | 3.3210 ppb  | 12:22:31 |
| 2 | Se 196.026†        | 22.1      | -4.7      | -4.7320 µg/L | -4.7320 ppb | 12:22:31 |
| 2 | SiO2†              | 2853.3    | -9.0      | -1.7019 µg/L | -1.7019 ppb | 12:22:11 |
| 2 | Si 251.611†        | 491.8     | 67.9      | 4.8291 µg/L  | 4.8291 ppb  | 12:22:31 |
| 2 | Sn 189.927†        | 2.6       | 4.3       | 1.8339 µg/L  | 1.8339 ppb  | 12:22:31 |
| 2 | Ti 334.940†        | -598.7    | 111.7     | 0.2752 µg/L  | 0.2752 ppb  | 12:22:11 |
| 2 | Tl 190.801†        | -36.5     | 0.7       | 0.6998 µg/L  | 0.6998 ppb  | 12:22:31 |
| 2 | U 409.014†         | 40.6      | 98.2      | 9.3731 µg/L  | 9.3731 ppb  | 12:22:11 |
| 2 | V 292.402†         | 120.9     | 1.3       | 0.0332 µg/L  | 0.0332 ppb  | 12:22:11 |
| 2 | Zn 213.857†        | 638.5     | 2.9       | 0.0698 µg/L  | 0.0698 ppb  | 12:22:31 |
| 3 | Sc RADIAL          | 84219.8   | 84219.8   | 98.2 %       |             | 12:21:02 |
| 3 | Al 396.153Radial†  | -272.3    | -20.3     | -10.562 µg/L | -10.562 ppb | 12:21:02 |
| 3 | Ca 317.933Radial†  | 351.0     | 32.4      | 12.007 µg/L  | 12.007 ppb  | 12:21:23 |
| 3 | Fe 238.204 Radial† | 16.0      | 1.4       | 15.654 µg/L  | 15.654 ppb  | 12:21:23 |
| 3 | K 766.490 Radial†  | 358.7     | -8.3      | -4.2038 µg/L | -4.2038 ppb | 12:21:02 |
| 3 | Mg 279.077 IEC†    | 10.7      | 4.9       | 62.549 µg/L  | 62.549 ppb  | 12:21:23 |
| 3 | Na 589.592 Radial† | 223.8     | 15.6      | 7.4479 µg/L  | 7.4479 ppb  | 12:21:02 |
| 3 | Sr 421.552†        | 151.5     | 35.9      | 0.2183 µg/L  | 0.2183 ppb  | 12:21:02 |
| 3 | Sc 361.383         | 1843718.1 | 1843718.1 | 101.24 %     |             | 12:22:37 |
| 3 | Y 371.029          | 1273059.2 | 1273059.2 | 101.11 %     |             | 12:22:37 |
| 3 | Ag 328.068†        | -563.5    | -19.1     | -0.1602 µg/L | -0.1602 ppb | 12:22:43 |
| 3 | As 188.979†        | -7.7      | -5.1      | -7.7852 µg/L | -7.7852 ppb | 12:23:03 |
| 3 | B 249.677†         | 305.8     | -7.0      | -0.3506 µg/L | -0.3506 ppb | 12:23:03 |
| 3 | Ba 233.527†        | -22.2     | -2.6      | -0.0604 µg/L | -0.0604 ppb | 12:23:03 |
| 3 | Be 313.107†        | -1453.9   | 99.5      | 0.0625 µg/L  | 0.0625 ppb  | 12:22:43 |
| 3 | Cd 226.502†        | -174.9    | -6.6      | -0.1703 µg/L | -0.1703 ppb | 12:23:03 |
| 3 | Co 228.616†        | 24.2      | -0.9      | -0.0422 µg/L | -0.0422 ppb | 12:23:03 |
| 3 | Cr 267.716†        | 78.3      | 17.3      | 0.4006 µg/L  | 0.4006 ppb  | 12:23:03 |
| 3 | Cu 324.752†        | 4166.3    | -153.4    | -1.0740 µg/L | -1.0740 ppb | 12:22:43 |
| 3 | Mn 257.610†        | -774.7    | -16.5     | -0.0575 µg/L | -0.0575 ppb | 12:23:03 |
| 3 | Mo 202.031†        | 13.8      | 3.8       | 0.3969 µg/L  | 0.3969 ppb  | 12:23:03 |
| 3 | Ni 231.604†        | 354.1     | -4.0      | -0.2351 µg/L | -0.2351 ppb | 12:23:03 |
| 3 | P 214.914†         | 288.7     | -1.8      | -2.9873 µg/L | -2.9873 ppb | 12:23:03 |
| 3 | Pb 220.353†        | 50.4      | 6.5       | 1.8101 µg/L  | 1.8101 ppb  | 12:23:03 |
| 3 | S 181.975 Axial†   | 17.7      | -4.5      | -14.875 µg/L | -14.875 ppb | 12:23:03 |
| 3 | Sb 206.836†        | 28.7      | 1.4       | 1.2876 µg/L  | 1.2876 ppb  | 12:23:03 |
| 3 | Se 196.026†        | 24.3      | -2.7      | -2.6741 µg/L | -2.6741 ppb | 12:23:03 |
| 3 | SiO2†              | 2816.9    | -65.6     | -12.395 µg/L | -12.395 ppb | 12:22:43 |
| 3 | Si 251.611†        | 498.5     | 70.9      | 5.0432 µg/L  | 5.0432 ppb  | 12:23:03 |
| 3 | Sn 189.927†        | -4.8      | -3.0      | -1.2499 µg/L | -1.2499 ppb | 12:23:03 |
| 3 | Ti 334.940†        | -582.7    | 131.9     | 0.3273 µg/L  | 0.3273 ppb  | 12:22:43 |
| 3 | Tl 190.801†        | -34.4     | 3.0       | 3.1364 µg/L  | 3.1364 ppb  | 12:23:03 |
| 3 | U 409.014†         | -18.3     | 39.8      | 3.7916 µg/L  | 3.7916 ppb  | 12:22:43 |
| 3 | V 292.402†         | 155.6     | 34.7      | 0.4445 µg/L  | 0.4445 ppb  | 12:22:43 |
| 3 | Zn 213.857†        | 666.4     | 25.8      | 0.6241 µg/L  | 0.6241 ppb  | 12:23:03 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1827858.8                | 100.37 %           | 0.945    |                    |          | 0.94%   |
| Sc RADIAL   | 83412.2                  | 97.2 %             | 0.91     |                    |          | 0.93%   |
| Y 371.029   | 1262334.8                | 100.25 %           | 0.916    |                    |          | 0.91%   |
| Ag 328.068†   | -38.7                    | -0.3294 µg/L       | 0.15694  | -0.3294 ppb        | 0.15694  | 47.64%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -19.3                    | -10.081 µg/L       | 8.2472   | -10.081 ppb        | 8.2472   | 81.81%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -2.0                     | -3.1464 µg/L       | 4.02655  | -3.1464 ppb        | 4.02655  | 127.97% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 8.3                      | 0.3952 µg/L        | 0.70187  | 0.3952 ppb         | 0.70187  | 177.58% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -1.8                     | -0.0424 µg/L       | 0.03962  | -0.0424 ppb        | 0.03962  | 93.41%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 38.5                     | 0.0241 µg/L        | 0.06713  | 0.0241 ppb         | 0.06713  | 278.42% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 34.9                     | 12.942 µg/L        | 0.9904   | 12.942 ppb         | 0.9904   | 7.65%   |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -6.4                     | -0.1660 µg/L       | 0.04058  | -0.1660 ppb        | 0.04058  | 24.45%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 3.6                      | 0.1661 µg/L        | 0.27170  | 0.1661 ppb         | 0.27170  | 163.54% |

|  |                 |        |              |          |             |          |         |
|--|-----------------|--------|--------------|----------|-------------|----------|---------|
| Cr   | 267.716†        | 13.4   | 0.3099 µg/L  | 0.09134  | 0.3099 ppb  | 0.09134  | 29.47%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Cu   | 324.752†        | -101.5 | -0.7087 µg/L | 0.32599  | -0.7087 ppb | 0.32599  | 46.00%  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Fe   | 238.204 Radial† | 1.9    | 21.645 µg/L  | 24.9839  | 21.645 ppb  | 24.9839  | 115.43% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |        |              |          |             |          |         |
| K  | 766.490 Radial† | 15.6   | 7.9035 µg/L  | 28.77810 | 7.9035 ppb  | 28.77810 | 364.12% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |        |              |          |             |          |         |
| Mg   | 279.077 IEC†    | 4.6    | 57.764 µg/L  | 23.0819  | 57.764 ppb  | 23.0819  | 39.96%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |        |              |          |             |          |         |
| Mn   | 257.610†        | -26.0  | -0.0881 µg/L | 0.02708  | -0.0881 ppb | 0.02708  | 30.74%  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Mo   | 202.031†        | 5.1    | 0.5361 µg/L  | 0.22718  | 0.5361 ppb  | 0.22718  | 42.37%  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Na   | 589.592 Radial† | 7.8    | 3.7124 µg/L  | 7.25978  | 3.7124 ppb  | 7.25978  | 195.55% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |        |              |          |             |          |         |
| Ni   | 231.604†        | -1.5   | -0.0880 µg/L | 0.61980  | -0.0880 ppb | 0.61980  | 704.11% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| P  | 214.914†        | -3.6   | -6.1551 µg/L | 11.13571 | -6.1551 ppb | 11.13571 | 180.92% |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| Pb   | 220.353†        | 2.3    | 0.6294 µg/L  | 1.31378  | 0.6294 ppb  | 1.31378  | 208.74% |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| S  | 181.975 Axial†  | 0.1    | 0.1809 µg/L  | 16.61366 | 0.1809 ppb  | 16.61366 | >999.9% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |        |              |          |             |          |         |
| Sb   | 206.836†        | 3.0    | 2.8336 µg/L  | 1.36895  | 2.8336 ppb  | 1.36895  | 48.31%  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Se   | 196.026†        | -5.0   | -4.9559 µg/L | 2.40154  | -4.9559 ppb | 2.40154  | 48.46%  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| SiO2†  |                 | -32.0  | -6.0505 µg/L | 5.61916  | -6.0505 ppb | 5.61916  | 92.87%  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |        |              |          |             |          |         |
| Si   | 251.611†        | 70.7   | 5.0302 µg/L  | 0.19501  | 5.0302 ppb  | 0.19501  | 3.88%   |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Sn   | 189.927†        | 0.2    | 0.0793 µg/L  | 1.58534  | 0.0793 ppb  | 1.58534  | >999.9% |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Sr   | 421.552†        | 45.1   | 0.2745 µg/L  | 0.11884  | 0.2745 ppb  | 0.11884  | 43.30%  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Ti   | 334.940†        | 133.5  | 0.3319 µg/L  | 0.05909  | 0.3319 ppb  | 0.05909  | 17.80%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Tl   | 190.801†        | -0.4   | -0.3932 µg/L | 4.18458  | -0.3932 ppb | 4.18458  | >999.9% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| U  | 409.014†        | 64.5   | 6.1523 µg/L  | 2.88842  | 6.1523 ppb  | 2.88842  | 46.95%  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| V  | 292.402†        | 16.9   | 0.2217 µg/L  | 0.20777  | 0.2217 ppb  | 0.20777  | 93.72%  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| Zn   | 213.857†        | 6.5    | 0.1537 µg/L  | 0.43458  | 0.1537 ppb  | 0.43458  | 282.82% |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |        |              |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 17

Sample ID: 247188002|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 313

Date Collected: 3/11/2010 12:23:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188002|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87957.2          | 87957.2                | 103 %                 |                       | 12:23:49         |
| 1     | Al 396.153Radial†  | 30426.4          | 29939.7                | 15590 µg/L            | 15590 ppb             | 12:23:49         |
| 1     | Ca 317.933Radial†  | 13377.7          | 12725.4                | 4712.5 µg/L           | 4712.5 ppb            | 12:23:49         |
| 1     | Fe 238.204 Radial† | 6205.4           | 6038.7                 | 68737 µg/L            | 68737 ppb             | 12:24:10         |
| 1     | K 766.490 Radial†  | 7825.8           | 7260.7                 | 3675.3 µg/L           | 3675.3 ppb            | 12:23:49         |
| 1     | Mg 279.077 IEC†    | 227.5            | 216.0                  | 2664.4 µg/L           | 2664.4 ppb            | 12:24:10         |
| 1     | Na 589.592 Radial† | 4962.2           | 4628.5                 | 2207.1 µg/L           | 2207.1 ppb            | 12:23:49         |
| 1     | Sr 421.552†        | 6893.4           | 6606.4                 | 40.205 µg/L           | 40.205 ppb            | 12:23:49         |
| 1     | Sc 361.383         | 1898034.4        | 1898034.4              | 104.22 %              |                       | 12:25:15         |
| 1     | Y 371.029          | 1378137.7        | 1378137.7              | 109.45 %              |                       | 12:25:15         |
| 1     | Ag 328.068†        | -1134.4          | -551.0                 | 0.8180 µg/L           | 0.8180 ppb            | 12:25:20         |
| 1     | As 188.979†        | 6.2              | 8.5                    | 3.9674 µg/L           | 3.9674 ppb            | 12:25:41         |
| 1     | B 249.677†         | 786.5            | 445.6                  | -14.039 µg/L          | -14.039 ppb           | 12:25:20         |
| 1     | Ba 233.527†        | 10253.4          | 9857.3                 | 230.79 µg/L           | 230.79 ppb            | 12:25:20         |
| 1     | Be 313.107†        | 4321.7           | 5682.1                 | 2.6876 µg/L           | 2.6876 ppb            | 12:25:20         |
| 1     | Cd 226.502†        | 179.3            | 338.2                  | 0.8498 µg/L           | 0.8498 ppb            | 12:25:41         |
| 1     | Co 228.616†        | 287.7            | 251.3                  | 6.6418 µg/L           | 6.6418 ppb            | 12:25:41         |
| 1     | Cr 267.716†        | 856.3            | 761.5                  | 17.641 µg/L           | 17.641 ppb            | 12:25:41         |
| 1     | Cu 324.752†        | 4551.4           | 98.3                   | 13.613 µg/L           | 13.613 ppb            | 12:25:20         |
| 1     | Mn 257.610†        | 800889.8         | 769191.7               | 2529.3 µg/L           | 2529.3 ppb            | 12:25:15         |
| 1     | Mo 202.031†        | 65.4             | 53.0                   | 8.1709 µg/L           | 8.1709 ppb            | 12:25:41         |
| 1     | Ni 231.604†        | 657.9            | 277.4                  | 17.304 µg/L           | 17.304 ppb            | 12:25:41         |
| 1     | P 214.914†         | 546.5            | 237.3                  | 353.40 µg/L           | 353.40 ppb            | 12:25:41         |
| 1     | Pb 220.353†        | 181.1            | 130.4                  | 39.099 µg/L           | 39.099 ppb            | 12:25:41         |
| 1     | S 181.975 Axial†   | 20.6             | -2.2                   | -7.2572 µg/L          | -7.2572 ppb           | 12:25:41         |
| 1     | Sb 206.836†        | 18.6             | -9.1                   | -8.7681 µg/L          | -8.7681 ppb           | 12:25:41         |
| 1     | Se 196.026†        | -27.6            | -53.2                  | 163.45 µg/L           | 163.45 ppb            | 12:25:41         |
| 1     | SiO2†              | 277002.4         | 262932.1               | 49692 µg/L            | 49692 ppb             | 12:25:15         |
| 1     | Si 251.611†        | 339626.6         | 325445.7               | 23159 µg/L            | 23159 ppb             | 12:25:15         |
| 1     | Sn 189.927†        | 7.2              | 8.7                    | 3.7947 µg/L           | 3.7947 ppb            | 12:25:41         |
| 1     | Ti 334.940†        | 963473.6         | 925147.5               | 2329.1 µg/L           | 2329.1 ppb            | 12:25:15         |
| 1     | Tl 190.801†        | -68.1            | -28.3                  | 9.8536 µg/L           | 9.8536 ppb            | 12:25:41         |
| 1     | U 409.014†         | -2130.3          | -1986.2                | -199.40 µg/L          | -199.40 ppb           | 12:25:15         |
| 1     | V 292.402†         | 3462.2           | 3202.9                 | 27.833 µg/L           | 27.833 ppb            | 12:25:20         |
| 1     | Zn 213.857†        | 16597.2          | 15292.4                | 367.07 µg/L           | 367.07 ppb            | 12:25:20         |
| 2     | Sc RADIAL          | 88372.8          | 88372.8                | 103 %                 |                       | 12:24:15         |
| 2     | Al 396.153Radial†  | 30701.8          | 30067.5                | 15656 µg/L            | 15656 ppb             | 12:24:15         |
| 2     | Ca 317.933Radial†  | 13514.5          | 12797.0                | 4739.0 µg/L           | 4739.0 ppb            | 12:24:15         |
| 2     | Fe 238.204 Radial† | 6210.2           | 6014.9                 | 68467 µg/L            | 68467 ppb             | 12:24:36         |
| 2     | K 766.490 Radial†  | 7952.6           | 7347.9                 | 3719.4 µg/L           | 3719.4 ppb            | 12:24:15         |
| 2     | Mg 279.077 IEC†    | 228.4            | 215.8                  | 2662.4 µg/L           | 2662.4 ppb            | 12:24:36         |
| 2     | Na 589.592 Radial† | 5096.2           | 4735.8                 | 2258.2 µg/L           | 2258.2 ppb            | 12:24:15         |
| 2     | Sr 421.552†        | 6955.1           | 6634.6                 | 40.377 µg/L           | 40.377 ppb            | 12:24:15         |
| 2     | Sc 361.383         | 1909271.6        | 1909271.6              | 104.84 %              |                       | 12:25:48         |
| 2     | Y 371.029          | 1386591.9        | 1386591.9              | 110.12 %              |                       | 12:25:48         |
| 2     | Ag 328.068†        | -1239.6          | -644.9                 | -0.0143 µg/L          | -0.0143 ppb           | 12:25:54         |
| 2     | As 188.979†        | 2.2              | 4.7                    | -1.8609 µg/L          | -1.8609 ppb           | 12:26:14         |
| 2     | B 249.677†         | 779.2            | 434.2                  | -14.457 µg/L          | -14.457 ppb           | 12:25:54         |
| 2     | Ba 233.527†        | 10289.1          | 9833.4                 | 230.23 µg/L           | 230.23 ppb            | 12:25:54         |
| 2     | Be 313.107†        | 4347.9           | 5682.8                 | 2.6957 µg/L           | 2.6957 ppb            | 12:25:54         |
| 2     | Cd 226.502†        | 165.6            | 324.1                  | 0.5221 µg/L           | 0.5221 ppb            | 12:26:14         |
| 2     | Co 228.616†        | 278.1            | 240.5                  | 6.1893 µg/L           | 6.1893 ppb            | 12:26:14         |
| 2     | Cr 267.716†        | 848.6            | 749.4                  | 17.361 µg/L           | 17.361 ppb            | 12:26:14         |
| 2     | Cu 324.752†        | 4650.3           | 167.0                  | 14.044 µg/L           | 14.044 ppb            | 12:25:54         |
| 2     | Mn 257.610†        | 800522.4         | 764318.5               | 2513.3 µg/L           | 2513.3 ppb            | 12:25:48         |
| 2     | Mo 202.031†        | 59.3             | 46.7                   | 7.5077 µg/L           | 7.5077 ppb            | 12:26:14         |
| 2     | Ni 231.604†        | 673.3            | 288.4                  | 17.952 µg/L           | 17.952 ppb            | 12:26:14         |
| 2     | P 214.914†         | 542.9            | 230.8                  | 342.41 µg/L           | 342.41 ppb            | 12:26:14         |
| 2     | Pb 220.353†        | 174.5            | 123.1                  | 37.059 µg/L           | 37.059 ppb            | 12:26:14         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.7      | -1.3      | -4.2869 µg/L | -4.2869 ppb | 12:26:14 |
| 2 | Sb 206.836†        | 20.1      | -7.8      | -7.5469 µg/L | -7.5469 ppb | 12:26:14 |
| 2 | Se 196.026†        | -38.5     | -63.4     | 152.44 µg/L  | 152.44 ppb  | 12:26:14 |
| 2 | SiO2†              | 275968.8  | 260381.9  | 49210 µg/L   | 49210 ppb   | 12:25:48 |
| 2 | Si 251.611†        | 337796.6  | 321782.2  | 22899 µg/L   | 22899 ppb   | 12:25:48 |
| 2 | Sn 189.927†        | -2.6      | -0.7      | -0.1489 µg/L | -0.1489 ppb | 12:26:14 |
| 2 | Ti 334.940†        | 960767.4  | 917125.3  | 2308.9 µg/L  | 2308.9 ppb  | 12:25:48 |
| 2 | Tl 190.801†        | -79.2     | -38.5     | -1.1220 µg/L | -1.1220 ppb | 12:26:14 |
| 2 | U 409.014†         | -2110.3   | -1955.1   | -196.39 µg/L | -196.39 ppb | 12:25:48 |
| 2 | V 292.402†         | 3424.8    | 3147.8    | 27.182 µg/L  | 27.182 ppb  | 12:25:54 |
| 2 | Zn 213.857†        | 16596.8   | 15198.3   | 364.80 µg/L  | 364.80 ppb  | 12:25:54 |
| 3 | Sc RADIAL          | 88604.6   | 88604.6   | 103 %        |             | 12:24:41 |
| 3 | Al 396.153Radial†  | 30813.8   | 30098.0   | 15672 µg/L   | 15672 ppb   | 12:24:41 |
| 3 | Ca 317.933Radial†  | 13566.7   | 12813.1   | 4745.0 µg/L  | 4745.0 ppb  | 12:24:41 |
| 3 | Fe 238.204 Radial† | 6236.4    | 6024.5    | 68576 µg/L   | 68576 ppb   | 12:25:02 |
| 3 | K 766.490 Radial†  | 7889.6    | 7266.7    | 3678.3 µg/L  | 3678.3 ppb  | 12:24:41 |
| 3 | Mg 279.077 IEC†    | 225.5     | 212.4     | 2619.3 µg/L  | 2619.3 ppb  | 12:25:02 |
| 3 | Na 589.592 Radial† | 5095.8    | 4722.5    | 2251.9 µg/L  | 2251.9 ppb  | 12:24:41 |
| 3 | Sr 421.552†        | 6964.7    | 6626.3    | 40.326 µg/L  | 40.326 ppb  | 12:24:41 |
| 3 | Sc 361.383         | 1920536.9 | 1920536.9 | 105.46 %     |             | 12:26:22 |
| 3 | Y 371.029          | 1390745.2 | 1390745.2 | 110.45 %     |             | 12:26:22 |
| 3 | Ag 328.068†        | -1158.9   | -561.4    | 0.6921 µg/L  | 0.6921 ppb  | 12:26:28 |
| 3 | As 188.979†        | 7.3       | 9.5       | 5.6062 µg/L  | 5.6062 ppb  | 12:26:48 |
| 3 | B 249.677†         | 740.5     | 393.1     | -16.525 µg/L | -16.525 ppb | 12:26:28 |
| 3 | Ba 233.527†        | 9599.0    | 9121.5    | 213.56 µg/L  | 213.56 ppb  | 12:26:28 |
| 3 | Be 313.107†        | 3857.6    | 5193.5    | 2.4349 µg/L  | 2.4349 ppb  | 12:26:28 |
| 3 | Cd 226.502†        | 145.2     | 303.9     | -0.0063 µg/L | -0.0063 ppb | 12:26:48 |
| 3 | Co 228.616†        | 253.0     | 215.1     | 5.2857 µg/L  | 5.2857 ppb  | 12:26:48 |
| 3 | Cr 267.716†        | 741.4     | 643.0     | 14.897 µg/L  | 14.897 ppb  | 12:26:48 |
| 3 | Cu 324.752†        | 4515.8    | 13.4      | 12.986 µg/L  | 12.986 ppb  | 12:26:28 |
| 3 | Mn 257.610†        | 765810.7  | 726924.4  | 2390.5 µg/L  | 2390.5 ppb  | 12:26:22 |
| 3 | Mo 202.031†        | 62.3      | 49.2      | 7.7719 µg/L  | 7.7719 ppb  | 12:26:48 |
| 3 | Ni 231.604†        | 641.8     | 254.8     | 15.961 µg/L  | 15.961 ppb  | 12:26:48 |
| 3 | P 214.914†         | 526.6     | 212.3     | 310.93 µg/L  | 310.93 ppb  | 12:26:48 |
| 3 | Pb 220.353†        | 166.5     | 114.5     | 34.645 µg/L  | 34.645 ppb  | 12:26:48 |
| 3 | S 181.975 Axial†   | 21.6      | -1.5      | -4.9520 µg/L | -4.9520 ppb | 12:26:48 |
| 3 | Sb 206.836†        | 15.0      | -12.7     | -12.130 µg/L | -12.130 ppb | 12:26:48 |
| 3 | Se 196.026†        | -26.3     | -51.7     | 164.43 µg/L  | 164.43 ppb  | 12:26:48 |
| 3 | SiO2†              | 267541.8  | 250847.1  | 47408 µg/L   | 47408 ppb   | 12:26:22 |
| 3 | Si 251.611†        | 327612.4  | 310235.2  | 22077 µg/L   | 22077 ppb   | 12:26:22 |
| 3 | Sn 189.927†        | 5.5       | 7.0       | 3.0956 µg/L  | 3.0956 ppb  | 12:26:48 |
| 3 | Ti 334.940†        | 914732.6  | 868097.6  | 2185.4 µg/L  | 2185.4 ppb  | 12:26:22 |
| 3 | Tl 190.801†        | -67.9     | -27.4     | 9.0234 µg/L  | 9.0234 ppb  | 12:26:48 |
| 3 | U 409.014†         | -2013.3   | -1851.2   | -186.50 µg/L | -186.50 ppb | 12:26:22 |
| 3 | V 292.402†         | 3205.5    | 2920.6    | 24.290 µg/L  | 24.290 ppb  | 12:26:28 |
| 3 | Zn 213.857†        | 15681.5   | 14237.5   | 341.53 µg/L  | 341.53 ppb  | 12:26:28 |

Mean Data: 247188002|954676|1

| Analyte            | Mean Corrected | Calib.       | Std.Dev. | Sample      | Std.Dev. | RSD     |
|--------------------|----------------|--------------|----------|-------------|----------|---------|
|                    | Intensity      | Conc. Units  |          | Conc. Units |          |         |
| Sc 361.383         | 1909281.0      | 104.84 %     | 0.618    |             |          | 0.59%   |
| Sc RADIAL          | 88311.5        | 103 %        | 0.4      |             |          | 0.37%   |
| Y 371.029          | 1385158.3      | 110.01 %     | 0.510    |             |          | 0.46%   |
| Ag 328.068†        | -585.8         | 0.4986 µg/L  | 0.44862  | 0.4986 ppb  | 0.44862  | 89.98%  |
| Al 396.153Radial†  | 30035.1        | 15639 µg/L   | 43.7     | 15639 ppb   | 43.7     | 0.28%   |
| As 188.979†        | 7.6            | 2.5709 µg/L  | 3.92455  | 2.5709 ppb  | 3.92455  | 152.65% |
| B 249.677†         | 424.3          | -15.007 µg/L | 1.3310   | -15.007 ppb | 1.3310   | 8.87%   |
| Ba 233.527†        | 9604.1         | 224.86 µg/L  | 9.789    | 224.86 ppb  | 9.789    | 4.35%   |
| Be 313.107†        | 5519.5         | 2.6061 µg/L  | 0.14830  | 2.6061 ppb  | 0.14830  | 5.69%   |
| Ca 317.933Radial†  | 12778.5        | 4732.2 µg/L  | 17.29    | 4732.2 ppb  | 17.29    | 0.37%   |
| Cd 226.502†        | 322.1          | 0.4552 µg/L  | 0.43192  | 0.4552 ppb  | 0.43192  | 94.88%  |
| Co 228.616†        | 235.6          | 6.0389 µg/L  | 0.69043  | 6.0389 ppb  | 0.69043  | 11.43%  |
| Cr 267.716†        | 718.0          | 16.633 µg/L  | 1.5095   | 16.633 ppb  | 1.5095   | 9.08%   |
| Cu 324.752†        | 92.9           | 13.548 µg/L  | 0.5320   | 13.548 ppb  | 0.5320   | 3.93%   |
| Fe 238.204 Radial† | 6026.0         | 68593 µg/L   | 136.1    | 68593 ppb   | 136.1    | 0.20%   |
| K 766.490 Radial†  | 7291.8         | 3691.0 µg/L  | 24.65    | 3691.0 ppb  | 24.65    | 0.67%   |
| Mg 279.077 IEC†    | 214.7          | 2648.7 µg/L  | 25.48    | 2648.7 ppb  | 25.48    | 0.96%   |
| Mn 257.610†        | 753478.2       | 2477.7 µg/L  | 75.92    | 2477.7 ppb  | 75.92    | 3.06%   |
| Mo 202.031†        | 49.6           | 7.8169 µg/L  | 0.33388  | 7.8169 ppb  | 0.33388  | 4.27%   |
| Na 589.592 Radial† | 4695.6         | 2239.1 µg/L  | 27.90    | 2239.1 ppb  | 27.90    | 1.25%   |



|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 273.6    | 17.072 µg/L  | 1.0154  | 17.072 ppb  | 1.0154  | 5.95%   |
| P 214.914†       | 226.8    | 335.58 µg/L  | 22.044  | 335.58 ppb  | 22.044  | 6.57%   |
| Pb 220.353†      | 122.7    | 36.934 µg/L  | 2.2296  | 36.934 ppb  | 2.2296  | 6.04%   |
| S 181.975 Axial† | -1.7     | -5.4987 µg/L | 1.55876 | -5.4987 ppb | 1.55876 | 28.35%  |
| Sb 206.836†      | -9.9     | -9.4817 µg/L | 2.37338 | -9.4817 ppb | 2.37338 | 25.03%  |
| Se 196.026†      | -56.1    | 160.10 µg/L  | 6.657   | 160.10 ppb  | 6.657   | 4.16%   |
| SiO2†            | 258053.7 | 48770 µg/L   | 1203.9  | 48770 ppb   | 1203.9  | 2.47%   |
| Si 251.611†      | 319154.4 | 22712 µg/L   | 564.9   | 22712 ppb   | 564.9   | 2.49%   |
| Sn 189.927†      | 5.0      | 2.2471 µg/L  | 2.10425 | 2.2471 ppb  | 2.10425 | 93.64%  |
| Sr 421.552†      | 6622.4   | 40.302 µg/L  | 0.0884  | 40.302 ppb  | 0.0884  | 0.22%   |
| Ti 334.940†      | 903456.8 | 2274.5 µg/L  | 77.75   | 2274.5 ppb  | 77.75   | 3.42%   |
| Tl 190.801†      | -31.4    | 5.9183 µg/L  | 6.11124 | 5.9183 ppb  | 6.11124 | 103.26% |
| U 409.014†       | -1930.8  | -194.10 µg/L | 6.750   | -194.10 ppb | 6.750   | 3.48%   |
| V 292.402†       | 3090.4   | 26.435 µg/L  | 1.8861  | 26.435 ppb  | 1.8861  | 7.14%   |
| Zn 213.857†      | 14909.4  | 357.80 µg/L  | 14.139  | 357.80 ppb  | 14.139  | 3.95%   |

Sequence No.: 18

Sample ID: 247188003|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 314

Date Collected: 3/11/2010 12:26:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188003|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84649.9          | 84649.9                | 98.7 %                |                       | 12:27:30         |
| 1     | Al 396.153Radial†  | 15883.9          | 16358.2                | 8517.5 µg/L           | 8517.5 ppb            | 12:27:30         |
| 1     | Ca 317.933Radial†  | 12387.7          | 12231.8                | 4529.8 µg/L           | 4529.8 ppb            | 12:27:30         |
| 1     | Fe 238.204 Radial† | 5783.6           | 5847.7                 | 66563 µg/L            | 66563 ppb             | 12:27:50         |
| 1     | K 766.490 Radial†  | 9301.0           | 9054.3                 | 4583.2 µg/L           | 4583.2 ppb            | 12:27:30         |
| 1     | Mg 279.077 IEC†    | 129.4            | 125.2                  | 1516.6 µg/L           | 1516.6 ppb            | 12:27:50         |
| 1     | Na 589.592 Radial† | 7125.6           | 7010.6                 | 3342.9 µg/L           | 3342.9 ppb            | 12:27:30         |
| 1     | Sr 421.552†        | 2589.4           | 2506.3                 | 15.253 µg/L           | 15.253 ppb            | 12:27:30         |
| 1     | Sc 361.383         | 1807471.9        | 1807471.9              | 99.250 %              |                       | 12:28:55         |
| 1     | Y 371.029          | 1385952.0        | 1385952.0              | 110.07 %              |                       | 12:28:55         |
| 1     | Ag 328.068†        | -1271.4          | -743.5                 | -1.0565 µg/L          | -1.0565 ppb           | 12:29:00         |
| 1     | As 188.979†        | 6.5              | 9.2                    | 5.2985 µg/L           | 5.2985 ppb            | 12:29:21         |
| 1     | B 249.677†         | 756.1            | 452.8                  | -12.541 µg/L          | -12.541 ppb           | 12:29:00         |
| 1     | Ba 233.527†        | 7500.3           | 7576.3                 | 177.39 µg/L           | 177.39 ppb            | 12:29:00         |
| 1     | Be 313.107†        | 9381.0           | 10987.5                | 5.7365 µg/L           | 5.7365 ppb            | 12:29:00         |
| 1     | Cd 226.502†        | 159.4            | 326.8                  | 0.7923 µg/L           | 0.7923 ppb            | 12:29:21         |
| 1     | Co 228.616†        | 271.7            | 249.0                  | 4.9645 µg/L           | 4.9645 ppb            | 12:29:21         |
| 1     | Cr 267.716†        | 1108.0           | 1056.3                 | 24.454 µg/L           | 24.454 ppb            | 12:29:21         |
| 1     | Cu 324.752†        | 4830.8           | 598.7                  | 16.717 µg/L           | 16.717 ppb            | 12:29:00         |
| 1     | Mn 257.610†        | 920841.5         | 928552.9               | 3052.5 µg/L           | 3052.5 ppb            | 12:28:55         |
| 1     | Mo 202.031†        | 163.8            | 155.2                  | 18.823 µg/L           | 18.823 ppb            | 12:29:21         |
| 1     | Ni 231.604†        | 418.0            | 67.4                   | 4.8407 µg/L           | 4.8407 ppb            | 12:29:21         |
| 1     | P 214.914†         | 568.5            | 285.8                  | 435.19 µg/L           | 435.19 ppb            | 12:29:21         |
| 1     | Pb 220.353†        | 186.7            | 144.8                  | 42.589 µg/L           | 42.589 ppb            | 12:29:21         |
| 1     | S 181.975 Axial†   | 29.2             | 7.4                    | 24.483 µg/L           | 24.483 ppb            | 12:29:21         |
| 1     | Sb 206.836†        | 19.1             | -7.7                   | -7.3365 µg/L          | -7.3365 ppb           | 12:29:21         |
| 1     | Se 196.026†        | -34.0            | -61.0                  | 149.61 µg/L           | 149.61 ppb            | 12:29:21         |
| 1     | SiO2†              | 238652.8         | 237609.3               | 44906 µg/L            | 44906 ppb             | 12:28:55         |
| 1     | Si 251.611†        | 292249.9         | 294038.2               | 20924 µg/L            | 20924 ppb             | 12:28:55         |
| 1     | Sn 189.927†        | -26.1            | -24.6                  | -10.211 µg/L          | -10.211 ppb           | 12:29:21         |
| 1     | Ti 334.940†        | 1216659.7        | 1226566.5              | 3088.0 µg/L           | 3088.0 ppb            | 12:28:55         |
| 1     | Tl 190.801†        | -81.4            | -45.0                  | 0.6446 µg/L           | 0.6446 ppb            | 12:29:21         |
| 1     | U 409.014†         | -2001.6          | -1958.9                | -196.48 µg/L          | -196.48 ppb           | 12:28:55         |
| 1     | V 292.402†         | 2675.6           | 2576.8                 | 20.398 µg/L           | 20.398 ppb            | 12:29:00         |
| 1     | Zn 213.857†        | 19413.3          | 18927.7                | 455.38 µg/L           | 455.38 ppb            | 12:29:00         |
| 2     | Sc RADIAL          | 84274.7          | 84274.7                | 98.2 %                |                       | 12:27:56         |
| 2     | Al 396.153Radial†  | 15930.9          | 16477.7                | 8579.7 µg/L           | 8579.7 ppb            | 12:27:56         |
| 2     | Ca 317.933Radial†  | 12334.3          | 12233.3                | 4530.3 µg/L           | 4530.3 ppb            | 12:27:56         |
| 2     | Fe 238.204 Radial† | 5797.0           | 5887.4                 | 67015 µg/L            | 67015 ppb             | 12:28:16         |
| 2     | K 766.490 Radial†  | 9288.1           | 9083.2                 | 4597.8 µg/L           | 4597.8 ppb            | 12:27:56         |
| 2     | Mg 279.077 IEC†    | 124.9            | 121.2                  | 1464.9 µg/L           | 1464.9 ppb            | 12:28:16         |
| 2     | Na 589.592 Radial† | 7199.4           | 7117.9                 | 3394.1 µg/L           | 3394.1 ppb            | 12:27:56         |
| 2     | Sr 421.552†        | 2575.1           | 2503.5                 | 15.235 µg/L           | 15.235 ppb            | 12:27:56         |
| 2     | Sc 361.383         | 1803243.0        | 1803243.0              | 99.017 %              |                       | 12:29:29         |
| 2     | Y 371.029          | 1382754.8        | 1382754.8              | 109.82 %              |                       | 12:29:29         |
| 2     | Ag 328.068†        | -1365.0          | -841.1                 | -1.8653 µg/L          | -1.8653 ppb           | 12:29:34         |
| 2     | As 188.979†        | 6.8              | 9.5                    | 5.6865 µg/L           | 5.6865 ppb            | 12:29:55         |
| 2     | B 249.677†         | 790.2            | 489.0                  | -11.006 µg/L          | -11.006 ppb           | 12:29:34         |
| 2     | Ba 233.527†        | 7493.2           | 7586.9                 | 177.63 µg/L           | 177.63 ppb            | 12:29:34         |
| 2     | Be 313.107†        | 9413.1           | 11042.1                | 5.7731 µg/L           | 5.7731 ppb            | 12:29:34         |
| 2     | Cd 226.502†        | 149.3            | 317.0                  | 0.4908 µg/L           | 0.4908 ppb            | 12:29:55         |
| 2     | Co 228.616†        | 279.0            | 257.0                  | 5.3442 µg/L           | 5.3442 ppb            | 12:29:55         |
| 2     | Cr 267.716†        | 1109.9           | 1060.9                 | 24.561 µg/L           | 24.561 ppb            | 12:29:55         |
| 2     | Cu 324.752†        | 4886.8           | 666.7                  | 17.279 µg/L           | 17.279 ppb            | 12:29:34         |
| 2     | Mn 257.610†        | 917795.6         | 927652.6               | 3049.6 µg/L           | 3049.6 ppb            | 12:29:29         |
| 2     | Mo 202.031†        | 169.8            | 161.6                  | 19.510 µg/L           | 19.510 ppb            | 12:29:55         |
| 2     | Ni 231.604†        | 397.2            | 47.3                   | 3.6587 µg/L           | 3.6587 ppb            | 12:29:55         |
| 2     | P 214.914†         | 568.2            | 286.8                  | 436.56 µg/L           | 436.56 ppb            | 12:29:55         |
| 2     | Pb 220.353†        | 185.3            | 143.8                  | 42.334 µg/L           | 42.334 ppb            | 12:29:55         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 25.3      | 3.5       | 11.673 µg/L  | 11.673 ppb  | 12:29:55 |
| 2 | Sb 206.836†        | 13.3      | -13.6     | -12.824 µg/L | -12.824 ppb | 12:29:55 |
| 2 | Se 196.026†        | -18.5     | -45.4     | 166.60 µg/L  | 166.60 ppb  | 12:29:55 |
| 2 | SiO2†              | 237665.7  | 237176.3  | 44824 µg/L   | 44824 ppb   | 12:29:29 |
| 2 | Si 251.611†        | 290528.8  | 292990.5  | 20850 µg/L   | 20850 ppb   | 12:29:29 |
| 2 | Sn 189.927†        | -22.8     | -21.3     | -8.8349 µg/L | -8.8349 ppb | 12:29:55 |
| 2 | Ti 334.940†        | 1211538.3 | 1224269.2 | 3082.3 µg/L  | 3082.3 ppb  | 12:29:29 |
| 2 | Tl 190.801†        | -77.2     | -40.9     | 4.9301 µg/L  | 4.9301 ppb  | 12:29:55 |
| 2 | U 409.014†         | -1922.7   | -1883.9   | -189.39 µg/L | -189.39 ppb | 12:29:29 |
| 2 | V 292.402†         | 2611.5    | 2518.5    | 19.588 µg/L  | 19.588 ppb  | 12:29:34 |
| 2 | Zn 213.857†        | 19447.9   | 19008.5   | 457.33 µg/L  | 457.33 ppb  | 12:29:34 |
| 3 | Sc RADIAL          | 84550.8   | 84550.8   | 98.5 %       |             | 12:28:22 |
| 3 | Al 396.153Radial†  | 15893.0   | 16386.2   | 8532.2 µg/L  | 8532.2 ppb  | 12:28:22 |
| 3 | Ca 317.933Radial†  | 12394.6   | 12253.6   | 4537.8 µg/L  | 4537.8 ppb  | 12:28:22 |
| 3 | Fe 238.204 Radial† | 5792.1    | 5863.1    | 66739 µg/L   | 66739 ppb   | 12:28:42 |
| 3 | K 766.490 Radial†  | 9287.1    | 9051.3    | 4581.6 µg/L  | 4581.6 ppb  | 12:28:22 |
| 3 | Mg 279.077 IEC†    | 126.4     | 122.3     | 1479.7 µg/L  | 1479.7 ppb  | 12:28:42 |
| 3 | Na 589.592 Radial† | 7144.2    | 7037.9    | 3356.0 µg/L  | 3356.0 ppb  | 12:28:22 |
| 3 | Sr 421.552†        | 2587.5    | 2507.5    | 15.260 µg/L  | 15.260 ppb  | 12:28:22 |
| 3 | Sc 361.383         | 1810825.1 | 1810825.1 | 99.434 %     |             | 12:30:02 |
| 3 | Y 371.029          | 1383926.2 | 1383926.2 | 109.91 %     |             | 12:30:02 |
| 3 | Ag 328.068†        | -1250.8   | -720.4    | -0.8669 µg/L | -0.8669 ppb | 12:30:08 |
| 3 | As 188.979†        | 11.1      | 13.8      | 12.320 µg/L  | 12.320 ppb  | 12:30:29 |
| 3 | B 249.677†         | 788.3     | 483.7     | -11.124 µg/L | -11.124 ppb | 12:30:08 |
| 3 | Ba 233.527†        | 7027.6    | 7086.9    | 165.93 µg/L  | 165.93 ppb  | 12:30:08 |
| 3 | Be 313.107†        | 8693.2    | 10278.3   | 5.3494 µg/L  | 5.3494 ppb  | 12:30:08 |
| 3 | Cd 226.502†        | 120.8     | 287.6     | -0.2227 µg/L | -0.2227 ppb | 12:30:29 |
| 3 | Co 228.616†        | 249.8     | 226.4     | 4.2535 µg/L  | 4.2535 ppb  | 12:30:29 |
| 3 | Cr 267.716†        | 977.3     | 922.8     | 21.364 µg/L  | 21.364 ppb  | 12:30:29 |
| 3 | Cu 324.752†        | 4800.5    | 559.2     | 16.473 µg/L  | 16.473 ppb  | 12:30:08 |
| 3 | Mn 257.610†        | 881626.5  | 887396.5  | 2917.4 µg/L  | 2917.4 ppb  | 12:30:02 |
| 3 | Mo 202.031†        | 139.3     | 130.3     | 16.214 µg/L  | 16.214 ppb  | 12:30:29 |
| 3 | Ni 231.604†        | 432.0     | 80.7      | 5.6302 µg/L  | 5.6302 ppb  | 12:30:29 |
| 3 | P 214.914†         | 532.6     | 248.6     | 371.80 µg/L  | 371.80 ppb  | 12:30:29 |
| 3 | Pb 220.353†        | 168.7     | 126.2     | 37.385 µg/L  | 37.385 ppb  | 12:30:29 |
| 3 | S 181.975 Axial†   | 24.0      | 2.2       | 7.1860 µg/L  | 7.1860 ppb  | 12:30:29 |
| 3 | Sb 206.836†        | 19.3      | -7.6      | -7.2621 µg/L | -7.2621 ppb | 12:30:29 |
| 3 | Se 196.026†        | -25.6     | -52.5     | 158.62 µg/L  | 158.62 ppb  | 12:30:29 |
| 3 | SiO2†              | 231030.9  | 229498.7  | 43373 µg/L   | 43373 ppb   | 12:30:02 |
| 3 | Si 251.611†        | 282459.3  | 283646.6  | 20185 µg/L   | 20185 ppb   | 12:30:02 |
| 3 | Sn 189.927†        | -12.9     | -11.2     | -4.5662 µg/L | -4.5662 ppb | 12:30:29 |
| 3 | Ti 334.940†        | 1157578.2 | 1164878.6 | 2932.7 µg/L  | 2932.7 ppb  | 12:30:02 |
| 3 | Tl 190.801†        | -75.2     | -38.6     | 5.4688 µg/L  | 5.4688 ppb  | 12:30:29 |
| 3 | U 409.014†         | -1892.2   | -1845.1   | -185.65 µg/L | -185.65 ppb | 12:30:02 |
| 3 | V 292.402†         | 2414.6    | 2309.4    | 16.960 µg/L  | 16.960 ppb  | 12:30:08 |
| 3 | Zn 213.857†        | 18231.0   | 17702.4   | 425.68 µg/L  | 425.68 ppb  | 12:30:08 |

Mean Data: 247188003|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1807180.0                | 99.234 %           | 0.2086   |                    |          | 0.21%   |
| Sc RADIAL          | 84491.8                  | 98.5 %             | 0.23     |                    |          | 0.23%   |
| Y 371.029          | 1384211.0                | 109.93 %           | 0.128    |                    |          | 0.12%   |
| Ag 328.068†        | -768.4                   | -1.2629 µg/L       | 0.53023  | -1.2629 ppb        | 0.53023  | 41.99%  |
| Al 396.153Radial†  | 16407.4                  | 8543.1 µg/L        | 32.51    | 8543.1 ppb         | 32.51    | 0.38%   |
| As 188.979†        | 10.8                     | 7.7685 µg/L        | 3.94688  | 7.7685 ppb         | 3.94688  | 50.81%  |
| B 249.677†         | 475.2                    | -11.557 µg/L       | 0.8545   | -11.557 ppb        | 0.8545   | 7.39%   |
| Ba 233.527†        | 7416.7                   | 173.65 µg/L        | 6.689    | 173.65 ppb         | 6.689    | 3.85%   |
| Be 313.107†        | 10769.3                  | 5.6197 µg/L        | 0.23473  | 5.6197 ppb         | 0.23473  | 4.18%   |
| Ca 317.933Radial†  | 12239.6                  | 4532.6 µg/L        | 4.50     | 4532.6 ppb         | 4.50     | 0.10%   |
| Cd 226.502†        | 310.5                    | 0.3535 µg/L        | 0.52123  | 0.3535 ppb         | 0.52123  | 147.46% |
| Co 228.616†        | 244.1                    | 4.8540 µg/L        | 0.55367  | 4.8540 ppb         | 0.55367  | 11.41%  |
| Cr 267.716†        | 1013.4                   | 23.460 µg/L        | 1.8158   | 23.460 ppb         | 1.8158   | 7.74%   |
| Cu 324.752†        | 608.2                    | 16.823 µg/L        | 0.4137   | 16.823 ppb         | 0.4137   | 2.46%   |
| Fe 238.204 Radial† | 5866.1                   | 66772 µg/L         | 227.8    | 66772 ppb          | 227.8    | 0.34%   |
| K 766.490 Radial†  | 9063.0                   | 4587.5 µg/L        | 8.91     | 4587.5 ppb         | 8.91     | 0.19%   |
| Mg 279.077 IEC†    | 122.9                    | 1487.1 µg/L        | 26.58    | 1487.1 ppb         | 26.58    | 1.79%   |
| Mn 257.610†        | 914534.0                 | 3006.5 µg/L        | 77.18    | 3006.5 ppb         | 77.18    | 2.57%   |
| Mo 202.031†        | 149.1                    | 18.182 µg/L        | 1.7388   | 18.182 ppb         | 1.7388   | 9.56%   |
| Na 589.592 Radial† | 7055.5                   | 3364.4 µg/L        | 26.60    | 3364.4 ppb         | 26.60    | 0.79%   |

|                  |           |              |         |             |         |        |
|------------------|-----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 65.1      | 4.7099 µg/L  | 0.99220 | 4.7099 ppb  | 0.99220 | 21.07% |
| P 214.914†       | 273.7     | 414.52 µg/L  | 36.997  | 414.52 ppb  | 36.997  | 8.93%  |
| Pb 220.353†      | 138.3     | 40.769 µg/L  | 2.9340  | 40.769 ppb  | 2.9340  | 7.20%  |
| S 181.975 Axial† | 4.4       | 14.447 µg/L  | 8.9758  | 14.447 ppb  | 8.9758  | 62.13% |
| Sb 206.836†      | -9.6      | -9.1407 µg/L | 3.18964 | -9.1407 ppb | 3.18964 | 34.89% |
| Se 196.026†      | -53.0     | 158.28 µg/L  | 8.499   | 158.28 ppb  | 8.499   | 5.37%  |
| SiO2†            | 234761.5  | 44368 µg/L   | 862.3   | 44368 ppb   | 862.3   | 1.94%  |
| Si 251.611†      | 290225.1  | 20653 µg/L   | 407.1   | 20653 ppb   | 407.1   | 1.97%  |
| Sn 189.927†      | -19.0     | -7.8707 µg/L | 2.94335 | -7.8707 ppb | 2.94335 | 37.40% |
| Sr 421.552†      | 2505.8    | 15.249 µg/L  | 0.0126  | 15.249 ppb  | 0.0126  | 0.08%  |
| Ti 334.940†      | 1205238.1 | 3034.3 µg/L  | 88.05   | 3034.3 ppb  | 88.05   | 2.90%  |
| Tl 190.801†      | -41.5     | 3.6812 µg/L  | 2.64353 | 3.6812 ppb  | 2.64353 | 71.81% |
| U 409.014†       | -1896.0   | -190.50 µg/L | 5.501   | -190.50 ppb | 5.501   | 2.89%  |
| V 292.402†       | 2468.2    | 18.982 µg/L  | 1.7974  | 18.982 ppb  | 1.7974  | 9.47%  |
| Zn 213.857†      | 18546.2   | 446.13 µg/L  | 17.736  | 446.13 ppb  | 17.736  | 3.98%  |

Sequence No.: 19

Sample ID: 247188004|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 315

Date Collected: 3/11/2010 12:30:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188004|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84767.8          | 84767.8                | 98.8 %                |                       | 12:31:11         |
| 1     | Al 396.153Radial†  | 18859.7          | 19348.0                | 10074 µg/L            | 10074 ppb             | 12:31:11         |
| 1     | Ca 317.933Radial†  | 9505.6           | 9296.9                 | 3442.9 µg/L           | 3442.9 ppb            | 12:31:11         |
| 1     | Fe 238.204 Radial† | 7052.5           | 7124.0                 | 81091 µg/L            | 81091 ppb             | 12:31:32         |
| 1     | K 766.490 Radial†  | 9221.7           | 8961.0                 | 4535.9 µg/L           | 4535.9 ppb            | 12:31:11         |
| 1     | Mg 279.077 IEC†    | 191.1            | 187.5                  | 2290.0 µg/L           | 2290.0 ppb            | 12:31:32         |
| 1     | Na 589.592 Radial† | 6679.2           | 6548.7                 | 3122.7 µg/L           | 3122.7 ppb            | 12:31:11         |
| 1     | Sr 421.552†        | 2720.9           | 2635.8                 | 16.041 µg/L           | 16.041 ppb            | 12:31:11         |
| 1     | Sc 361.383         | 1826116.7        | 1826116.7              | 100.27 %              |                       | 12:32:37         |
| 1     | Y 371.029          | 1360297.9        | 1360297.9              | 108.03 %              |                       | 12:32:37         |
| 1     | Ag 328.068†        | -1375.2          | -834.0                 | -0.6561 µg/L          | -0.6561 ppb           | 12:32:42         |
| 1     | As 188.979†        | 0.7              | 3.2                    | -5.4671 µg/L          | -5.4671 ppb           | 12:33:03         |
| 1     | B 249.677†         | 822.6            | 511.3                  | -17.030 µg/L          | -17.030 ppb           | 12:32:42         |
| 1     | Ba 233.527†        | 7510.5           | 7509.3                 | 175.84 µg/L           | 175.84 ppb            | 12:32:42         |
| 1     | Be 313.107†        | 10245.0          | 11752.7                | 5.8061 µg/L           | 5.8061 ppb            | 12:32:42         |
| 1     | Cd 226.502†        | 230.0            | 395.6                  | 0.9779 µg/L           | 0.9779 ppb            | 12:33:03         |
| 1     | Co 228.616†        | 368.0            | 342.2                  | 6.9696 µg/L           | 6.9696 ppb            | 12:33:03         |
| 1     | Cr 267.716†        | 7391.9           | 7311.7                 | 169.16 µg/L           | 169.16 ppb            | 12:32:42         |
| 1     | Cu 324.752†        | 4356.7           | 76.1                   | 15.780 µg/L           | 15.780 ppb            | 12:32:42         |
| 1     | Mn 257.610†        | 868305.6         | 866687.2               | 2850.2 µg/L           | 2850.2 ppb            | 12:32:37         |
| 1     | Mo 202.031†        | 117.5            | 107.4                  | 14.353 µg/L           | 14.353 ppb            | 12:33:03         |
| 1     | Ni 231.604†        | 1763.9           | 1405.4                 | 84.229 µg/L           | 84.229 ppb            | 12:33:03         |
| 1     | P 214.914†         | 733.1            | 444.1                  | 694.42 µg/L           | 694.42 ppb            | 12:33:03         |
| 1     | Pb 220.353†        | 179.6            | 135.8                  | 40.422 µg/L           | 40.422 ppb            | 12:33:03         |
| 1     | S 181.975 Axial†   | 23.1             | 1.0                    | 3.3315 µg/L           | 3.3315 ppb            | 12:33:03         |
| 1     | Sb 206.836†        | 8.9              | -18.1                  | -18.793 µg/L          | -18.793 ppb           | 12:33:03         |
| 1     | Se 196.026†        | -45.9            | -72.5                  | 183.97 µg/L           | 183.97 ppb            | 12:33:03         |
| 1     | SiO2†              | 272813.7         | 269222.0               | 50881 µg/L            | 50881 ppb             | 12:32:37         |
| 1     | Si 251.611†        | 333996.7         | 332664.7               | 23673 µg/L            | 23673 ppb             | 12:32:37         |
| 1     | Sn 189.927†        | -1.0             | 0.8                    | 0.3158 µg/L           | 0.3158 ppb            | 12:33:03         |
| 1     | Ti 334.940†        | 1659654.3        | 1655837.4              | 4168.7 µg/L           | 4168.7 ppb            | 12:32:37         |
| 1     | Tl 190.801†        | -88.0            | -50.7                  | 5.5311 µg/L           | 5.5311 ppb            | 12:33:03         |
| 1     | U 409.014†         | -2052.9          | -1989.4                | -201.35 µg/L          | -201.35 ppb           | 12:32:37         |
| 1     | V 292.402†         | 3430.9           | 3302.6                 | 27.188 µg/L           | 27.188 ppb            | 12:32:42         |
| 1     | Zn 213.857†        | 20366.9          | 19679.0                | 472.51 µg/L           | 472.51 ppb            | 12:32:42         |
| 2     | Sc RADIAL          | 84867.0          | 84867.0                | 98.9 %                |                       | 12:31:37         |
| 2     | Al 396.153Radial†  | 18841.9          | 19307.8                | 10054 µg/L            | 10054 ppb             | 12:31:37         |
| 2     | Ca 317.933Radial†  | 9529.4           | 9309.7                 | 3447.6 µg/L           | 3447.6 ppb            | 12:31:37         |
| 2     | Fe 238.204 Radial† | 7053.8           | 7117.0                 | 81011 µg/L            | 81011 ppb             | 12:31:58         |
| 2     | K 766.490 Radial†  | 9258.0           | 8986.8                 | 4549.0 µg/L           | 4549.0 ppb            | 12:31:37         |
| 2     | Mg 279.077 IEC†    | 188.7            | 184.8                  | 2256.8 µg/L           | 2256.8 ppb            | 12:31:58         |
| 2     | Na 589.592 Radial† | 6667.4           | 6528.8                 | 3113.2 µg/L           | 3113.2 ppb            | 12:31:37         |
| 2     | Sr 421.552†        | 2715.5           | 2627.1                 | 15.988 µg/L           | 15.988 ppb            | 12:31:37         |
| 2     | Sc 361.383         | 1838037.6        | 1838037.6              | 100.93 %              |                       | 12:33:11         |
| 2     | Y 371.029          | 1369152.5        | 1369152.5              | 108.74 %              |                       | 12:33:11         |
| 2     | Ag 328.068†        | -1510.0          | -958.7                 | -1.7368 µg/L          | -1.7368 ppb           | 12:33:16         |
| 2     | As 188.979†        | 4.6              | 7.2                    | 0.5485 µg/L           | 0.5485 ppb            | 12:33:37         |
| 2     | B 249.677†         | 842.1            | 525.3                  | -16.301 µg/L          | -16.301 ppb           | 12:33:16         |
| 2     | Ba 233.527†        | 7551.2           | 7501.0                 | 175.64 µg/L           | 175.64 ppb            | 12:33:16         |
| 2     | Be 313.107†        | 10454.7          | 11894.1                | 5.8988 µg/L           | 5.8988 ppb            | 12:33:16         |
| 2     | Cd 226.502†        | 229.6            | 393.6                  | 0.9371 µg/L           | 0.9371 ppb            | 12:33:37         |
| 2     | Co 228.616†        | 356.8            | 328.8                  | 6.3743 µg/L           | 6.3743 ppb            | 12:33:37         |
| 2     | Cr 267.716†        | 7400.0           | 7271.9                 | 168.23 µg/L           | 168.23 ppb            | 12:33:16         |
| 2     | Cu 324.752†        | 4398.5           | 89.3                   | 15.857 µg/L           | 15.857 ppb            | 12:33:16         |
| 2     | Mn 257.610†        | 873649.2         | 866365.5               | 2849.1 µg/L           | 2849.1 ppb            | 12:33:11         |
| 2     | Mo 202.031†        | 111.0            | 100.2                  | 13.595 µg/L           | 13.595 ppb            | 12:33:37         |
| 2     | Ni 231.604†        | 1756.6           | 1386.7                 | 83.122 µg/L           | 83.122 ppb            | 12:33:37         |
| 2     | P 214.914†         | 734.0            | 440.2                  | 687.80 µg/L           | 687.80 ppb            | 12:33:37         |
| 2     | Pb 220.353†        | 184.8            | 139.7                  | 41.522 µg/L           | 41.522 ppb            | 12:33:37         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.9      | -0.3      | -1.0632 µg/L | -1.0632 ppb | 12:33:37 |
| 2 | Sb 206.836†        | 12.4      | -14.7     | -15.623 µg/L | -15.623 ppb | 12:33:37 |
| 2 | Se 196.026†        | -36.1     | -62.5     | 193.68 µg/L  | 193.68 ppb  | 12:33:37 |
| 2 | SiO2†              | 273844.6  | 268478.8  | 50740 µg/L   | 50740 ppb   | 12:33:11 |
| 2 | Si 251.611†        | 335266.4  | 331762.4  | 23609 µg/L   | 23609 ppb   | 12:33:11 |
| 2 | Sn 189.927†        | -0.4      | 1.4       | 0.5587 µg/L  | 0.5587 ppb  | 12:33:37 |
| 2 | Ti 334.940†        | 1666620.4 | 1652004.9 | 4159.1 µg/L  | 4159.1 ppb  | 12:33:11 |
| 2 | Tl 190.801†        | -88.5     | -50.6     | 5.5298 µg/L  | 5.5298 ppb  | 12:33:37 |
| 2 | U 409.014†         | -2058.2   | -1981.4   | -200.57 µg/L | -200.57 ppb | 12:33:11 |
| 2 | V 292.402†         | 3417.0    | 3266.6    | 26.740 µg/L  | 26.740 ppb  | 12:33:16 |
| 2 | Zn 213.857†        | 20408.1   | 19588.0   | 470.31 µg/L  | 470.31 ppb  | 12:33:16 |
| 3 | Sc RADIAL          | 85000.4   | 85000.4   | 99.1 %       |             | 12:32:03 |
| 3 | Al 396.153Radial†  | 18808.0   | 19243.5   | 10020 µg/L   | 10020 ppb   | 12:32:03 |
| 3 | Ca 317.933Radial†  | 9487.1    | 9251.9    | 3426.2 µg/L  | 3426.2 ppb  | 12:32:03 |
| 3 | Fe 238.204 Radial† | 7016.0    | 7067.6    | 80449 µg/L   | 80449 ppb   | 12:32:24 |
| 3 | K 766.490 Radial†  | 9262.5    | 8976.6    | 4543.8 µg/L  | 4543.8 ppb  | 12:32:03 |
| 3 | Mg 279.077 IEC†    | 192.4     | 188.2     | 2300.3 µg/L  | 2300.3 ppb  | 12:32:24 |
| 3 | Na 589.592 Radial† | 6749.5    | 6601.1    | 3147.7 µg/L  | 3147.7 ppb  | 12:32:03 |
| 3 | Sr 421.552†        | 2682.2    | 2589.1    | 15.757 µg/L  | 15.757 ppb  | 12:32:03 |
| 3 | Sc 361.383         | 1835507.4 | 1835507.4 | 100.79 %     |             | 12:33:44 |
| 3 | Y 371.029          | 1365839.0 | 1365839.0 | 108.47 %     |             | 12:33:44 |
| 3 | Ag 328.068†        | -1312.9   | -765.1    | -0.1403 µg/L | -0.1403 ppb | 12:33:50 |
| 3 | As 188.979†        | 5.6       | 8.2       | 2.1622 µg/L  | 2.1622 ppb  | 12:34:11 |
| 3 | B 249.677†         | 776.9     | 461.7     | -19.139 µg/L | -19.139 ppb | 12:33:50 |
| 3 | Ba 233.527†        | 7042.7    | 7006.9    | 164.07 µg/L  | 164.07 ppb  | 12:33:50 |
| 3 | Be 313.107†        | 9570.4    | 11031.1   | 5.4354 µg/L  | 5.4354 ppb  | 12:33:50 |
| 3 | Cd 226.502†        | 179.7     | 344.5     | -0.2562 µg/L | -0.2562 ppb | 12:34:11 |
| 3 | Co 228.616†        | 336.8     | 309.3     | 5.9204 µg/L  | 5.9204 ppb  | 12:34:11 |
| 3 | Cr 267.716†        | 6863.6    | 6749.8    | 156.16 µg/L  | 156.16 ppb  | 12:33:50 |
| 3 | Cu 324.752†        | 4397.6    | 94.5      | 15.788 µg/L  | 15.788 ppb  | 12:33:50 |
| 3 | Mn 257.610†        | 833595.4  | 827818.5  | 2722.5 µg/L  | 2722.5 ppb  | 12:33:44 |
| 3 | Mo 202.031†        | 101.9     | 91.2      | 12.633 µg/L  | 12.633 ppb  | 12:34:11 |
| 3 | Ni 231.604†        | 1631.0    | 1264.5    | 75.883 µg/L  | 75.883 ppb  | 12:34:11 |
| 3 | P 214.914†         | 693.4     | 401.0     | 621.48 µg/L  | 621.48 ppb  | 12:34:11 |
| 3 | Pb 220.353†        | 168.2     | 123.5     | 36.953 µg/L  | 36.953 ppb  | 12:34:11 |
| 3 | S 181.975 Axial†   | 19.9      | -2.2      | -7.3490 µg/L | -7.3490 ppb | 12:34:11 |
| 3 | Sb 206.836†        | 20.3      | -6.9      | -8.1159 µg/L | -8.1159 ppb | 12:34:11 |
| 3 | Se 196.026†        | -32.3     | -58.8     | 195.55 µg/L  | 195.55 ppb  | 12:34:11 |
| 3 | SiO2†              | 264993.6  | 260071.2  | 49151 µg/L   | 49151 ppb   | 12:33:44 |
| 3 | Si 251.611†        | 324208.0  | 321248.6  | 22861 µg/L   | 22861 ppb   | 12:33:44 |
| 3 | Sn 189.927†        | 9.8       | 11.5      | 4.8202 µg/L  | 4.8202 ppb  | 12:34:11 |
| 3 | Ti 334.940†        | 1580706.0 | 1569039.3 | 3950.2 µg/L  | 3950.2 ppb  | 12:33:44 |
| 3 | Tl 190.801†        | -87.6     | -49.9     | 3.8684 µg/L  | 3.8684 ppb  | 12:34:11 |
| 3 | U 409.014†         | -2012.9   | -1939.2   | -196.47 µg/L | -196.47 ppb | 12:33:44 |
| 3 | V 292.402†         | 3126.6    | 2983.1    | 23.222 µg/L  | 23.222 ppb  | 12:33:50 |
| 3 | Zn 213.857†        | 19188.5   | 18405.9   | 441.72 µg/L  | 441.72 ppb  | 12:33:50 |

Mean Data: 247188004|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1833220.6                | 100.66 %           | 0.345    |                    |          | 0.34%   |
| Sc RADIAL          | 84878.4                  | 98.9 %             | 0.14     |                    |          | 0.14%   |
| Y 371.029          | 1365096.5                | 108.41 %           | 0.355    |                    |          | 0.33%   |
| Ag 328.068†        | -852.6                   | -0.8444 µg/L       | 0.81473  | -0.8444 ppb        | 0.81473  | 96.49%  |
| Al 396.153Radial†  | 19299.8                  | 10049 µg/L         | 27.4     | 10049 ppb          | 27.4     | 0.27%   |
| As 188.979†        | 6.2                      | -0.9188 µg/L       | 4.02071  | -0.9188 ppb        | 4.02071  | 437.61% |
| B 249.677†         | 499.4                    | -17.490 µg/L       | 1.4738   | -17.490 ppb        | 1.4738   | 8.43%   |
| Ba 233.527†        | 7339.1                   | 171.85 µg/L        | 6.739    | 171.85 ppb         | 6.739    | 3.92%   |
| Be 313.107†        | 11559.3                  | 5.7135 µg/L        | 0.24523  | 5.7135 ppb         | 0.24523  | 4.29%   |
| Ca 317.933Radial†  | 9286.2                   | 3438.9 µg/L        | 11.24    | 3438.9 ppb         | 11.24    | 0.33%   |
| Cd 226.502†        | 377.9                    | 0.5529 µg/L        | 0.70104  | 0.5529 ppb         | 0.70104  | 126.79% |
| Co 228.616†        | 326.8                    | 6.4214 µg/L        | 0.52616  | 6.4214 ppb         | 0.52616  | 8.19%   |
| Cr 267.716†        | 7111.2                   | 164.51 µg/L        | 7.254    | 164.51 ppb         | 7.254    | 4.41%   |
| Cu 324.752†        | 86.7                     | 15.808 µg/L        | 0.0426   | 15.808 ppb         | 0.0426   | 0.27%   |
| Fe 238.204 Radial† | 7102.9                   | 80851 µg/L         | 350.0    | 80851 ppb          | 350.0    | 0.43%   |
| K 766.490 Radial†  | 8974.8                   | 4542.9 µg/L        | 6.58     | 4542.9 ppb         | 6.58     | 0.14%   |
| Mg 279.077 IEC†    | 186.8                    | 2282.4 µg/L        | 22.76    | 2282.4 ppb         | 22.76    | 1.00%   |
| Mn 257.610†        | 853623.7                 | 2807.3 µg/L        | 73.40    | 2807.3 ppb         | 73.40    | 2.61%   |
| Mo 202.031†        | 99.6                     | 13.527 µg/L        | 0.8619   | 13.527 ppb         | 0.8619   | 6.37%   |
| Na 589.592 Radial† | 6559.6                   | 3127.9 µg/L        | 17.81    | 3127.9 ppb         | 17.81    | 0.57%   |

|                  |           |              |         |             |         |         |
|------------------|-----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 1352.2    | 81.078 µg/L  | 4.5329  | 81.078 ppb  | 4.5329  | 5.59%   |
| P 214.914†       | 428.4     | 667.90 µg/L  | 40.337  | 667.90 ppb  | 40.337  | 6.04%   |
| Pb 220.353†      | 133.0     | 39.632 µg/L  | 2.3846  | 39.632 ppb  | 2.3846  | 6.02%   |
| S 181.975 Axial† | -0.5      | -1.6936 µg/L | 5.36804 | -1.6936 ppb | 5.36804 | 316.96% |
| Sb 206.836†      | -13.2     | -14.177 µg/L | 5.4833  | -14.177 ppb | 5.4833  | 38.68%  |
| Se 196.026†      | -64.6     | 191.07 µg/L  | 6.218   | 191.07 ppb  | 6.218   | 3.25%   |
| SiO2†            | 265924.0  | 50257 µg/L   | 960.5   | 50257 ppb   | 960.5   | 1.91%   |
| Si 251.611†      | 328558.6  | 23381 µg/L   | 451.6   | 23381 ppb   | 451.6   | 1.93%   |
| Sn 189.927†      | 4.6       | 1.8982 µg/L  | 2.53341 | 1.8982 ppb  | 2.53341 | 133.46% |
| Sr 421.552†      | 2617.3    | 15.928 µg/L  | 0.1510  | 15.928 ppb  | 0.1510  | 0.95%   |
| Ti 334.940†      | 1625627.2 | 4092.7 µg/L  | 123.48  | 4092.7 ppb  | 123.48  | 3.02%   |
| Tl 190.801†      | -50.4     | 4.9764 µg/L  | 0.95955 | 4.9764 ppb  | 0.95955 | 19.28%  |
| U 409.014†       | -1970.0   | -199.46 µg/L | 2.622   | -199.46 ppb | 2.622   | 1.31%   |
| V 292.402†       | 3184.1    | 25.717 µg/L  | 2.1725  | 25.717 ppb  | 2.1725  | 8.45%   |
| Zn 213.857†      | 19224.3   | 461.52 µg/L  | 17.175  | 461.52 ppb  | 17.175  | 3.72%   |

Sequence No.: 20

Sample ID: 247188005|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 316

Date Collected: 3/11/2010 12:34:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188005|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 87304.5       | 87304.5             | 102 %              |                    | 12:34:53      |
| 1     | Al 396.153Radial†  | 14723.8       | 14728.4             | 7669.1 µg/L        | 7669.1 ppb         | 12:34:53      |
| 1     | Ca 317.933Radial†  | 7906.7        | 7445.9              | 2757.4 µg/L        | 2757.4 ppb         | 12:34:53      |
| 1     | Fe 238.204 Radial† | 5314.4        | 5208.2              | 59284 µg/L         | 59284 ppb          | 12:35:13      |
| 1     | K 766.490 Radial†  | 8425.7        | 7907.4              | 4002.6 µg/L        | 4002.6 ppb         | 12:34:53      |
| 1     | Mg 279.077 IEC†    | 140.0         | 131.6               | 1605.1 µg/L        | 1605.1 ppb         | 12:35:13      |
| 1     | Na 589.592 Radial† | 6542.4        | 6217.7              | 2964.9 µg/L        | 2964.9 ppb         | 12:34:53      |
| 1     | Sr 421.552†        | 2108.0        | 1953.4              | 11.888 µg/L        | 11.888 ppb         | 12:34:53      |
| 1     | Sc 361.383         | 1909807.6     | 1909807.6           | 104.87 %           |                    | 12:36:18      |
| 1     | Y 371.029          | 1403131.9     | 1403131.9           | 111.44 %           |                    | 12:36:18      |
| 1     | Ag 328.068†        | -1207.5       | -614.0              | -0.5137 µg/L       | -0.5137 ppb        | 12:36:23      |
| 1     | As 188.979†        | 4.9           | 7.3                 | 3.5115 µg/L        | 3.5115 ppb         | 12:36:44      |
| 1     | B 249.677†         | 676.6         | 336.1               | -14.473 µg/L       | -14.473 ppb        | 12:36:23      |
| 1     | Ba 233.527†        | 5523.1        | 5285.9              | 123.78 µg/L        | 123.78 ppb         | 12:36:23      |
| 1     | Be 313.107†        | 5988.8        | 7246.3              | 3.3477 µg/L        | 3.3477 ppb         | 12:36:23      |
| 1     | Cd 226.502†        | 139.5         | 299.2               | 0.9114 µg/L        | 0.9114 ppb         | 12:36:44      |
| 1     | Co 228.616†        | 294.6         | 256.1               | 5.0860 µg/L        | 5.0860 ppb         | 12:36:44      |
| 1     | Cr 267.716†        | 505.6         | 422.1               | 9.7839 µg/L        | 9.7839 ppb         | 12:36:44      |
| 1     | Cu 324.752†        | 4435.1        | -39.5               | 10.868 µg/L        | 10.868 ppb         | 12:36:23      |
| 1     | Mn 257.610†        | 768279.3      | 733358.1            | 2411.2 µg/L        | 2411.2 ppb         | 12:36:18      |
| 1     | Mo 202.031†        | 40.4          | 28.7                | 5.2640 µg/L        | 5.2640 ppb         | 12:36:44      |
| 1     | Ni 231.604†        | 424.6         | 51.1                | 3.7836 µg/L        | 3.7836 ppb         | 12:36:44      |
| 1     | P 214.914†         | 639.9         | 323.2               | 505.25 µg/L        | 505.25 ppb         | 12:36:44      |
| 1     | Pb 220.353†        | 175.4         | 123.9               | 36.508 µg/L        | 36.508 ppb         | 12:36:44      |
| 1     | S 181.975 Axial†   | 40.3          | 16.5                | 54.318 µg/L        | 54.318 ppb         | 12:36:44      |
| 1     | Sb 206.836†        | 15.9          | -11.9               | -11.272 µg/L       | -11.272 ppb        | 12:36:44      |
| 1     | Se 196.026†        | -22.8         | -48.4               | 139.05 µg/L        | 139.05 ppb         | 12:36:44      |
| 1     | SiO2†              | 240014.4      | 226022.9            | 42716 µg/L         | 42716 ppb          | 12:36:18      |
| 1     | Si 251.611†        | 293610.7      | 279557.4            | 19894 µg/L         | 19894 ppb          | 12:36:18      |
| 1     | Sn 189.927†        | -0.1          | 1.7                 | 0.7283 µg/L        | 0.7283 ppb         | 12:36:44      |
| 1     | Ti 334.940†        | 1323684.4     | 1262935.5           | 3179.6 µg/L        | 3179.6 ppb         | 12:36:18      |
| 1     | Tl 190.801†        | -82.9         | -42.0               | 1.3170 µg/L        | 1.3170 ppb         | 12:36:44      |
| 1     | U 409.014†         | -1838.6       | -1695.4             | -170.22 µg/L       | -170.22 ppb        | 12:36:18      |
| 1     | V 292.402†         | 2692.2        | 2448.3              | 20.000 µg/L        | 20.000 ppb         | 12:36:23      |
| 1     | Zn 213.857†        | 16395.6       | 15001.9             | 360.60 µg/L        | 360.60 ppb         | 12:36:23      |
| 2     | Sc RADIAL          | 88524.6       | 88524.6             | 103 %              |                    | 12:35:19      |
| 2     | Al 396.153Radial†  | 14782.0       | 14585.3             | 7594.6 µg/L        | 7594.6 ppb         | 12:35:19      |
| 2     | Ca 317.933Radial†  | 7962.9        | 7393.2              | 2737.9 µg/L        | 2737.9 ppb         | 12:35:19      |
| 2     | Fe 238.204 Radial† | 5309.4        | 5131.4              | 58410 µg/L         | 58410 ppb          | 12:35:39      |
| 2     | K 766.490 Radial†  | 8454.4        | 7821.1              | 3958.9 µg/L        | 3958.9 ppb         | 12:35:19      |
| 2     | Mg 279.077 IEC†    | 139.5         | 129.3               | 1576.2 µg/L        | 1576.2 ppb         | 12:35:39      |
| 2     | Na 589.592 Radial† | 6638.3        | 6222.1              | 2967.0 µg/L        | 2967.0 ppb         | 12:35:19      |
| 2     | Sr 421.552†        | 2106.7        | 1923.5              | 11.706 µg/L        | 11.706 ppb         | 12:35:19      |
| 2     | Sc 361.383         | 1918632.8     | 1918632.8           | 105.35 %           |                    | 12:36:52      |
| 2     | Y 371.029          | 1408028.5     | 1408028.5           | 111.82 %           |                    | 12:36:52      |
| 2     | Ag 328.068†        | -1196.7       | -598.4              | -0.4481 µg/L       | -0.4481 ppb        | 12:36:57      |
| 2     | As 188.979†        | 5.5           | 7.8                 | 4.4405 µg/L        | 4.4405 ppb         | 12:37:18      |
| 2     | B 249.677†         | 691.3         | 347.1               | -13.481 µg/L       | -13.481 ppb        | 12:36:57      |
| 2     | Ba 233.527†        | 5537.9        | 5275.8              | 123.54 µg/L        | 123.54 ppb         | 12:36:57      |
| 2     | Be 313.107†        | 6006.6        | 7237.0              | 3.3439 µg/L        | 3.3439 ppb         | 12:36:57      |
| 2     | Cd 226.502†        | 120.1         | 280.2               | 0.5260 µg/L        | 0.5260 ppb         | 12:37:18      |
| 2     | Co 228.616†        | 280.0         | 240.9               | 4.4038 µg/L        | 4.4038 ppb         | 12:37:18      |
| 2     | Cr 267.716†        | 522.4         | 435.8               | 10.100 µg/L        | 10.100 ppb         | 12:37:18      |
| 2     | Cu 324.752†        | 4450.0        | -44.8               | 10.666 µg/L        | 10.666 ppb         | 12:36:57      |
| 2     | Mn 257.610†        | 770495.9      | 732092.2            | 2407.0 µg/L        | 2407.0 ppb         | 12:36:52      |
| 2     | Mo 202.031†        | 43.8          | 31.8                | 5.5554 µg/L        | 5.5554 ppb         | 12:37:18      |
| 2     | Ni 231.604†        | 417.0         | 42.0                | 3.2349 µg/L        | 3.2349 ppb         | 12:37:18      |
| 2     | P 214.914†         | 638.0         | 318.5               | 498.09 µg/L        | 498.09 ppb         | 12:37:18      |
| 2     | Pb 220.353†        | 162.8         | 111.1               | 32.906 µg/L        | 32.906 ppb         | 12:37:18      |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 35.6      | 11.8      | 39.081 µg/L  | 39.081 ppb  | 12:37:18 |
| 2 | Sb 206.836†        | 16.7      | -11.1     | -10.540 µg/L | -10.540 ppb | 12:37:18 |
| 2 | Se 196.026†        | -13.3     | -39.4     | 145.26 µg/L  | 145.26 ppb  | 12:37:18 |
| 2 | SiO2†              | 240905.6  | 225816.1  | 42677 µg/L   | 42677 ppb   | 12:36:52 |
| 2 | Si 251.611†        | 294724.8  | 279327.0  | 19877 µg/L   | 19877 ppb   | 12:36:52 |
| 2 | Sn 189.927†        | 5.9       | 7.4       | 3.1220 µg/L  | 3.1220 ppb  | 12:37:18 |
| 2 | Ti 334.940†        | 1327553.2 | 1260801.8 | 3174.2 µg/L  | 3174.2 ppb  | 12:36:52 |
| 2 | Tl 190.801†        | -83.9     | -42.7     | 0.4325 µg/L  | 0.4325 ppb  | 12:37:18 |
| 2 | U 409.014†         | -1899.3   | -1744.9   | -174.82 µg/L | -174.82 ppb | 12:36:52 |
| 2 | V 292.402†         | 2691.5    | 2435.8    | 20.000 µg/L  | 20.000 ppb  | 12:36:57 |
| 2 | Zn 213.857†        | 16394.0   | 14928.5   | 358.87 µg/L  | 358.87 ppb  | 12:36:57 |
| 3 | Sc RADIAL          | 88568.7   | 88568.7   | 103 %        |             | 12:35:45 |
| 3 | Al 396.153Radial†  | 14741.8   | 14539.2   | 7570.6 µg/L  | 7570.6 ppb  | 12:35:45 |
| 3 | Ca 317.933Radial†  | 7941.9    | 7369.0    | 2728.9 µg/L  | 2728.9 ppb  | 12:35:45 |
| 3 | Fe 238.204 Radial† | 5285.0    | 5105.2    | 58111 µg/L   | 58111 ppb   | 12:36:05 |
| 3 | K 766.490 Radial†  | 8357.4    | 7723.1    | 3909.3 µg/L  | 3909.3 ppb  | 12:35:45 |
| 3 | Mg 279.077 IEC†    | 139.2     | 128.9     | 1571.9 µg/L  | 1571.9 ppb  | 12:36:05 |
| 3 | Na 589.592 Radial† | 6601.0    | 6182.8    | 2948.2 µg/L  | 2948.2 ppb  | 12:35:45 |
| 3 | Sr 421.552†        | 2109.0    | 1924.8    | 11.714 µg/L  | 11.714 ppb  | 12:35:45 |
| 3 | Sc 361.383         | 1926575.8 | 1926575.8 | 105.79 %     |             | 12:37:25 |
| 3 | Y 371.029          | 1408034.1 | 1408034.1 | 111.82 %     |             | 12:37:25 |
| 3 | Ag 328.068†        | -1160.3   | -559.3    | -0.1512 µg/L | -0.1512 ppb | 12:37:31 |
| 3 | As 188.979†        | 4.0       | 6.4       | 2.2642 µg/L  | 2.2642 ppb  | 12:37:51 |
| 3 | B 249.677†         | 677.6     | 331.5     | -14.091 µg/L | -14.091 ppb | 12:37:31 |
| 3 | Ba 233.527†        | 5271.6    | 5002.3    | 117.13 µg/L  | 117.13 ppb  | 12:37:31 |
| 3 | Be 313.107†        | 5511.0    | 6745.0    | 3.0960 µg/L  | 3.0960 ppb  | 12:37:31 |
| 3 | Cd 226.502†        | 115.0     | 274.9     | 0.4257 µg/L  | 0.4257 ppb  | 12:37:51 |
| 3 | Co 228.616†        | 254.5     | 215.8     | 3.5924 µg/L  | 3.5924 ppb  | 12:37:51 |
| 3 | Cr 267.716†        | 456.8     | 371.8     | 8.6172 µg/L  | 8.6172 ppb  | 12:37:51 |
| 3 | Cu 324.752†        | 4490.4    | -24.0     | 10.756 µg/L  | 10.756 ppb  | 12:37:31 |
| 3 | Mn 257.610†        | 739397.5  | 699680.6  | 2300.5 µg/L  | 2300.5 ppb  | 12:37:25 |
| 3 | Mo 202.031†        | 49.2      | 36.7      | 6.0615 µg/L  | 6.0615 ppb  | 12:37:51 |
| 3 | Ni 231.604†        | 418.6     | 41.9      | 3.2267 µg/L  | 3.2267 ppb  | 12:37:51 |
| 3 | P 214.914†         | 609.8     | 289.5     | 448.68 µg/L  | 448.68 ppb  | 12:37:51 |
| 3 | Pb 220.353†        | 153.3     | 101.5     | 30.186 µg/L  | 30.186 ppb  | 12:37:51 |
| 3 | S 181.975 Axial†   | 42.5      | 18.2      | 60.031 µg/L  | 60.031 ppb  | 12:37:51 |
| 3 | Sb 206.836†        | 19.7      | -8.3      | -7.9147 µg/L | -7.9147 ppb | 12:37:51 |
| 3 | Se 196.026†        | -12.1     | -38.2     | 145.53 µg/L  | 145.53 ppb  | 12:37:51 |
| 3 | SiO2†              | 233817.9  | 218173.6  | 41233 µg/L   | 41233 ppb   | 12:37:25 |
| 3 | Si 251.611†        | 286098.3  | 270019.3  | 19215 µg/L   | 19215 ppb   | 12:37:25 |
| 3 | Sn 189.927†        | 2.0       | 3.7       | 1.5423 µg/L  | 1.5423 ppb  | 12:37:51 |
| 3 | Ti 334.940†        | 1265048.0 | 1196522.2 | 3012.4 µg/L  | 3012.4 ppb  | 12:37:25 |
| 3 | Tl 190.801†        | -71.4     | -30.5     | 11.307 µg/L  | 11.307 ppb  | 12:37:51 |
| 3 | U 409.014†         | -1776.7   | -1621.6   | -163.01 µg/L | -163.01 ppb | 12:37:25 |
| 3 | V 292.402†         | 2493.5    | 2238.0    | 17.562 µg/L  | 17.562 ppb  | 12:37:31 |
| 3 | Zn 213.857†        | 15691.1   | 14199.9   | 341.23 µg/L  | 341.23 ppb  | 12:37:31 |

Mean Data: 247188005|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383         | 1918338.7                | 105.34 %           | 0.461    |                    |          | 0.44%  |
| Sc RADIAL          | 88132.6                  | 103 %              | 0.8      |                    |          | 0.81%  |
| Y 371.029          | 1406398.2                | 111.69 %           | 0.225    |                    |          | 0.20%  |
| Ag 328.068†        | -590.6                   | -0.3710 µg/L       | 0.19313  | -0.3710 ppb        | 0.19313  | 52.05% |
| Al 396.153Radial†  | 14617.6                  | 7611.5 µg/L        | 51.36    | 7611.5 ppb         | 51.36    | 0.67%  |
| As 188.979†        | 7.1                      | 3.4054 µg/L        | 1.09205  | 3.4054 ppb         | 1.09205  | 32.07% |
| B 249.677†         | 338.2                    | -14.015 µg/L       | 0.5004   | -14.015 ppb        | 0.5004   | 3.57%  |
| Ba 233.527†        | 5188.0                   | 121.48 µg/L        | 3.768    | 121.48 ppb         | 3.768    | 3.10%  |
| Be 313.107†        | 7076.1                   | 3.2626 µg/L        | 0.14423  | 3.2626 ppb         | 0.14423  | 4.42%  |
| Ca 317.933Radial†  | 7402.7                   | 2741.4 µg/L        | 14.55    | 2741.4 ppb         | 14.55    | 0.53%  |
| Cd 226.502†        | 284.7                    | 0.6210 µg/L        | 0.25642  | 0.6210 ppb         | 0.25642  | 41.29% |
| Co 228.616†        | 237.6                    | 4.3607 µg/L        | 0.74772  | 4.3607 ppb         | 0.74772  | 17.15% |
| Cr 267.716†        | 409.9                    | 9.5003 µg/L        | 0.78094  | 9.5003 ppb         | 0.78094  | 8.22%  |
| Cu 324.752†        | -36.1                    | 10.763 µg/L        | 0.1010   | 10.763 ppb         | 0.1010   | 0.94%  |
| Fe 238.204 Radial† | 5148.3                   | 58602 µg/L         | 609.7    | 58602 ppb          | 609.7    | 1.04%  |
| K 766.490 Radial†  | 7817.2                   | 3957.0 µg/L        | 46.68    | 3957.0 ppb         | 46.68    | 1.18%  |
| Mg 279.077 IEC†    | 129.9                    | 1584.4 µg/L        | 18.08    | 1584.4 ppb         | 18.08    | 1.14%  |
| Mn 257.610†        | 721710.3                 | 2372.9 µg/L        | 62.70    | 2372.9 ppb         | 62.70    | 2.64%  |
| Mo 202.031†        | 32.4                     | 5.6270 µg/L        | 0.40357  | 5.6270 ppb         | 0.40357  | 7.17%  |
| Na 589.592 Radial† | 6207.5                   | 2960.0 µg/L        | 10.28    | 2960.0 ppb         | 10.28    | 0.35%  |

|                  |           |              |         |             |         |         |
|------------------|-----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 45.0      | 3.4151 µg/L  | 0.31921 | 3.4151 ppb  | 0.31921 | 9.35%   |
| P 214.914†       | 310.4     | 484.01 µg/L  | 30.801  | 484.01 ppb  | 30.801  | 6.36%   |
| Pb 220.353†      | 112.2     | 33.200 µg/L  | 3.1710  | 33.200 ppb  | 3.1710  | 9.55%   |
| S 181.975 Axial† | 15.5      | 51.143 µg/L  | 10.8298 | 51.143 ppb  | 10.8298 | 21.18%  |
| Sb 206.836†      | -10.4     | -9.9092 µg/L | 1.76556 | -9.9092 ppb | 1.76556 | 17.82%  |
| Se 196.026†      | -42.0     | 143.28 µg/L  | 3.663   | 143.28 ppb  | 3.663   | 2.56%   |
| SiO2†            | 223337.5  | 42209 µg/L   | 845.4   | 42209 ppb   | 845.4   | 2.00%   |
| Si 251.611†      | 276301.2  | 19662 µg/L   | 387.2   | 19662 ppb   | 387.2   | 1.97%   |
| Sn 189.927†      | 4.3       | 1.7976 µg/L  | 1.21711 | 1.7976 ppb  | 1.21711 | 67.71%  |
| Sr 421.552†      | 1933.9    | 11.769 µg/L  | 0.1029  | 11.769 ppb  | 0.1029  | 0.87%   |
| Ti 334.940†      | 1240086.5 | 3122.0 µg/L  | 95.02   | 3122.0 ppb  | 95.02   | 3.04%   |
| Tl 190.801†      | -38.4     | 4.3523 µg/L  | 6.03938 | 4.3523 ppb  | 6.03938 | 138.76% |
| U 409.014†       | -1687.3   | -169.35 µg/L | 5.954   | -169.35 ppb | 5.954   | 3.52%   |
| V 292.402†       | 2374.0    | 19.187 µg/L  | 1.4075  | 19.187 ppb  | 1.4075  | 7.34%   |
| Zn 213.857†      | 14710.1   | 353.57 µg/L  | 10.721  | 353.57 ppb  | 10.721  | 3.03%   |

Sequence No.: 21  
 Sample ID: 247188006|954676|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 317  
 Date Collected: 3/11/2010 12:38:02  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 247188006|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88874.6          | 88874.6                | 104 %                 |                       | 12:38:34         |
| 1     | Al 396.153Radial†  | 15054.9          | 14792.4                | 7702.4 µg/L           | 7702.4 ppb            | 12:38:34         |
| 1     | Ca 317.933Radial†  | 7057.0           | 6488.3                 | 2402.8 µg/L           | 2402.8 ppb            | 12:38:34         |
| 1     | Fe 238.204 Radial† | 4977.4           | 4790.7                 | 54531 µg/L            | 54531 ppb             | 12:38:55         |
| 1     | K 766.490 Radial†  | 6478.4           | 5881.1                 | 2976.9 µg/L           | 2976.9 ppb            | 12:38:34         |
| 1     | Mg 279.077 IEC†    | 135.7            | 125.1                  | 1527.7 µg/L           | 1527.7 ppb            | 12:38:55         |
| 1     | Na 589.592 Radial† | 5308.9           | 4913.3                 | 2342.9 µg/L           | 2342.9 ppb            | 12:38:34         |
| 1     | Sr 421.552†        | 2470.7           | 2266.9                 | 13.796 µg/L           | 13.796 ppb            | 12:38:34         |
| 1     | Sc 361.383         | 1945580.0        | 1945580.0              | 106.83 %              |                       | 12:40:00         |
| 1     | Y 371.029          | 1427420.3        | 1427420.3              | 113.36 %              |                       | 12:40:00         |
| 1     | Ag 328.068†        | -1198.0          | -583.9                 | -0.6418 µg/L          | -0.6418 ppb           | 12:40:05         |
| 1     | As 188.979†        | 1.5              | 4.0                    | -0.8891 µg/L          | -0.8891 ppb           | 12:40:26         |
| 1     | B 249.677†         | 665.4            | 313.8                  | -13.025 µg/L          | -13.025 ppb           | 12:40:05         |
| 1     | Ba 233.527†        | 5609.6           | 5270.1                 | 123.40 µg/L           | 123.40 ppb            | 12:40:05         |
| 1     | Be 313.107†        | 5785.6           | 6951.1                 | 3.3488 µg/L           | 3.3488 ppb            | 12:40:05         |
| 1     | Cd 226.502†        | 119.1            | 277.7                  | 0.9228 µg/L           | 0.9228 ppb            | 12:40:26         |
| 1     | Co 228.616†        | 252.2            | 211.3                  | 4.0605 µg/L           | 4.0605 ppb            | 12:40:26         |
| 1     | Cr 267.716†        | 2297.4           | 2090.5                 | 48.372 µg/L           | 48.372 ppb            | 12:40:26         |
| 1     | Cu 324.752†        | 4433.8           | -118.5                 | 9.4200 µg/L           | 9.4200 ppb            | 12:40:05         |
| 1     | Mn 257.610†        | 586007.9         | 549274.9               | 1806.5 µg/L           | 1806.5 ppb            | 12:40:00         |
| 1     | Mo 202.031†        | 71.0             | 56.6                   | 8.0123 µg/L           | 8.0123 ppb            | 12:40:26         |
| 1     | Ni 231.604†        | 801.5            | 396.4                  | 24.164 µg/L           | 24.164 ppb            | 12:40:26         |
| 1     | P 214.914†         | 602.7            | 277.2                  | 430.79 µg/L           | 430.79 ppb            | 12:40:26         |
| 1     | Pb 220.353†        | 105.1            | 55.0                   | 17.084 µg/L           | 17.084 ppb            | 12:40:26         |
| 1     | S 181.975 Axial†   | 30.3             | 6.4                    | 20.974 µg/L           | 20.974 ppb            | 12:40:26         |
| 1     | Sb 206.836†        | 14.3             | -13.7                  | -13.316 µg/L          | -13.316 ppb           | 12:40:26         |
| 1     | Se 196.026†        | -24.4            | -49.5                  | 122.95 µg/L           | 122.95 ppb            | 12:40:26         |
| 1     | SiO2†              | 216385.9         | 199697.7               | 37741 µg/L            | 37741 ppb             | 12:40:00         |
| 1     | Si 251.611†        | 264390.0         | 247057.8               | 17581 µg/L            | 17581 ppb             | 12:40:00         |
| 1     | Sn 189.927†        | 9.2              | 10.5                   | 4.3877 µg/L           | 4.3877 ppb            | 12:40:26         |
| 1     | Ti 334.940†        | 1140448.1        | 1068211.3              | 2689.3 µg/L           | 2689.3 ppb            | 12:40:00         |
| 1     | Tl 190.801†        | -77.0            | -35.1                  | 1.2880 µg/L           | 1.2880 ppb            | 12:40:26         |
| 1     | U 409.014†         | -1507.0          | -1352.8                | -136.83 µg/L          | -136.83 ppb           | 12:40:00         |
| 1     | V 292.402†         | 2470.2           | 2193.2                 | 17.780 µg/L           | 17.780 ppb            | 12:40:05         |
| 1     | Zn 213.857†        | 15602.9          | 13972.5                | 335.80 µg/L           | 335.80 ppb            | 12:40:05         |
| 2     | Sc RADIAL          | 90089.7          | 90089.7                | 105 %                 |                       | 12:39:00         |
| 2     | Al 396.153Radial†  | 15250.9          | 14783.0                | 7697.5 µg/L           | 7697.5 ppb            | 12:39:00         |
| 2     | Ca 317.933Radial†  | 7154.0           | 6488.7                 | 2402.9 µg/L           | 2402.9 ppb            | 12:39:00         |
| 2     | Fe 238.204 Radial† | 4984.5           | 4732.6                 | 53870 µg/L            | 53870 ppb             | 12:39:21         |
| 2     | K 766.490 Radial†  | 6622.3           | 5933.7                 | 3003.6 µg/L           | 3003.6 ppb            | 12:39:00         |
| 2     | Mg 279.077 IEC†    | 135.0            | 122.6                  | 1497.1 µg/L           | 1497.1 ppb            | 12:39:21         |
| 2     | Na 589.592 Radial† | 5298.5           | 4834.2                 | 2305.2 µg/L           | 2305.2 ppb            | 12:39:00         |
| 2     | Sr 421.552†        | 2491.6           | 2254.7                 | 13.721 µg/L           | 13.721 ppb            | 12:39:00         |
| 2     | Sc 361.383         | 1948430.5        | 1948430.5              | 106.99 %              |                       | 12:40:34         |
| 2     | Y 371.029          | 1429611.6        | 1429611.6              | 113.54 %              |                       | 12:40:34         |
| 2     | Ag 328.068†        | -1151.4          | -538.7                 | -0.3077 µg/L          | -0.3077 ppb           | 12:40:39         |
| 2     | As 188.979†        | 2.1              | 4.5                    | -0.0414 µg/L          | -0.0414 ppb           | 12:41:00         |
| 2     | B 249.677†         | 650.1            | 298.5                  | -13.426 µg/L          | -13.426 ppb           | 12:40:39         |
| 2     | Ba 233.527†        | 5592.7           | 5246.6                 | 122.85 µg/L           | 122.85 ppb            | 12:40:39         |
| 2     | Be 313.107†        | 5652.7           | 6819.0                 | 3.2639 µg/L           | 3.2639 ppb            | 12:40:39         |
| 2     | Cd 226.502†        | 107.3            | 266.5                  | 0.7122 µg/L           | 0.7122 ppb            | 12:41:00         |
| 2     | Co 228.616†        | 260.6            | 218.8                  | 4.3945 µg/L           | 4.3945 ppb            | 12:41:00         |
| 2     | Cr 267.716†        | 2296.8           | 2086.8                 | 48.287 µg/L           | 48.287 ppb            | 12:41:00         |
| 2     | Cu 324.752†        | 4461.8           | -98.3                  | 9.4372 µg/L           | 9.4372 ppb            | 12:40:39         |
| 2     | Mn 257.610†        | 587287.6         | 549668.4               | 1807.8 µg/L           | 1807.8 ppb            | 12:40:34         |
| 2     | Mo 202.031†        | 62.4             | 48.5                   | 7.1336 µg/L           | 7.1336 ppb            | 12:41:00         |
| 2     | Ni 231.604†        | 800.7            | 394.6                  | 24.048 µg/L           | 24.048 ppb            | 12:41:00         |
| 2     | P 214.914†         | 599.0            | 272.9                  | 423.96 µg/L           | 423.96 ppb            | 12:41:00         |
| 2     | Pb 220.353†        | 121.1            | 69.8                   | 21.205 µg/L           | 21.205 ppb            | 12:41:00         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 24.9      | 1.3       | 4.1845 µg/L  | 4.1845 ppb  | 12:41:00 |
| 2 | Sb 206.836†        | 17.5      | -10.6     | -10.479 µg/L | -10.479 ppb | 12:41:00 |
| 2 | Se 196.026†        | -23.7     | -48.9     | 121.50 µg/L  | 121.50 ppb  | 12:41:00 |
| 2 | SiO2†              | 217567.5  | 200505.8  | 37894 µg/L   | 37894 ppb   | 12:40:34 |
| 2 | Si 251.611†        | 265604.9  | 247831.4  | 17636 µg/L   | 17636 ppb   | 12:40:34 |
| 2 | Sn 189.927†        | 3.9       | 5.4       | 2.2700 µg/L  | 2.2700 ppb  | 12:41:00 |
| 2 | Ti 334.940†        | 1144099.8 | 1070062.6 | 2694.0 µg/L  | 2694.0 ppb  | 12:40:34 |
| 2 | Tl 190.801†        | -82.1     | -39.8     | -3.6752 µg/L | -3.6752 ppb | 12:41:00 |
| 2 | U 409.014†         | -1533.1   | -1375.1   | -138.87 µg/L | -138.87 ppb | 12:40:34 |
| 2 | V 292.402†         | 2431.4    | 2153.6    | 17.390 µg/L  | 17.390 ppb  | 12:40:39 |
| 2 | Zn 213.857†        | 15633.3   | 13979.6   | 336.01 µg/L  | 336.01 ppb  | 12:40:39 |
| 3 | Sc RADIAL          | 89746.8   | 89746.8   | 105 %        |             | 12:39:26 |
| 3 | Al 396.153Radial†  | 15085.4   | 14680.3   | 7644.1 µg/L  | 7644.1 ppb  | 12:39:26 |
| 3 | Ca 317.933Radial†  | 7045.4    | 6410.9    | 2374.1 µg/L  | 2374.1 ppb  | 12:39:26 |
| 3 | Fe 238.204 Radial† | 5017.8    | 4782.6    | 54439 µg/L   | 54439 ppb   | 12:39:47 |
| 3 | K 766.490 Radial†  | 6611.7    | 5947.7    | 3010.6 µg/L  | 3010.6 ppb  | 12:39:26 |
| 3 | Mg 279.077 IEC†    | 140.1     | 128.0     | 1564.2 µg/L  | 1564.2 ppb  | 12:39:47 |
| 3 | Na 589.592 Radial† | 5235.6    | 4793.3    | 2285.7 µg/L  | 2285.7 ppb  | 12:39:26 |
| 3 | Sr 421.552†        | 2453.2    | 2227.0    | 13.553 µg/L  | 13.553 ppb  | 12:39:26 |
| 3 | Sc 361.383         | 1942934.2 | 1942934.2 | 106.69 %     |             | 12:41:08 |
| 3 | Y 371.029          | 1422925.4 | 1422925.4 | 113.01 %     |             | 12:41:08 |
| 3 | Ag 328.068†        | -1145.1   | -535.9    | -0.2446 µg/L | -0.2446 ppb | 12:41:13 |
| 3 | As 188.979†        | 1.0       | 3.5       | -1.5853 µg/L | -1.5853 ppb | 12:41:33 |
| 3 | B 249.677†         | 677.1     | 325.6     | -12.406 µg/L | -12.406 ppb | 12:41:13 |
| 3 | Ba 233.527†        | 5283.3    | 4971.4    | 116.41 µg/L  | 116.41 ppb  | 12:41:13 |
| 3 | Be 313.107†        | 5143.1    | 6356.3    | 3.0234 µg/L  | 3.0234 ppb  | 12:41:13 |
| 3 | Cd 226.502†        | 78.3      | 239.6     | -0.0392 µg/L | -0.0392 ppb | 12:41:33 |
| 3 | Co 228.616†        | 232.0     | 192.6     | 3.4742 µg/L  | 3.4742 ppb  | 12:41:33 |
| 3 | Cr 267.716†        | 2068.5    | 1878.8    | 43.476 µg/L  | 43.476 ppb  | 12:41:33 |
| 3 | Cu 324.752†        | 4400.1    | -144.4    | 9.2207 µg/L  | 9.2207 ppb  | 12:41:13 |
| 3 | Mn 257.610†        | 560988.5  | 526570.8  | 1732.0 µg/L  | 1732.0 ppb  | 12:41:08 |
| 3 | Mo 202.031†        | 61.7      | 48.0      | 7.1037 µg/L  | 7.1037 ppb  | 12:41:33 |
| 3 | Ni 231.604†        | 743.3     | 343.0     | 20.999 µg/L  | 20.999 ppb  | 12:41:33 |
| 3 | P 214.914†         | 579.9     | 256.5     | 395.57 µg/L  | 395.57 ppb  | 12:41:33 |
| 3 | Pb 220.353†        | 105.0     | 55.1      | 17.076 µg/L  | 17.076 ppb  | 12:41:33 |
| 3 | S 181.975 Axial†   | 37.7      | 13.3      | 44.042 µg/L  | 44.042 ppb  | 12:41:33 |
| 3 | Sb 206.836†        | 15.1      | -12.8     | -12.496 µg/L | -12.496 ppb | 12:41:33 |
| 3 | Se 196.026†        | -19.4     | -45.0     | 127.17 µg/L  | 127.17 ppb  | 12:41:33 |
| 3 | SiO2†              | 209548.7  | 193564.8  | 36582 µg/L   | 36582 ppb   | 12:41:08 |
| 3 | Si 251.611†        | 255837.3  | 239378.2  | 17035 µg/L   | 17035 ppb   | 12:41:08 |
| 3 | Sn 189.927†        | -3.4      | -1.4      | -0.6088 µg/L | -0.6088 ppb | 12:41:33 |
| 3 | Ti 334.940†        | 1084542.7 | 1017264.1 | 2561.0 µg/L  | 2561.0 ppb  | 12:41:08 |
| 3 | Tl 190.801†        | -74.5     | -32.8     | 2.2156 µg/L  | 2.2156 ppb  | 12:41:33 |
| 3 | U 409.014†         | -1419.5   | -1272.6   | -129.17 µg/L | -129.17 ppb | 12:41:08 |
| 3 | V 292.402†         | 2356.8    | 2090.1    | 16.480 µg/L  | 16.480 ppb  | 12:41:13 |
| 3 | Zn 213.857†        | 14767.6   | 13209.5   | 317.33 µg/L  | 317.33 ppb  | 12:41:13 |

## Mean Data: 247188006|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383         | 1945648.2                | 106.84 %           | 0.151    |                    |          | 0.14%  |
| Sc RADIAL          | 89570.4                  | 104 %              | 0.7      |                    |          | 0.70%  |
| Y 371.029          | 1426652.4                | 113.30 %           | 0.271    |                    |          | 0.24%  |
| Ag 328.068†        | -552.8                   | -0.3981 µg/L       | 0.21347  | -0.3981 ppb        | 0.21347  | 53.63% |
| Al 396.153Radial†  | 14751.9                  | 7681.3 µg/L        | 32.38    | 7681.3 ppb         | 32.38    | 0.42%  |
| As 188.979†        | 4.0                      | -0.8386 µg/L       | 0.77320  | -0.8386 ppb        | 0.77320  | 92.20% |
| B 249.677†         | 312.7                    | -12.952 µg/L       | 0.5142   | -12.952 ppb        | 0.5142   | 3.97%  |
| Ba 233.527†        | 5162.7                   | 120.89 µg/L        | 3.888    | 120.89 ppb         | 3.888    | 3.22%  |
| Be 313.107†        | 6708.8                   | 3.2120 µg/L        | 0.16879  | 3.2120 ppb         | 0.16879  | 5.25%  |
| Ca 317.933Radial†  | 6462.6                   | 2393.3 µg/L        | 16.58    | 2393.3 ppb         | 16.58    | 0.69%  |
| Cd 226.502†        | 261.3                    | 0.5319 µg/L        | 0.50568  | 0.5319 ppb         | 0.50568  | 95.07% |
| Co 228.616†        | 207.6                    | 3.9764 µg/L        | 0.46590  | 3.9764 ppb         | 0.46590  | 11.72% |
| Cr 267.716†        | 2018.7                   | 46.712 µg/L        | 2.8028   | 46.712 ppb         | 2.8028   | 6.00%  |
| Cu 324.752†        | -120.4                   | 9.3593 µg/L        | 0.12035  | 9.3593 ppb         | 0.12035  | 1.29%  |
| Fe 238.204 Radial† | 4768.6                   | 54280 µg/L         | 358.1    | 54280 ppb          | 358.1    | 0.66%  |
| K 766.490 Radial†  | 5920.8                   | 2997.0 µg/L        | 17.78    | 2997.0 ppb         | 17.78    | 0.59%  |
| Mg 279.077 IEC†    | 125.2                    | 1529.7 µg/L        | 33.56    | 1529.7 ppb         | 33.56    | 2.19%  |
| Mn 257.610†        | 541838.0                 | 1782.1 µg/L        | 43.41    | 1782.1 ppb         | 43.41    | 2.44%  |
| Mo 202.031†        | 51.0                     | 7.4165 µg/L        | 0.51616  | 7.4165 ppb         | 0.51616  | 6.96%  |
| Na 589.592 Radial† | 4846.9                   | 2311.2 µg/L        | 29.07    | 2311.2 ppb         | 29.07    | 1.26%  |

|                  |           |              |         |             |         |         |
|------------------|-----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 378.0     | 23.071 µg/L  | 1.7949  | 23.071 ppb  | 1.7949  | 7.78%   |
| P 214.914†       | 268.9     | 416.77 µg/L  | 18.674  | 416.77 ppb  | 18.674  | 4.48%   |
| Pb 220.353†      | 60.0      | 18.455 µg/L  | 2.3814  | 18.455 ppb  | 2.3814  | 12.90%  |
| S 181.975 Axial† | 7.0       | 23.067 µg/L  | 20.0112 | 23.067 ppb  | 20.0112 | 86.75%  |
| Sb 206.836†      | -12.4     | -12.097 µg/L | 1.4601  | -12.097 ppb | 1.4601  | 12.07%  |
| Se 196.026†      | -47.8     | 123.87 µg/L  | 2.948   | 123.87 ppb  | 2.948   | 2.38%   |
| SiO2†            | 197922.7  | 37406 µg/L   | 717.3   | 37406 ppb   | 717.3   | 1.92%   |
| Si 251.611†      | 244755.8  | 17417 µg/L   | 332.5   | 17417 ppb   | 332.5   | 1.91%   |
| Sn 189.927†      | 4.8       | 2.0163 µg/L  | 2.50786 | 2.0163 ppb  | 2.50786 | 124.38% |
| Sr 421.552†      | 2249.5    | 13.690 µg/L  | 0.1244  | 13.690 ppb  | 0.1244  | 0.91%   |
| Ti 334.940†      | 1051846.0 | 2648.1 µg/L  | 75.44   | 2648.1 ppb  | 75.44   | 2.85%   |
| Tl 190.801†      | -35.9     | -0.0572 µg/L | 3.16743 | -0.0572 ppb | 3.16743 | >999.9% |
| U 409.014†       | -1333.5   | -134.96 µg/L | 5.113   | -134.96 ppb | 5.113   | 3.79%   |
| V 292.402†       | 2145.6    | 17.217 µg/L  | 0.6670  | 17.217 ppb  | 0.6670  | 3.87%   |
| Zn 213.857†      | 13720.5   | 329.71 µg/L  | 10.725  | 329.71 ppb  | 10.725  | 3.25%   |

Sequence No.: 22

Sample ID: 247188007|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 318

Date Collected: 3/11/2010 12:41:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188007|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86859.7          | 86859.7                | 101 %                 |                       | 12:42:16         |
| 1     | Al 396.153Radial†  | 14919.8          | 14996.1                | 7808.5 µg/L           | 7808.5 ppb            | 12:42:16         |
| 1     | Ca 317.933Radial†  | 17294.3          | 16759.5                | 6206.4 µg/L           | 6206.4 ppb            | 12:42:16         |
| 1     | Fe 238.204 Radial† | 5665.2           | 5581.6                 | 63534 µg/L            | 63534 ppb             | 12:42:36         |
| 1     | K 766.490 Radial†  | 9764.6           | 9272.5                 | 4693.6 µg/L           | 4693.6 ppb            | 12:42:16         |
| 1     | Mg 279.077 IEC†    | 113.0            | 105.6                  | 1271.2 µg/L           | 1271.2 ppb            | 12:42:36         |
| 1     | Na 589.592 Radial† | 7291.1           | 6990.3                 | 3333.3 µg/L           | 3333.3 ppb            | 12:42:16         |
| 1     | Sr 421.552†        | 2209.8           | 2064.6                 | 12.565 µg/L           | 12.565 ppb            | 12:42:16         |
| 1     | Sc 361.383         | 1914848.5        | 1914848.5              | 105.15 %              |                       | 12:43:41         |
| 1     | Y 371.029          | 1466742.1        | 1466742.1              | 116.49 %              |                       | 12:43:41         |
| 1     | Ag 328.068†        | -1280.7          | -680.6                 | -0.7658 µg/L          | -0.7658 ppb           | 12:43:47         |
| 1     | As 188.979†        | 5.5              | 7.8                    | 3.3435 µg/L           | 3.3435 ppb            | 12:44:07         |
| 1     | B 249.677†         | 744.0            | 398.5                  | -13.627 µg/L          | -13.627 ppb           | 12:43:47         |
| 1     | Ba 233.527†        | 5184.1           | 4949.7                 | 115.90 µg/L           | 115.90 ppb            | 12:43:47         |
| 1     | Be 313.107†        | 9190.8           | 10276.5                | 5.3232 µg/L           | 5.3232 ppb            | 12:43:47         |
| 1     | Cd 226.502†        | 162.7            | 320.9                  | 0.9852 µg/L           | 0.9852 ppb            | 12:44:07         |
| 1     | Co 228.616†        | 245.7            | 208.8                  | 3.3042 µg/L           | 3.3042 ppb            | 12:44:07         |
| 1     | Cr 267.716†        | 909.4            | 804.9                  | 18.636 µg/L           | 18.636 ppb            | 12:44:07         |
| 1     | Cu 324.752†        | 4953.4           | 442.3                  | 15.050 µg/L           | 15.050 ppb            | 12:43:47         |
| 1     | Mn 257.610†        | 900101.6         | 856800.6               | 2816.8 µg/L           | 2816.8 ppb            | 12:43:41         |
| 1     | Mo 202.031†        | 66.8             | 53.7                   | 8.0527 µg/L           | 8.0527 ppb            | 12:44:07         |
| 1     | Ni 231.604†        | 444.6            | 69.1                   | 4.9029 µg/L           | 4.9029 ppb            | 12:44:07         |
| 1     | P 214.914†         | 563.7            | 249.1                  | 375.01 µg/L           | 375.01 ppb            | 12:44:07         |
| 1     | Pb 220.353†        | 212.4            | 158.6                  | 46.311 µg/L           | 46.311 ppb            | 12:44:07         |
| 1     | S 181.975 Axial†   | 24.5             | 1.3                    | 4.4056 µg/L           | 4.4056 ppb            | 12:44:07         |
| 1     | Sb 206.836†        | 13.5             | -14.1                  | -13.502 µg/L          | -13.502 ppb           | 12:44:07         |
| 1     | Se 196.026†        | -18.3            | -44.2                  | 156.68 µg/L           | 156.68 ppb            | 12:44:07         |
| 1     | SiO2†              | 265767.1         | 249912.8               | 47231 µg/L            | 47231 ppb             | 12:43:41         |
| 1     | Si 251.611†        | 325177.5         | 308842.3               | 21978 µg/L            | 21978 ppb             | 12:43:41         |
| 1     | Sn 189.927†        | -18.6            | -15.9                  | -6.3827 µg/L          | -6.3827 ppb           | 12:44:07         |
| 1     | Ti 334.940†        | 1251593.4        | 1191049.7              | 2998.7 µg/L           | 2998.7 ppb            | 12:43:41         |
| 1     | Tl 190.801†        | -79.3            | -38.4                  | 5.0019 µg/L           | 5.0019 ppb            | 12:44:07         |
| 1     | U 409.014†         | -1695.5          | -1554.7                | -157.58 µg/L          | -157.58 ppb           | 12:43:41         |
| 1     | V 292.402†         | 2615.7           | 2368.7                 | 18.263 µg/L           | 18.263 ppb            | 12:43:47         |
| 1     | Zn 213.857†        | 22016.4          | 20306.5                | 488.95 µg/L           | 488.95 ppb            | 12:43:47         |
| 2     | Sc RADIAL          | 87916.8          | 87916.8                | 102 %                 |                       | 12:42:42         |
| 2     | Al 396.153Radial†  | 14555.0          | 14462.9                | 7530.8 µg/L           | 7530.8 ppb            | 12:42:42         |
| 2     | Ca 317.933Radial†  | 16876.8          | 16146.6                | 5979.5 µg/L           | 5979.5 ppb            | 12:42:42         |
| 2     | Fe 238.204 Radial† | 5578.1           | 5429.3                 | 61801 µg/L            | 61801 ppb             | 12:43:02         |
| 2     | K 766.490 Radial†  | 9668.6           | 9062.9                 | 4587.5 µg/L           | 4587.5 ppb            | 12:42:42         |
| 2     | Mg 279.077 IEC†    | 111.8            | 103.2                  | 1241.7 µg/L           | 1241.7 ppb            | 12:43:02         |
| 2     | Na 589.592 Radial† | 7220.4           | 6834.7                 | 3259.1 µg/L           | 3259.1 ppb            | 12:42:42         |
| 2     | Sr 421.552†        | 2151.5           | 1981.4                 | 12.058 µg/L           | 12.058 ppb            | 12:42:42         |
| 2     | Sc 361.383         | 1911826.0        | 1911826.0              | 104.98 %              |                       | 12:44:15         |
| 2     | Y 371.029          | 1462287.6        | 1462287.6              | 116.13 %              |                       | 12:44:15         |
| 2     | Ag 328.068†        | -1383.2          | -780.1                 | -1.7487 µg/L          | -1.7487 ppb           | 12:44:20         |
| 2     | As 188.979†        | 4.2              | 6.6                    | 1.8006 µg/L           | 1.8006 ppb            | 12:44:41         |
| 2     | B 249.677†         | 731.4            | 387.7                  | -13.251 µg/L          | -13.251 ppb           | 12:44:20         |
| 2     | Ba 233.527†        | 5252.8           | 5023.0                 | 117.62 µg/L           | 117.62 ppb            | 12:44:20         |
| 2     | Be 313.107†        | 9269.9           | 10365.8                | 5.3726 µg/L           | 5.3726 ppb            | 12:44:20         |
| 2     | Cd 226.502†        | 154.5            | 313.3                  | 0.9878 µg/L           | 0.9878 ppb            | 12:44:41         |
| 2     | Co 228.616†        | 262.2            | 225.0                  | 4.0049 µg/L           | 4.0049 ppb            | 12:44:41         |
| 2     | Cr 267.716†        | 907.9            | 804.8                  | 18.635 µg/L           | 18.635 ppb            | 12:44:41         |
| 2     | Cu 324.752†        | 5001.9           | 496.0                  | 15.101 µg/L           | 15.101 ppb            | 12:44:20         |
| 2     | Mn 257.610†        | 903951.7         | 861821.4               | 2833.1 µg/L           | 2833.1 ppb            | 12:44:15         |
| 2     | Mo 202.031†        | 66.9             | 53.9                   | 8.0042 µg/L           | 8.0042 ppb            | 12:44:41         |
| 2     | Ni 231.604†        | 443.9            | 69.1                   | 4.8826 µg/L           | 4.8826 ppb            | 12:44:41         |
| 2     | P 214.914†         | 574.7            | 260.4                  | 395.54 µg/L           | 395.54 ppb            | 12:44:41         |
| 2     | Pb 220.353†        | 223.6            | 169.7                  | 49.352 µg/L           | 49.352 ppb            | 12:44:41         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 16.3      | -6.5      | -21.304 µg/L | -21.304 ppb | 12:44:41 |
| 2 | Sb 206.836†        | 13.0      | -14.6     | -13.957 µg/L | -13.957 ppb | 12:44:41 |
| 2 | Se 196.026†        | -23.3     | -48.9     | 146.55 µg/L  | 146.55 ppb  | 12:44:41 |
| 2 | SiO2†              | 267174.6  | 251653.2  | 47560 µg/L   | 47560 ppb   | 12:44:15 |
| 2 | Si 251.611†        | 327115.1  | 311176.9  | 22144 µg/L   | 22144 ppb   | 12:44:15 |
| 2 | Sn 189.927†        | -33.3     | -30.0     | -12.328 µg/L | -12.328 ppb | 12:44:41 |
| 2 | Ti 334.940†        | 1257089.1 | 1198166.6 | 3016.6 µg/L  | 3016.6 ppb  | 12:44:15 |
| 2 | Tl 190.801†        | -84.6     | -43.6     | -0.3756 µg/L | -0.3756 ppb | 12:44:41 |
| 2 | U 409.014†         | -1666.8   | -1529.9   | -154.97 µg/L | -154.97 ppb | 12:44:15 |
| 2 | V 292.402†         | 2680.6    | 2434.4    | 19.417 µg/L  | 19.417 ppb  | 12:44:20 |
| 2 | Zn 213.857†        | 22128.8   | 20446.7   | 492.43 µg/L  | 492.43 ppb  | 12:44:20 |
| 3 | Sc RADIAL          | 86930.3   | 86930.3   | 101 %        |             | 12:43:08 |
| 3 | Al 396.153Radial†  | 14391.8   | 14463.0   | 7530.9 µg/L  | 7530.9 ppb  | 12:43:08 |
| 3 | Ca 317.933Radial†  | 16660.0   | 16119.5   | 5969.5 µg/L  | 5969.5 ppb  | 12:43:08 |
| 3 | Fe 238.204 Radial† | 5514.5    | 5428.2    | 61789 µg/L   | 61789 ppb   | 12:43:28 |
| 3 | K 766.490 Radial†  | 9552.0    | 9054.8    | 4583.4 µg/L  | 4583.4 ppb  | 12:43:08 |
| 3 | Mg 279.077 IEC†    | 107.4     | 100.1     | 1202.4 µg/L  | 1202.4 ppb  | 12:43:28 |
| 3 | Na 589.592 Radial† | 7109.5    | 6805.2    | 3245.0 µg/L  | 3245.0 ppb  | 12:43:08 |
| 3 | Sr 421.552†        | 2092.0    | 1946.5    | 11.846 µg/L  | 11.846 ppb  | 12:43:08 |
| 3 | Sc 361.383         | 1917851.6 | 1917851.6 | 105.31 %     |             | 12:44:49 |
| 3 | Y 371.029          | 1460530.6 | 1460530.6 | 115.99 %     |             | 12:44:49 |
| 3 | Ag 328.068†        | -1301.6   | -698.5    | -1.0605 µg/L | -1.0605 ppb | 12:44:54 |
| 3 | As 188.979†        | 11.2      | 13.2      | 11.911 µg/L  | 11.911 ppb  | 12:45:15 |
| 3 | B 249.677†         | 740.0     | 393.6     | -12.959 µg/L | -12.959 ppb | 12:44:54 |
| 3 | Ba 233.527†        | 4938.5    | 4708.7    | 110.26 µg/L  | 110.26 ppb  | 12:44:54 |
| 3 | Be 313.107†        | 8441.7    | 9551.5    | 4.9199 µg/L  | 4.9199 ppb  | 12:44:54 |
| 3 | Cd 226.502†        | 113.3     | 273.7     | -0.0179 µg/L | -0.0179 ppb | 12:45:15 |
| 3 | Co 228.616†        | 228.5     | 192.2     | 2.8304 µg/L  | 2.8304 ppb  | 12:45:15 |
| 3 | Cr 267.716†        | 806.8     | 706.1     | 16.352 µg/L  | 16.352 ppb  | 12:45:15 |
| 3 | Cu 324.752†        | 4925.7    | 408.6     | 14.485 µg/L  | 14.485 ppb  | 12:44:54 |
| 3 | Mn 257.610†        | 864295.3  | 821459.4  | 2700.6 µg/L  | 2700.6 ppb  | 12:44:49 |
| 3 | Mo 202.031†        | 57.1      | 44.4      | 7.0089 µg/L  | 7.0089 ppb  | 12:45:15 |
| 3 | Ni 231.604†        | 433.2     | 57.6      | 4.1996 µg/L  | 4.1996 ppb  | 12:45:15 |
| 3 | P 214.914†         | 536.3     | 222.3     | 330.62 µg/L  | 330.62 ppb  | 12:45:15 |
| 3 | Pb 220.353†        | 209.1     | 155.2     | 45.287 µg/L  | 45.287 ppb  | 12:45:15 |
| 3 | S 181.975 Axial†   | 26.6      | 3.3       | 10.924 µg/L  | 10.924 ppb  | 12:45:15 |
| 3 | Sb 206.836†        | 12.9      | -14.7     | -14.049 µg/L | -14.049 ppb | 12:45:15 |
| 3 | Se 196.026†        | -8.1      | -34.4     | 160.85 µg/L  | 160.85 ppb  | 12:45:15 |
| 3 | SiO2†              | 258481.2  | 242598.6  | 45849 µg/L   | 45849 ppb   | 12:44:49 |
| 3 | Si 251.611†        | 316323.9  | 299950.9  | 21345 µg/L   | 21345 ppb   | 12:44:49 |
| 3 | Sn 189.927†        | -32.1     | -28.7     | -11.783 µg/L | -11.783 ppb | 12:45:15 |
| 3 | Ti 334.940†        | 1195546.0 | 1135964.8 | 2860.0 µg/L  | 2860.0 ppb  | 12:44:49 |
| 3 | Tl 190.801†        | -74.4     | -33.7     | 8.1034 µg/L  | 8.1034 ppb  | 12:45:15 |
| 3 | U 409.014†         | -1616.6   | -1477.2   | -149.93 µg/L | -149.93 ppb | 12:44:49 |
| 3 | V 292.402†         | 2537.9    | 2290.9    | 17.593 µg/L  | 17.593 ppb  | 12:44:54 |
| 3 | Zn 213.857†        | 20831.1   | 19148.2   | 460.98 µg/L  | 460.98 ppb  | 12:44:54 |

Mean Data: 247188007|954676|1

| Analyte            | Mean Corrected | Conc. Units  | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD    |
|--------------------|----------------|--------------|--------|----------|-------------|--------|----------|--------|
| Sc 361.383         | 1914842.0      | 105.15 %     |        | 0.165    |             |        |          | 0.16%  |
| Sc RADIAL          | 87235.6        | 102 %        |        | 0.7      |             |        |          | 0.68%  |
| Y 371.029          | 1463186.8      | 116.20 %     |        | 0.254    |             |        |          | 0.22%  |
| Ag 328.068†        | -719.7         | -1.1917 µg/L |        | 0.50441  | -1.1917 ppb |        | 0.50441  | 42.33% |
| Al 396.153Radial†  | 14640.7        | 7623.4 µg/L  |        | 160.30   | 7623.4 ppb  |        | 160.30   | 2.10%  |
| As 188.979†        | 9.2            | 5.6850 µg/L  |        | 5.44671  | 5.6850 ppb  |        | 5.44671  | 95.81% |
| B 249.677†         | 393.2          | -13.279 µg/L |        | 0.3349   | -13.279 ppb |        | 0.3349   | 2.52%  |
| Ba 233.527†        | 4893.8         | 114.60 µg/L  |        | 3.850    | 114.60 ppb  |        | 3.850    | 3.36%  |
| Be 313.107†        | 10064.6        | 5.2052 µg/L  |        | 0.24832  | 5.2052 ppb  |        | 0.24832  | 4.77%  |
| Ca 317.933Radial†  | 16341.9        | 6051.8 µg/L  |        | 134.02   | 6051.8 ppb  |        | 134.02   | 2.21%  |
| Cd 226.502†        | 302.7          | 0.6517 µg/L  |        | 0.57991  | 0.6517 ppb  |        | 0.57991  | 88.98% |
| Co 228.616†        | 208.7          | 3.3799 µg/L  |        | 0.59089  | 3.3799 ppb  |        | 0.59089  | 17.48% |
| Cr 267.716†        | 771.9          | 17.874 µg/L  |        | 1.3186   | 17.874 ppb  |        | 1.3186   | 7.38%  |
| Cu 324.752†        | 449.0          | 14.879 µg/L  |        | 0.3416   | 14.879 ppb  |        | 0.3416   | 2.30%  |
| Fe 238.204 Radial† | 5479.7         | 62374 µg/L   |        | 1004.3   | 62374 ppb   |        | 1004.3   | 1.61%  |
| K 766.490 Radial†  | 9130.1         | 4621.5 µg/L  |        | 62.48    | 4621.5 ppb  |        | 62.48    | 1.35%  |
| Mg 279.077 IEC†    | 103.0          | 1238.4 µg/L  |        | 34.51    | 1238.4 ppb  |        | 34.51    | 2.79%  |
| Mn 257.610†        | 846693.8       | 2783.5 µg/L  |        | 72.24    | 2783.5 ppb  |        | 72.24    | 2.60%  |
| Mo 202.031†        | 50.7           | 7.6886 µg/L  |        | 0.58914  | 7.6886 ppb  |        | 0.58914  | 7.66%  |
| Na 589.592 Radial† | 6876.8         | 3279.1 µg/L  |        | 47.42    | 3279.1 ppb  |        | 47.42    | 1.45%  |

|                  |           |              |          |             |          |         |
|------------------|-----------|--------------|----------|-------------|----------|---------|
| Ni 231.604†      | 65.2      | 4.6617 µg/L  | 0.40029  | 4.6617 ppb  | 0.40029  | 8.59%   |
| P 214.914†       | 243.9     | 367.06 µg/L  | 33.179   | 367.06 ppb  | 33.179   | 9.04%   |
| Pb 220.353†      | 161.2     | 46.983 µg/L  | 2.1143   | 46.983 ppb  | 2.1143   | 4.50%   |
| S 181.975 Axial† | -0.6      | -1.9915 µg/L | 17.03991 | -1.9915 ppb | 17.03991 | 855.63% |
| Sb 206.836†      | -14.5     | -13.836 µg/L | 0.2931   | -13.836 ppb | 0.2931   | 2.12%   |
| Se 196.026†      | -42.5     | 154.69 µg/L  | 7.356    | 154.69 ppb  | 7.356    | 4.76%   |
| SiO2†            | 248054.9  | 46880 µg/L   | 908.1    | 46880 ppb   | 908.1    | 1.94%   |
| Si 251.611†      | 306656.7  | 21822 µg/L   | 421.5    | 21822 ppb   | 421.5    | 1.93%   |
| Sn 189.927†      | -24.8     | -10.164 µg/L | 3.2864   | -10.164 ppb | 3.2864   | 32.33%  |
| Sr 421.552†      | 1997.5    | 12.156 µg/L  | 0.3692   | 12.156 ppb  | 0.3692   | 3.04%   |
| Ti 334.940†      | 1175060.4 | 2958.4 µg/L  | 85.71    | 2958.4 ppb  | 85.71    | 2.90%   |
| Tl 190.801†      | -38.6     | 4.2432 µg/L  | 4.29012  | 4.2432 ppb  | 4.29012  | 101.11% |
| U 409.014†       | -1520.6   | -154.16 µg/L | 3.887    | -154.16 ppb | 3.887    | 2.52%   |
| V 292.402†       | 2364.7    | 18.424 µg/L  | 0.9228   | 18.424 ppb  | 0.9228   | 5.01%   |
| Zn 213.857†      | 19967.2   | 480.79 µg/L  | 17.245   | 480.79 ppb  | 17.245   | 3.59%   |



Sequence No.: 23

Sample ID: 247188008|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 319

Date Collected: 3/11/2010 12:45:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188008|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88787.6       | 88787.6             | 103 %              |                    | 12:45:57      |
| 1     | Al 396.153Radial†  | 14353.6       | 14128.8             | 7356.9 µg/L        | 7356.9 ppb         | 12:45:57      |
| 1     | Ca 317.933Radial†  | 6984.3        | 6424.6              | 2379.2 µg/L        | 2379.2 ppb         | 12:45:57      |
| 1     | Fe 238.204 Radial† | 5626.5        | 5422.6              | 61725 µg/L         | 61725 ppb          | 12:46:17      |
| 1     | K 766.490 Radial†  | 8835.7        | 8165.4              | 4133.2 µg/L        | 4133.2 ppb         | 12:45:57      |
| 1     | Mg 279.077 IEC†    | 131.7         | 121.4               | 1472.7 µg/L        | 1472.7 ppb         | 12:46:17      |
| 1     | Na 589.592 Radial† | 6197.6        | 5777.2              | 2754.8 µg/L        | 2754.8 ppb         | 12:45:57      |
| 1     | Sr 421.552†        | 1818.8        | 1639.3              | 9.9763 µg/L        | 9.9763 ppb         | 12:45:57      |
| 1     | Sc 361.383         | 1917922.7     | 1917922.7           | 105.31 %           |                    | 12:47:22      |
| 1     | Y 371.029          | 1406475.5     | 1406475.5           | 111.70 %           |                    | 12:47:22      |
| 1     | Ag 328.068†        | -1306.3       | -702.9              | -1.1061 µg/L       | -1.1061 ppb        | 12:47:27      |
| 1     | As 188.979†        | 8.7           | 10.8                | 8.6893 µg/L        | 8.6893 ppb         | 12:47:48      |
| 1     | B 249.677†         | 720.5         | 375.1               | -13.821 µg/L       | -13.821 ppb        | 12:47:27      |
| 1     | Ba 233.527†        | 4055.8        | 3870.4              | 90.641 µg/L        | 90.641 ppb         | 12:47:48      |
| 1     | Be 313.107†        | 5961.3        | 7196.1              | 3.3675 µg/L        | 3.3675 ppb         | 12:47:27      |
| 1     | Cd 226.502†        | 145.0         | 303.8               | 0.7580 µg/L        | 0.7580 ppb         | 12:47:48      |
| 1     | Co 228.616†        | 274.7         | 236.1               | 4.4538 µg/L        | 4.4538 ppb         | 12:47:48      |
| 1     | Cr 267.716†        | 1130.1        | 1013.1              | 23.452 µg/L        | 23.452 ppb         | 12:47:48      |
| 1     | Cu 324.752†        | 4451.4        | -41.9               | 11.310 µg/L        | 11.310 ppb         | 12:47:27      |
| 1     | Mn 257.610†        | 604853.5      | 575079.4            | 1891.7 µg/L        | 1891.7 ppb         | 12:47:22      |
| 1     | Mo 202.031†        | 79.3          | 65.5                | 9.2177 µg/L        | 9.2177 ppb         | 12:47:48      |
| 1     | Ni 231.604†        | 499.1         | 120.2               | 7.9029 µg/L        | 7.9029 ppb         | 12:47:48      |
| 1     | P 214.914†         | 596.1         | 279.0               | 427.90 µg/L        | 427.90 ppb         | 12:47:48      |
| 1     | Pb 220.353†        | 198.1         | 144.8               | 42.366 µg/L        | 42.366 ppb         | 12:47:48      |
| 1     | S 181.975 Axial†   | 24.0          | 0.8                 | 2.7356 µg/L        | 2.7356 ppb         | 12:47:48      |
| 1     | Sb 206.836†        | 17.7          | -10.2               | -9.7758 µg/L       | -9.7758 ppb        | 12:47:48      |
| 1     | Se 196.026†        | -23.1         | -48.6               | 146.75 µg/L        | 146.75 ppb         | 12:47:48      |
| 1     | SiO2†              | 247958.5      | 232597.8            | 43959 µg/L         | 43959 ppb          | 12:47:22      |
| 1     | Si 251.611†        | 303348.2      | 287618.9            | 20467 µg/L         | 20467 ppb          | 12:47:22      |
| 1     | Sn 189.927†        | -0.5          | 1.3                 | 0.5134 µg/L        | 0.5134 ppb         | 12:47:48      |
| 1     | Ti 334.940†        | 1272943.9     | 1209414.8           | 3044.8 µg/L        | 3044.8 ppb         | 12:47:22      |
| 1     | Tl 190.801†        | -79.0         | -38.0               | 2.6568 µg/L        | 2.6568 ppb         | 12:47:48      |
| 1     | U 409.014†         | -1724.4       | -1579.5             | -159.47 µg/L       | -159.47 ppb        | 12:47:22      |
| 1     | V 292.402†         | 2505.6        | 2260.2              | 17.237 µg/L        | 17.237 ppb         | 12:47:27      |
| 1     | Zn 213.857†        | 16921.2       | 15434.9             | 370.97 µg/L        | 370.97 ppb         | 12:47:27      |
| 2     | Sc RADIAL          | 88904.4       | 88904.4             | 104 %              |                    | 12:46:23      |
| 2     | Al 396.153Radial†  | 14350.5       | 14107.7             | 7345.9 µg/L        | 7345.9 ppb         | 12:46:23      |
| 2     | Ca 317.933Radial†  | 6921.9        | 6355.6              | 2353.6 µg/L        | 2353.6 ppb         | 12:46:23      |
| 2     | Fe 238.204 Radial† | 5659.8        | 5447.6              | 62009 µg/L         | 62009 ppb          | 12:46:43      |
| 2     | K 766.490 Radial†  | 8843.4        | 8161.6              | 4131.3 µg/L        | 4131.3 ppb         | 12:46:23      |
| 2     | Mg 279.077 IEC†    | 134.5         | 123.9               | 1504.6 µg/L        | 1504.6 ppb         | 12:46:43      |
| 2     | Na 589.592 Radial† | 6157.2        | 5730.3              | 2732.5 µg/L        | 2732.5 ppb         | 12:46:23      |
| 2     | Sr 421.552†        | 1777.1        | 1596.7              | 9.7171 µg/L        | 9.7171 ppb         | 12:46:23      |
| 2     | Sc 361.383         | 1929198.1     | 1929198.1           | 105.93 %           |                    | 12:47:56      |
| 2     | Y 371.029          | 1413331.2     | 1413331.2           | 112.25 %           |                    | 12:47:56      |
| 2     | Ag 328.068†        | -1338.4       | -726.0              | -1.2908 µg/L       | -1.2908 ppb        | 12:48:01      |
| 2     | As 188.979†        | 4.6           | 6.9                 | 2.6095 µg/L        | 2.6095 ppb         | 12:48:22      |
| 2     | B 249.677†         | 750.0         | 398.9               | -12.802 µg/L       | -12.802 ppb        | 12:48:01      |
| 2     | Ba 233.527†        | 4013.0        | 3807.5              | 89.166 µg/L        | 89.166 ppb         | 12:48:22      |
| 2     | Be 313.107†        | 6021.9        | 7220.1              | 3.3896 µg/L        | 3.3896 ppb         | 12:48:01      |
| 2     | Cd 226.502†        | 146.0         | 304.0               | 0.7287 µg/L        | 0.7287 ppb         | 12:48:22      |
| 2     | Co 228.616†        | 264.7         | 225.0               | 3.9873 µg/L        | 3.9873 ppb         | 12:48:22      |
| 2     | Cr 267.716†        | 1107.8        | 985.7               | 22.819 µg/L        | 22.819 ppb         | 12:48:22      |
| 2     | Cu 324.752†        | 4456.1        | -62.2               | 11.221 µg/L        | 11.221 ppb         | 12:48:01      |
| 2     | Mn 257.610†        | 605758.2      | 572576.8            | 1883.5 µg/L        | 1883.5 ppb         | 12:47:56      |
| 2     | Mo 202.031†        | 72.8          | 58.9                | 8.5404 µg/L        | 8.5404 ppb         | 12:48:22      |
| 2     | Ni 231.604†        | 481.6         | 100.8               | 6.7629 µg/L        | 6.7629 ppb         | 12:48:22      |
| 2     | P 214.914†         | 597.8         | 277.3               | 424.63 µg/L        | 424.63 ppb         | 12:48:22      |
| 2     | Pb 220.353†        | 197.9         | 143.5               | 42.015 µg/L        | 42.015 ppb         | 12:48:22      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 17.6      | -5.4      | -17.692 µg/L | -17.692 ppb | 12:48:22 |
| 2 | Sb 206.836†        | 11.9      | -15.8     | -15.018 µg/L | -15.018 ppb | 12:48:22 |
| 2 | Se 196.026†        | -26.9     | -52.2     | 144.16 µg/L  | 144.16 ppb  | 12:48:22 |
| 2 | SiO2†              | 247858.5  | 231127.3  | 43681 µg/L   | 43681 ppb   | 12:47:56 |
| 2 | Si 251.611†        | 303128.6  | 285728.1  | 20333 µg/L   | 20333 ppb   | 12:47:56 |
| 2 | Sn 189.927†        | -9.9      | -7.6      | -3.2448 µg/L | -3.2448 ppb | 12:48:22 |
| 2 | Ti 334.940†        | 1272741.1 | 1202158.9 | 3026.6 µg/L  | 3026.6 ppb  | 12:47:56 |
| 2 | Tl 190.801†        | -75.5     | -34.2     | 6.4394 µg/L  | 6.4394 ppb  | 12:48:22 |
| 2 | U 409.014†         | -1751.1   | -1595.1   | -161.00 µg/L | -161.00 ppb | 12:47:56 |
| 2 | V 292.402†         | 2414.5    | 2160.3    | 15.911 µg/L  | 15.911 ppb  | 12:48:01 |
| 2 | Zn 213.857†        | 16940.1   | 15358.8   | 369.12 µg/L  | 369.12 ppb  | 12:48:01 |
| 3 | Sc RADIAL          | 89189.9   | 89189.9   | 104 %        |             | 12:46:49 |
| 3 | Al 396.153Radial†  | 14287.2   | 14002.5   | 7291.1 µg/L  | 7291.1 ppb  | 12:46:49 |
| 3 | Ca 317.933Radial†  | 6958.2    | 6369.1    | 2358.6 µg/L  | 2358.6 ppb  | 12:46:49 |
| 3 | Fe 238.204 Radial† | 5655.9    | 5426.4    | 61768 µg/L   | 61768 ppb   | 12:47:09 |
| 3 | K 766.490 Radial†  | 8972.0    | 8257.9    | 4180.0 µg/L  | 4180.0 ppb  | 12:46:49 |
| 3 | Mg 279.077 IEC†    | 128.7     | 117.8     | 1427.7 µg/L  | 1427.7 ppb  | 12:47:09 |
| 3 | Na 589.592 Radial† | 6194.1    | 5746.7    | 2740.3 µg/L  | 2740.3 ppb  | 12:46:49 |
| 3 | Sr 421.552†        | 1796.7    | 1610.1    | 9.7986 µg/L  | 9.7986 ppb  | 12:46:49 |
| 3 | Sc 361.383         | 1928567.8 | 1928567.8 | 105.90 %     |             | 12:48:30 |
| 3 | Y 371.029          | 1410120.1 | 1410120.1 | 111.99 %     |             | 12:48:30 |
| 3 | Ag 328.068†        | -1254.5   | -647.2    | -0.6407 µg/L | -0.6407 ppb | 12:48:35 |
| 3 | As 188.979†        | 3.8       | 6.1       | 1.4975 µg/L  | 1.4975 ppb  | 12:48:56 |
| 3 | B 249.677†         | 682.7     | 335.6     | -15.780 µg/L | -15.780 ppb | 12:48:35 |
| 3 | Ba 233.527†        | 3671.3    | 3486.0    | 81.640 µg/L  | 81.640 ppb  | 12:48:56 |
| 3 | Be 313.107†        | 5439.4    | 6672.0    | 3.0990 µg/L  | 3.0990 ppb  | 12:48:35 |
| 3 | Cd 226.502†        | 107.9     | 268.1     | -0.1579 µg/L | -0.1579 ppb | 12:48:56 |
| 3 | Co 228.616†        | 248.5     | 209.9     | 3.5890 µg/L  | 3.5890 ppb  | 12:48:56 |
| 3 | Cr 267.716†        | 996.1     | 880.6     | 20.386 µg/L  | 20.386 ppb  | 12:48:56 |
| 3 | Cu 324.752†        | 4424.3    | -90.8     | 10.975 µg/L  | 10.975 ppb  | 12:48:35 |
| 3 | Mn 257.610†        | 579959.5  | 548402.0  | 1804.1 µg/L  | 1804.1 ppb  | 12:48:30 |
| 3 | Mo 202.031†        | 61.2      | 48.0      | 7.3803 µg/L  | 7.3803 ppb  | 12:48:56 |
| 3 | Ni 231.604†        | 470.6     | 90.6      | 6.1565 µg/L  | 6.1565 ppb  | 12:48:56 |
| 3 | P 214.914†         | 564.6     | 246.2     | 371.83 µg/L  | 371.83 ppb  | 12:48:56 |
| 3 | Pb 220.353†        | 183.6     | 130.0     | 38.217 µg/L  | 38.217 ppb  | 12:48:56 |
| 3 | S 181.975 Axial†   | 22.4      | -0.8      | -2.6763 µg/L | -2.6763 ppb | 12:48:56 |
| 3 | Sb 206.836†        | 23.0      | -5.3      | -5.1784 µg/L | -5.1784 ppb | 12:48:56 |
| 3 | Se 196.026†        | -19.0     | -44.7     | 150.85 µg/L  | 150.85 ppb  | 12:48:56 |
| 3 | SiO2†              | 240481.2  | 224237.4  | 42379 µg/L   | 42379 ppb   | 12:48:30 |
| 3 | Si 251.611†        | 294254.8  | 277442.1  | 19743 µg/L   | 19743 ppb   | 12:48:30 |
| 3 | Sn 189.927†        | -3.7      | -1.7      | -0.7765 µg/L | -0.7765 ppb | 12:48:56 |
| 3 | Ti 334.940†        | 1212411.0 | 1145582.1 | 2884.1 µg/L  | 2884.1 ppb  | 12:48:30 |
| 3 | Tl 190.801†        | -74.8     | -33.7     | 5.4532 µg/L  | 5.4532 ppb  | 12:48:56 |
| 3 | U 409.014†         | -1629.2   | -1480.6   | -150.03 µg/L | -150.03 ppb | 12:48:30 |
| 3 | V 292.402†         | 2302.7    | 2055.5    | 14.624 µg/L  | 14.624 ppb  | 12:48:35 |
| 3 | Zn 213.857†        | 15936.5   | 14416.4   | 346.30 µg/L  | 346.30 ppb  | 12:48:35 |

Mean Data: 247188008|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1925229.5                | 105.72 %           | 0.348    |                    |          | 0.33%   |
| Sc RADIAL          | 88960.6                  | 104 %              | 0.2      |                    |          | 0.23%   |
| Y 371.029          | 1409975.6                | 111.98 %           | 0.272    |                    |          | 0.24%   |
| Ag 328.068†        | -692.0                   | -1.0126 µg/L       | 0.33500  | -1.0126 ppb        | 0.33500  | 33.08%  |
| Al 396.153Radial†  | 14079.7                  | 7331.3 µg/L        | 35.23    | 7331.3 ppb         | 35.23    | 0.48%   |
| As 188.979†        | 7.9                      | 4.2654 µg/L        | 3.87133  | 4.2654 ppb         | 3.87133  | 90.76%  |
| B 249.677†         | 369.9                    | -14.135 µg/L       | 1.5133   | -14.135 ppb        | 1.5133   | 10.71%  |
| Ba 233.527†        | 3721.3                   | 87.149 µg/L        | 4.8274   | 87.149 ppb         | 4.8274   | 5.54%   |
| Be 313.107†        | 7029.4                   | 3.2853 µg/L        | 0.16179  | 3.2853 ppb         | 0.16179  | 4.92%   |
| Ca 317.933Radial†  | 6383.1                   | 2363.8 µg/L        | 13.55    | 2363.8 ppb         | 13.55    | 0.57%   |
| Cd 226.502†        | 292.0                    | 0.4429 µg/L        | 0.52056  | 0.4429 ppb         | 0.52056  | 117.53% |
| Co 228.616†        | 223.7                    | 4.0100 µg/L        | 0.43280  | 4.0100 ppb         | 0.43280  | 10.79%  |
| Cr 267.716†        | 959.8                    | 22.219 µg/L        | 1.6183   | 22.219 ppb         | 1.6183   | 7.28%   |
| Cu 324.752†        | -65.0                    | 11.169 µg/L        | 0.1736   | 11.169 ppb         | 0.1736   | 1.55%   |
| Fe 238.204 Radial† | 5432.2                   | 61834 µg/L         | 153.1    | 61834 ppb          | 153.1    | 0.25%   |
| K 766.490 Radial†  | 8195.0                   | 4148.2 µg/L        | 27.62    | 4148.2 ppb         | 27.62    | 0.67%   |
| Mg 279.077 IEC†    | 121.0                    | 1468.3 µg/L        | 38.63    | 1468.3 ppb         | 38.63    | 2.63%   |
| Mn 257.610†        | 565352.7                 | 1859.7 µg/L        | 48.37    | 1859.7 ppb         | 48.37    | 2.60%   |
| Mo 202.031†        | 57.4                     | 8.3795 µg/L        | 0.92920  | 8.3795 ppb         | 0.92920  | 11.09%  |
| Na 589.592 Radial† | 5751.4                   | 2742.5 µg/L        | 11.34    | 2742.5 ppb         | 11.34    | 0.41%   |

|                  |           |              |          |             |          |         |
|------------------|-----------|--------------|----------|-------------|----------|---------|
| Ni 231.604†      | 103.9     | 6.9408 µg/L  | 0.88666  | 6.9408 ppb  | 0.88666  | 12.77%  |
| P 214.914†       | 267.5     | 408.12 µg/L  | 31.469   | 408.12 ppb  | 31.469   | 7.71%   |
| Pb 220.353†      | 139.4     | 40.866 µg/L  | 2.3009   | 40.866 ppb  | 2.3009   | 5.63%   |
| S 181.975 Axial† | -1.8      | -5.8775 µg/L | 10.58332 | -5.8775 ppb | 10.58332 | 180.06% |
| Sb 206.836†      | -10.4     | -9.9907 µg/L | 4.92329  | -9.9907 ppb | 4.92329  | 49.28%  |
| Se 196.026†      | -48.5     | 147.25 µg/L  | 3.375    | 147.25 ppb  | 3.375    | 2.29%   |
| SiO2†            | 229320.9  | 43340 µg/L   | 843.5    | 43340 ppb   | 843.5    | 1.95%   |
| Si 251.611†      | 283596.4  | 20181 µg/L   | 385.2    | 20181 ppb   | 385.2    | 1.91%   |
| Sn 189.927†      | -2.6      | -1.1693 µg/L | 1.90966  | -1.1693 ppb | 1.90966  | 163.32% |
| Sr 421.552†      | 1615.4    | 9.8307 µg/L  | 0.13255  | 9.8307 ppb  | 0.13255  | 1.35%   |
| Ti 334.940†      | 1185718.6 | 2985.2 µg/L  | 87.99    | 2985.2 ppb  | 87.99    | 2.95%   |
| Tl 190.801†      | -35.3     | 4.8498 µg/L  | 1.96218  | 4.8498 ppb  | 1.96218  | 40.46%  |
| U 409.014†       | -1551.7   | -156.83 µg/L | 5.940    | -156.83 ppb | 5.940    | 3.79%   |
| V 292.402†       | 2158.7    | 15.924 µg/L  | 1.3068   | 15.924 ppb  | 1.3068   | 8.21%   |
| Zn 213.857†      | 15070.0   | 362.13 µg/L  | 13.740   | 362.13 ppb  | 13.740   | 3.79%   |

Sequence No.: 24

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/11/2010 12:49:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88352.8          | 88352.8                | 103 %                 |                       | 12:49:44         |
| 1     | Al 396.153Radial†  | 9681.7           | 9659.9                 | 5018.8 µg/L           | 5018.8 ppb            | 12:49:44         |
| 1     | Ca 317.933Radial†  | 15128.3          | 14367.1                | 5320.5 µg/L           | 5320.5 ppb            | 12:49:44         |
| 1     | Fe 238.204 Radial† | 482.1            | 453.2                  | 5170.1 µg/L           | 5170.1 ppb            | 12:50:04         |
| 1     | K 766.490 Radial†  | 10549.7          | 9872.0                 | 4997.0 µg/L           | 4997.0 ppb            | 12:49:44         |
| 1     | Mg 279.077 IEC†    | 443.0            | 424.3                  | 5382.5 µg/L           | 5382.5 ppb            | 12:50:04         |
| 1     | Na 589.592 Radial† | 21216.1          | 20392.3                | 9723.9 µg/L           | 9723.9 ppb            | 12:49:44         |
| 1     | Sr 421.552†        | 81612.0          | 79141.8                | 481.64 µg/L           | 481.64 ppb            | 12:49:44         |
| 1     | Sc 361.383         | 1913425.0        | 1913425.0              | 105.07 %              |                       | 12:51:07         |
| 1     | Y 371.029          | 1319716.4        | 1319716.4              | 104.81 %              |                       | 12:51:07         |
| 1     | Ag 328.068†        | 60604.8          | 58219.3                | 504.22 µg/L           | 504.22 ppb            | 12:51:13         |
| 1     | As 188.979†        | 374.2            | 358.7                  | 549.06 µg/L           | 549.06 ppb            | 12:51:34         |
| 1     | B 249.677†         | 11204.7          | 10355.2                | 504.78 µg/L           | 504.78 ppb            | 12:51:13         |
| 1     | Ba 233.527†        | 23788.9          | 22660.8                | 531.33 µg/L           | 531.33 ppb            | 12:51:13         |
| 1     | Be 313.107†        | 873975.4         | 833358.3               | 524.14 µg/L           | 524.14 ppb            | 12:51:07         |
| 1     | Cd 226.502†        | 22413.9          | 21499.1                | 546.62 µg/L           | 546.62 ppb            | 12:51:13         |
| 1     | Co 228.616†        | 12126.9          | 11517.2                | 526.50 µg/L           | 526.50 ppb            | 12:51:34         |
| 1     | Cr 267.716†        | 24283.5          | 23052.2                | 533.55 µg/L           | 533.55 ppb            | 12:51:13         |
| 1     | Cu 324.752†        | 79241.6          | 71151.1                | 500.51 µg/L           | 500.51 ppb            | 12:51:13         |
| 1     | Mn 257.610†        | 167204.9         | 159889.1               | 524.90 µg/L           | 524.90 ppb            | 12:51:13         |
| 1     | Mo 202.031†        | 5463.8           | 5190.5                 | 545.00 µg/L           | 545.00 ppb            | 12:51:34         |
| 1     | Ni 231.604†        | 9786.3           | 8960.5                 | 529.88 µg/L           | 529.88 ppb            | 12:51:34         |
| 1     | P 214.914†         | 2006.0           | 1622.3                 | 2719.4 µg/L           | 2719.4 ppb            | 12:51:34         |
| 1     | Pb 220.353†        | 2153.4           | 2006.2                 | 563.31 µg/L           | 563.31 ppb            | 12:51:34         |
| 1     | S 181.975 Axial†   | 361.3            | 321.9                  | 1062.5 µg/L           | 1062.5 ppb            | 12:51:34         |
| 1     | Sb 206.836†        | 614.3            | 557.7                  | 526.70 µg/L           | 526.70 ppb            | 12:51:34         |
| 1     | Se 196.026†        | 598.7            | 543.1                  | 549.66 µg/L           | 549.66 ppb            | 12:51:34         |
| 1     | SiO2†              | 33517.2          | 29052.7                | 5490.7 µg/L           | 5490.7 ppb            | 12:51:13         |
| 1     | Si 251.611†        | 38668.3          | 36381.8                | 2589.0 µg/L           | 2589.0 ppb            | 12:51:13         |
| 1     | Sn 189.927†        | 1383.6           | 1318.6                 | 556.06 µg/L           | 556.06 ppb            | 12:51:34         |
| 1     | Ti 334.940†        | 208950.4         | 199579.9               | 502.14 µg/L           | 502.14 ppb            | 12:51:13         |
| 1     | Tl 190.801†        | 494.8            | 508.0                  | 536.98 µg/L           | 536.98 ppb            | 12:51:34         |
| 1     | U 409.014†         | 5567.2           | 5356.6                 | 510.18 µg/L           | 510.18 ppb            | 12:51:13         |
| 1     | V 292.402†         | 43200.7          | 40998.1                | 524.57 µg/L           | 524.57 ppb            | 12:51:13         |
| 1     | Zn 213.857†        | 23591.7          | 21821.5                | 525.08 µg/L           | 525.08 ppb            | 12:51:13         |
| 2     | Sc RADIAL          | 88722.3          | 88722.3                | 103 %                 |                       | 12:50:10         |
| 2     | Al 396.153Radial†  | 9656.1           | 9596.0                 | 4985.8 µg/L           | 4985.8 ppb            | 12:50:10         |
| 2     | Ca 317.933Radial†  | 15151.4          | 14328.3                | 5306.1 µg/L           | 5306.1 ppb            | 12:50:10         |
| 2     | Fe 238.204 Radial† | 477.1            | 446.5                  | 5092.8 µg/L           | 5092.8 ppb            | 12:50:30         |
| 2     | K 766.490 Radial†  | 10529.8          | 9810.1                 | 4965.7 µg/L           | 4965.7 ppb            | 12:50:10         |
| 2     | Mg 279.077 IEC†    | 437.4            | 417.1                  | 5291.9 µg/L           | 5291.9 ppb            | 12:50:30         |
| 2     | Na 589.592 Radial† | 21199.5          | 20290.5                | 9675.4 µg/L           | 9675.4 ppb            | 12:50:10         |
| 2     | Sr 421.552†        | 81804.2          | 78997.6                | 480.76 µg/L           | 480.76 ppb            | 12:50:10         |
| 2     | Sc 361.383         | 1913815.1        | 1913815.1              | 105.09 %              |                       | 12:51:40         |
| 2     | Y 371.029          | 1317130.5        | 1317130.5              | 104.61 %              |                       | 12:51:40         |
| 2     | Ag 328.068†        | 59968.2          | 57601.7                | 498.87 µg/L           | 498.87 ppb            | 12:51:46         |
| 2     | As 188.979†        | 367.6            | 352.3                  | 539.34 µg/L           | 539.34 ppb            | 12:52:07         |
| 2     | B 249.677†         | 11049.9          | 10205.7                | 497.49 µg/L           | 497.49 ppb            | 12:51:46         |
| 2     | Ba 233.527†        | 23540.6          | 22419.9                | 525.68 µg/L           | 525.68 ppb            | 12:51:46         |
| 2     | Be 313.107†        | 864924.3         | 824575.9               | 518.61 µg/L           | 518.61 ppb            | 12:51:40         |
| 2     | Cd 226.502†        | 22071.0          | 21168.4                | 538.21 µg/L           | 538.21 ppb            | 12:51:46         |
| 2     | Co 228.616†        | 11814.3          | 11217.4                | 512.78 µg/L           | 512.78 ppb            | 12:52:07         |
| 2     | Cr 267.716†        | 23911.6          | 22693.6                | 525.25 µg/L           | 525.25 ppb            | 12:51:46         |
| 2     | Cu 324.752†        | 78428.4          | 70361.8                | 494.95 µg/L           | 494.95 ppb            | 12:51:46         |
| 2     | Mn 257.610†        | 165511.3         | 158245.0               | 519.50 µg/L           | 519.50 ppb            | 12:51:46         |
| 2     | Mo 202.031†        | 5313.4           | 5046.3                 | 529.86 µg/L           | 529.86 ppb            | 12:52:07         |
| 2     | Ni 231.604†        | 9552.4           | 8736.1                 | 516.61 µg/L           | 516.61 ppb            | 12:52:07         |
| 2     | P 214.914†         | 1969.5           | 1587.1                 | 2659.9 µg/L           | 2659.9 ppb            | 12:52:07         |
| 2     | Pb 220.353†        | 2113.5           | 1967.8                 | 552.53 µg/L           | 552.53 ppb            | 12:52:07         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 361.1     | 321.6     | 1061.4 µg/L | 1061.4 ppb | 12:52:07 |
| 2 | Sb 206.836†        | 603.2     | 547.0     | 516.50 µg/L | 516.50 ppb | 12:52:07 |
| 2 | Se 196.026†        | 592.4     | 537.0     | 543.47 µg/L | 543.47 ppb | 12:52:07 |
| 2 | SiO2†              | 33394.0   | 28928.9   | 5467.3 µg/L | 5467.3 ppb | 12:51:46 |
| 2 | Si 251.611†        | 38460.6   | 36176.7   | 2574.4 µg/L | 2574.4 ppb | 12:51:46 |
| 2 | Sn 189.927†        | 1358.2    | 1294.2    | 545.77 µg/L | 545.77 ppb | 12:52:07 |
| 2 | Ti 334.940†        | 206358.0  | 197072.5  | 495.83 µg/L | 495.83 ppb | 12:51:46 |
| 2 | Tl 190.801†        | 483.4     | 497.0     | 525.45 µg/L | 525.45 ppb | 12:52:07 |
| 2 | U 409.014†         | 5429.7    | 5224.6    | 497.60 µg/L | 497.60 ppb | 12:51:46 |
| 2 | V 292.402†         | 42661.8   | 40476.9   | 517.84 µg/L | 517.84 ppb | 12:51:46 |
| 2 | Zn 213.857†        | 23351.3   | 21588.1   | 519.51 µg/L | 519.51 ppb | 12:51:46 |
| 3 | Sc RADIAL          | 89173.9   | 89173.9   | 104 %       |            | 12:50:36 |
| 3 | Al 396.153Radial†  | 9624.9    | 9518.6    | 4947.6 µg/L | 4947.6 ppb | 12:50:36 |
| 3 | Ca 317.933Radial†  | 15137.8   | 14241.0   | 5273.8 µg/L | 5273.8 ppb | 12:50:36 |
| 3 | Fe 238.204 Radial† | 476.7     | 443.8     | 5060.1 µg/L | 5060.1 ppb | 12:50:56 |
| 3 | K 766.490 Radial†  | 10492.4   | 9722.5    | 4921.4 µg/L | 4921.4 ppb | 12:50:36 |
| 3 | Mg 279.077 IEC†    | 435.3     | 412.9     | 5236.5 µg/L | 5236.5 ppb | 12:50:56 |
| 3 | Na 589.592 Radial† | 21159.7   | 20148.4   | 9607.6 µg/L | 9607.6 ppb | 12:50:36 |
| 3 | Sr 421.552†        | 81500.4   | 78304.7   | 476.54 µg/L | 476.54 ppb | 12:50:36 |
| 3 | Sc 361.383         | 1929531.7 | 1929531.7 | 105.95 %    |            | 12:52:13 |
| 3 | Y 371.029          | 1334084.9 | 1334084.9 | 105.95 %    |            | 12:52:13 |
| 3 | Ag 328.068†        | 55703.8   | 53112.0   | 459.83 µg/L | 459.83 ppb | 12:52:19 |
| 3 | As 188.979†        | 304.6     | 290.1     | 443.83 µg/L | 443.83 ppb | 12:52:39 |
| 3 | B 249.677†         | 10250.7   | 9365.8    | 456.29 µg/L | 456.29 ppb | 12:52:19 |
| 3 | Ba 233.527†        | 20935.1   | 19778.3   | 463.73 µg/L | 463.73 ppb | 12:52:19 |
| 3 | Be 313.107†        | 792871.4  | 749866.8  | 471.63 µg/L | 471.63 ppb | 12:52:13 |
| 3 | Cd 226.502†        | 19681.4   | 18741.9   | 476.41 µg/L | 476.41 ppb | 12:52:19 |
| 3 | Co 228.616†        | 9635.1    | 9069.1    | 414.52 µg/L | 414.52 ppb | 12:52:39 |
| 3 | Cr 267.716†        | 20458.6   | 19249.3   | 445.54 µg/L | 445.54 ppb | 12:52:19 |
| 3 | Cu 324.752†        | 69443.5   | 61273.8   | 431.14 µg/L | 431.14 ppb | 12:52:19 |
| 3 | Mn 257.610†        | 145174.2  | 137767.5  | 452.27 µg/L | 452.27 ppb | 12:52:19 |
| 3 | Mo 202.031†        | 4335.0    | 4081.6    | 428.61 µg/L | 428.61 ppb | 12:52:39 |
| 3 | Ni 231.604†        | 7870.7    | 7074.8    | 418.38 µg/L | 418.38 ppb | 12:52:39 |
| 3 | P 214.914†         | 1675.7    | 1294.6    | 2166.2 µg/L | 2166.2 ppb | 12:52:39 |
| 3 | Pb 220.353†        | 1791.2    | 1647.2    | 462.49 µg/L | 462.49 ppb | 12:52:39 |
| 3 | S 181.975 Axial†   | 314.3     | 274.6     | 906.43 µg/L | 906.43 ppb | 12:52:39 |
| 3 | Sb 206.836†        | 508.0     | 452.5     | 426.94 µg/L | 426.94 ppb | 12:52:39 |
| 3 | Se 196.026†        | 507.6     | 452.4     | 459.59 µg/L | 459.59 ppb | 12:52:39 |
| 3 | SiO2†              | 30480.6   | 25920.3   | 4898.7 µg/L | 4898.7 ppb | 12:52:19 |
| 3 | Si 251.611†        | 34840.6   | 32461.9   | 2310.1 µg/L | 2310.1 ppb | 12:52:19 |
| 3 | Sn 189.927†        | 1088.1    | 1028.8    | 433.95 µg/L | 433.95 ppb | 12:52:39 |
| 3 | Ti 334.940†        | 178439.5  | 169123.0  | 425.47 µg/L | 425.47 ppb | 12:52:19 |
| 3 | Tl 190.801†        | 433.0     | 445.6     | 471.04 µg/L | 471.04 ppb | 12:52:39 |
| 3 | U 409.014†         | 4766.7    | 4556.8    | 433.87 µg/L | 433.87 ppb | 12:52:19 |
| 3 | V 292.402†         | 37365.5   | 35147.5   | 449.27 µg/L | 449.27 ppb | 12:52:19 |
| 3 | Zn 213.857†        | 20545.4   | 18758.8   | 451.49 µg/L | 451.49 ppb | 12:52:19 |

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Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1918923.9                | 105.37 %           | 0.505    |                    |          | 0.48%  |
| Sc RADIAL  | 88749.6                  | 103 %              | 0.5      |                    |          | 0.46%  |
| Y 371.029  | 1323643.9                | 105.12 %           | 0.725    |                    |          | 0.69%  |
| Ag 328.068†  | 56311.0                  | 487.64 µg/L        | 24.233   | 487.64 ppb         | 24.233   | 4.97%  |
| QC value within limits for Ag 328.068 Recovery = 97.53%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 9591.5                   | 4984.1 µg/L        | 35.61    | 4984.1 ppb         | 35.61    | 0.71%  |
| QC value within limits for Al 396.153Radial Recovery = 99.68%  |                          |                    |          |                    |          |        |
| As 188.979†  | 333.7                    | 510.74 µg/L        | 58.153   | 510.74 ppb         | 58.153   | 11.39% |
| QC value within limits for As 188.979 Recovery = 102.15%       |                          |                    |          |                    |          |        |
| B 249.677†   | 9975.6                   | 486.18 µg/L        | 26.147   | 486.18 ppb         | 26.147   | 5.38%  |
| QC value within limits for B 249.677 Recovery = 97.24%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21619.7                  | 506.91 µg/L        | 37.505   | 506.91 ppb         | 37.505   | 7.40%  |
| QC value within limits for Ba 233.527 Recovery = 101.38%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 802600.3                 | 504.79 µg/L        | 28.850   | 504.79 ppb         | 28.850   | 5.72%  |
| QC value within limits for Be 313.107 Recovery = 100.96%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 14312.2                  | 5300.1 µg/L        | 23.92    | 5300.1 ppb         | 23.92    | 0.45%  |
| QC value within limits for Ca 317.933Radial Recovery = 106.00% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 20469.8                  | 520.42 µg/L        | 38.337   | 520.42 ppb         | 38.337   | 7.37%  |
| QC value within limits for Cd 226.502 Recovery = 104.08%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 10601.2                  | 484.60 µg/L        | 61.075   | 484.60 ppb         | 61.075   | 12.60% |

|       |   |          |             |        |            |        |        |
|-------|---|----------|-------------|--------|------------|--------|--------|
| Cr    | 267.716†  | 21665.1  | 501.45 µg/L | 48.596 | 501.45 ppb | 48.596 | 9.69%  |
|       | QC value within limits for Cr 267.716 Recovery = 100.29%        |          |             |        |            |        |        |
| Cu    | 324.752†  | 67595.6  | 475.54 µg/L | 38.545 | 475.54 ppb | 38.545 | 8.11%  |
|       | QC value within limits for Cu 324.752 Recovery = 95.11%         |          |             |        |            |        |        |
| Fe    | 238.204 Radial†   | 447.8    | 5107.7 µg/L | 56.48  | 5107.7 ppb | 56.48  | 1.11%  |
|       | QC value within limits for Fe 238.204 Radial Recovery = 102.15% |          |             |        |            |        |        |
| K     | 766.490 Radial†   | 9801.5   | 4961.4 µg/L | 38.02  | 4961.4 ppb | 38.02  | 0.77%  |
|       | QC value within limits for K 766.490 Radial Recovery = 99.23%   |          |             |        |            |        |        |
| Mg    | 279.077 IEC†  | 418.1    | 5303.6 µg/L | 73.68  | 5303.6 ppb | 73.68  | 1.39%  |
|       | QC value within limits for Mg 279.077 IEC Recovery = 106.07%    |          |             |        |            |        |        |
| Mn    | 257.610†  | 151967.2 | 498.89 µg/L | 40.464 | 498.89 ppb | 40.464 | 8.11%  |
|       | QC value within limits for Mn 257.610 Recovery = 99.78%         |          |             |        |            |        |        |
| Mo    | 202.031†  | 4772.8   | 501.16 µg/L | 63.284 | 501.16 ppb | 63.284 | 12.63% |
|       | QC value within limits for Mo 202.031 Recovery = 100.23%        |          |             |        |            |        |        |
| Na    | 589.592 Radial†   | 20277.1  | 9669.0 µg/L | 58.43  | 9669.0 ppb | 58.43  | 0.60%  |
|       | QC value within limits for Na 589.592 Radial Recovery = 96.69%  |          |             |        |            |        |        |
| Ni    | 231.604†  | 8257.1   | 488.29 µg/L | 60.904 | 488.29 ppb | 60.904 | 12.47% |
|       | QC value within limits for Ni 231.604 Recovery = 97.66%         |          |             |        |            |        |        |
| P     | 214.914†  | 1501.3   | 2515.2 µg/L | 303.70 | 2515.2 ppb | 303.70 | 12.07% |
|       | QC value within limits for P 214.914 Recovery = 100.61%         |          |             |        |            |        |        |
| Pb    | 220.353†  | 1873.7   | 526.11 µg/L | 55.358 | 526.11 ppb | 55.358 | 10.52% |
|       | QC value within limits for Pb 220.353 Recovery = 105.22%        |          |             |        |            |        |        |
| S     | 181.975 Axial†  | 306.0    | 1010.1 µg/L | 89.79  | 1010.1 ppb | 89.79  | 8.89%  |
|       | QC value within limits for S 181.975 Axial Recovery = 101.01%   |          |             |        |            |        |        |
| Sb    | 206.836†  | 519.1    | 490.05 µg/L | 54.890 | 490.05 ppb | 54.890 | 11.20% |
|       | QC value within limits for Sb 206.836 Recovery = 98.01%         |          |             |        |            |        |        |
| Se    | 196.026†  | 510.8    | 517.57 µg/L | 50.311 | 517.57 ppb | 50.311 | 9.72%  |
|       | QC value within limits for Se 196.026 Recovery = 103.51%        |          |             |        |            |        |        |
| SiO2† |   | 27967.3  | 5285.6 µg/L | 335.24 | 5285.6 ppb | 335.24 | 6.34%  |
|       | QC value within limits for SiO2 Recovery = 98.84%               |          |             |        |            |        |        |
| Si    | 251.611†  | 35006.8  | 2491.2 µg/L | 157.00 | 2491.2 ppb | 157.00 | 6.30%  |
|       | QC value within limits for Si 251.611 Recovery = 99.65%         |          |             |        |            |        |        |
| Sn    | 189.927†  | 1213.9   | 511.93 µg/L | 67.725 | 511.93 ppb | 67.725 | 13.23% |
|       | QC value within limits for Sn 189.927 Recovery = 102.39%        |          |             |        |            |        |        |
| Sr    | 421.552†  | 78814.7  | 479.65 µg/L | 2.723  | 479.65 ppb | 2.723  | 0.57%  |
|       | QC value within limits for Sr 421.552 Recovery = 95.93%         |          |             |        |            |        |        |
| Ti    | 334.940†  | 188591.8 | 474.48 µg/L | 42.562 | 474.48 ppb | 42.562 | 8.97%  |
|       | QC value within limits for Ti 334.940 Recovery = 94.90%         |          |             |        |            |        |        |
| Tl    | 190.801†  | 483.5    | 511.15 µg/L | 35.217 | 511.15 ppb | 35.217 | 6.89%  |
|       | QC value within limits for Tl 190.801 Recovery = 102.23%        |          |             |        |            |        |        |
| U     | 409.014†  | 5046.0   | 480.55 µg/L | 40.912 | 480.55 ppb | 40.912 | 8.51%  |
|       | QC value within limits for U 409.014 Recovery = 96.11%          |          |             |        |            |        |        |
| V     | 292.402†  | 38874.2  | 497.23 µg/L | 41.666 | 497.23 ppb | 41.666 | 8.38%  |
|       | QC value within limits for V 292.402 Recovery = 99.45%          |          |             |        |            |        |        |
| Zn    | 213.857†  | 20722.8  | 498.69 µg/L | 40.976 | 498.69 ppb | 40.976 | 8.22%  |
|       | QC value within limits for Zn 213.857 Recovery = 99.74%         |          |             |        |            |        |        |

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/11/2010 12:52:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 87402.4       | 87402.4             | 102 %              |                    | 12:53:22      |
| 1     | Al 396.153Radial†  | -271.4        | -9.2                | -4.8121 µg/L       | -4.8121 ppb        | 12:53:22      |
| 1     | Ca 317.933Radial†  | 363.5         | 31.7                | 11.739 µg/L        | 11.739 ppb         | 12:53:43      |
| 1     | Fe 238.204 Radial† | 17.3          | 2.1                 | 23.376 µg/L        | 23.376 ppb         | 12:53:43      |
| 1     | K 766.490 Radial†  | 371.3         | -9.2                | -4.6489 µg/L       | -4.6489 ppb        | 12:53:22      |
| 1     | Mg 279.077 IEC†    | 7.3           | 1.2                 | 15.783 µg/L        | 15.783 ppb         | 12:53:43      |
| 1     | Na 589.592 Radial† | 253.3         | 36.3                | 17.297 µg/L        | 17.297 ppb         | 12:53:22      |
| 1     | Sr 421.552†        | 204.6         | 82.4                | 0.5015 µg/L        | 0.5015 ppb         | 12:53:22      |
| 1     | Sc 361.383         | 1910786.7     | 1910786.7           | 104.92 %           |                    | 12:54:44      |
| 1     | Y 371.029          | 1319689.3     | 1319689.3           | 104.81 %           |                    | 12:54:44      |
| 1     | Ag 328.068†        | -532.5        | 30.0                | 0.2580 µg/L        | 0.2580 ppb         | 12:54:50      |
| 1     | As 188.979†        | -6.1          | -3.2                | -4.9925 µg/L       | -4.9925 ppb        | 12:55:11      |
| 1     | B 249.677†         | 332.0         | 7.3                 | 0.3459 µg/L        | 0.3459 ppb         | 12:55:11      |
| 1     | Ba 233.527†        | -15.8         | 4.2                 | 0.0976 µg/L        | 0.0976 ppb         | 12:55:11      |
| 1     | Be 313.107†        | -1533.9       | 73.6                | 0.0461 µg/L        | 0.0461 ppb         | 12:54:50      |
| 1     | Cd 226.502†        | -188.9        | -13.8               | -0.3540 µg/L       | -0.3540 ppb        | 12:55:11      |
| 1     | Co 228.616†        | 33.3          | 6.9                 | 0.3141 µg/L        | 0.3141 ppb         | 12:55:11      |
| 1     | Cr 267.716†        | 70.6          | 7.2                 | 0.1673 µg/L        | 0.1673 ppb         | 12:55:11      |
| 1     | Cu 324.752†        | 4186.9        | -278.2              | -1.9488 µg/L       | -1.9488 ppb        | 12:54:50      |
| 1     | Mn 257.610†        | -845.5        | -57.2               | -0.1875 µg/L       | -0.1875 ppb        | 12:55:11      |
| 1     | Mo 202.031†        | 9.4           | -0.9                | -0.0908 µg/L       | -0.0908 ppb        | 12:55:11      |
| 1     | Ni 231.604†        | 369.1         | -1.9                | -0.1154 µg/L       | -0.1154 ppb        | 12:55:11      |
| 1     | P 214.914†         | 291.7         | -9.0                | -15.220 µg/L       | -15.220 ppb        | 12:55:11      |
| 1     | Pb 220.353†        | 56.4          | 10.4                | 2.9046 µg/L        | 2.9046 ppb         | 12:55:11      |
| 1     | S 181.975 Axial†   | 23.1          | 0.0                 | 0.1193 µg/L        | 0.1193 ppb         | 12:55:11      |
| 1     | Sb 206.836†        | 33.2          | 4.7                 | 4.3946 µg/L        | 4.3946 ppb         | 12:55:11      |
| 1     | Se 196.026†        | 31.4          | 3.2                 | 3.1817 µg/L        | 3.1817 ppb         | 12:55:11      |
| 1     | SiO2†              | 2870.2        | -112.4              | -21.247 µg/L       | -21.247 ppb        | 12:54:50      |
| 1     | Si 251.611†        | 498.0         | 53.1                | 3.7801 µg/L        | 3.7801 ppb         | 12:55:11      |
| 1     | Sn 189.927†        | -4.5          | -2.5                | -1.0608 µg/L       | -1.0608 ppb        | 12:55:11      |
| 1     | Ti 334.940†        | -454.3        | 274.4               | 0.6899 µg/L        | 0.6899 ppb         | 12:54:50      |
| 1     | Tl 190.801†        | -35.8         | 2.9                 | 3.0290 µg/L        | 3.0290 ppb         | 12:55:11      |
| 1     | U 409.014†         | -39.1         | 20.6                | 1.9574 µg/L        | 1.9574 ppb         | 12:54:50      |
| 1     | V 292.402†         | 108.6         | -15.5               | -0.1985 µg/L       | -0.1985 ppb        | 12:54:50      |
| 1     | Zn 213.857†        | 628.6         | -33.3               | -0.8049 µg/L       | -0.8049 ppb        | 12:55:11      |
| 2     | Sc RADIAL          | 86858.9       | 86858.9             | 101 %              |                    | 12:53:48      |
| 2     | Al 396.153Radial†  | -266.0        | -5.6                | -2.9315 µg/L       | -2.9315 ppb        | 12:53:48      |
| 2     | Ca 317.933Radial†  | 359.3         | 29.8                | 11.032 µg/L        | 11.032 ppb         | 12:54:08      |
| 2     | Fe 238.204 Radial† | 13.9          | -1.3                | -14.394 µg/L       | -14.394 ppb        | 12:54:08      |
| 2     | K 766.490 Radial†  | 339.6         | -38.3               | -19.376 µg/L       | -19.376 ppb        | 12:53:48      |
| 2     | Mg 279.077 IEC†    | 7.9           | 1.9                 | 23.549 µg/L        | 23.549 ppb         | 12:54:08      |
| 2     | Na 589.592 Radial† | 219.6         | 4.5                 | 2.1544 µg/L        | 2.1544 ppb         | 12:53:48      |
| 2     | Sr 421.552†        | 133.0         | 12.9                | 0.0785 µg/L        | 0.0785 ppb         | 12:53:48      |
| 2     | Sc 361.383         | 1877482.3     | 1877482.3           | 103.09 %           |                    | 12:55:17      |
| 2     | Y 371.029          | 1295292.7     | 1295292.7           | 102.87 %           |                    | 12:55:17      |
| 2     | Ag 328.068†        | -537.7        | 15.9                | 0.1351 µg/L        | 0.1351 ppb         | 12:55:22      |
| 2     | As 188.979†        | -2.4          | 0.2                 | 0.3814 µg/L        | 0.3814 ppb         | 12:55:43      |
| 2     | B 249.677†         | 348.5         | 29.0                | 1.4246 µg/L        | 1.4246 ppb         | 12:55:43      |
| 2     | Ba 233.527†        | -19.8         | 0.1                 | 0.0014 µg/L        | 0.0014 ppb         | 12:55:43      |
| 2     | Be 313.107†        | -1623.8       | -39.5               | -0.0249 µg/L       | -0.0249 ppb        | 12:55:22      |
| 2     | Cd 226.502†        | -174.8        | -3.4                | -0.0850 µg/L       | -0.0850 ppb        | 12:55:43      |
| 2     | Co 228.616†        | 33.2          | 7.4                 | 0.3408 µg/L        | 0.3408 ppb         | 12:55:43      |
| 2     | Cr 267.716†        | 68.1          | 6.1                 | 0.1400 µg/L        | 0.1400 ppb         | 12:55:43      |
| 2     | Cu 324.752†        | 4151.2        | -242.0              | -1.7021 µg/L       | -1.7021 ppb        | 12:55:22      |
| 2     | Mn 257.610†        | -841.5        | -67.6               | -0.2245 µg/L       | -0.2245 ppb        | 12:55:43      |
| 2     | Mo 202.031†        | 18.0          | 7.6                 | 0.7996 µg/L        | 0.7996 ppb         | 12:55:43      |
| 2     | Ni 231.604†        | 360.9         | -3.7                | -0.2173 µg/L       | -0.2173 ppb        | 12:55:43      |
| 2     | P 214.914†         | 295.6         | -0.3                | -0.3270 µg/L       | -0.3270 ppb        | 12:55:43      |
| 2     | Pb 220.353†        | 40.4          | -4.2                | -1.1740 µg/L       | -1.1740 ppb        | 12:55:43      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 27.4      | 4.6       | 15.065 µg/L  | 15.065 ppb  | 12:55:43 |
| 2 | Sb 206.836†        | 29.1      | 1.2       | 1.1354 µg/L  | 1.1354 ppb  | 12:55:43 |
| 2 | Se 196.026†        | 16.5      | -10.7     | -10.682 µg/L | -10.682 ppb | 12:55:43 |
| 2 | SiO2†              | 2863.5    | -70.4     | -13.304 µg/L | -13.304 ppb | 12:55:22 |
| 2 | Si 251.611†        | 482.4     | 46.5      | 3.3068 µg/L  | 3.3068 ppb  | 12:55:43 |
| 2 | Sn 189.927†        | -0.4      | 1.4       | 0.5931 µg/L  | 0.5931 ppb  | 12:55:43 |
| 2 | Ti 334.940†        | -631.6    | 94.8      | 0.2370 µg/L  | 0.2370 ppb  | 12:55:22 |
| 2 | Tl 190.801†        | -42.9     | -4.6      | -4.8497 µg/L | -4.8497 ppb | 12:55:43 |
| 2 | U 409.014†         | -45.8     | 13.4      | 1.2792 µg/L  | 1.2792 ppb  | 12:55:22 |
| 2 | V 292.402†         | 112.3     | -10.1     | -0.1171 µg/L | -0.1171 ppb | 12:55:22 |
| 2 | Zn 213.857†        | 629.2     | -22.1     | -0.5327 µg/L | -0.5327 ppb | 12:55:43 |
| 3 | Sc RADIAL          | 88223.6   | 88223.6   | 103 %        |             | 12:54:14 |
| 3 | Al 396.153Radial†  | -302.8    | -37.3     | -19.425 µg/L | -19.425 ppb | 12:54:14 |
| 3 | Ca 317.933Radial†  | 362.9     | 27.7      | 10.273 µg/L  | 10.273 ppb  | 12:54:34 |
| 3 | Fe 238.204 Radial† | 14.7      | -0.7      | -8.1532 µg/L | -8.1532 ppb | 12:54:34 |
| 3 | K 766.490 Radial†  | 320.9     | -61.6     | -31.191 µg/L | -31.191 ppb | 12:54:14 |
| 3 | Mg 279.077 IEC†    | 10.0      | 3.7       | 47.475 µg/L  | 47.475 ppb  | 12:54:34 |
| 3 | Na 589.592 Radial† | 242.4     | 23.3      | 11.123 µg/L  | 11.123 ppb  | 12:54:14 |
| 3 | Sr 421.552†        | 200.8     | 76.9      | 0.4678 µg/L  | 0.4678 ppb  | 12:54:14 |
| 3 | Sc 361.383         | 1875505.4 | 1875505.4 | 102.99 %     |             | 12:55:49 |
| 3 | Y 371.029          | 1295220.9 | 1295220.9 | 102.87 %     |             | 12:55:49 |
| 3 | Ag 328.068†        | -573.5    | -19.4     | -0.1676 µg/L | -0.1676 ppb | 12:55:55 |
| 3 | As 188.979†        | -0.4      | 2.2       | 3.4071 µg/L  | 3.4071 ppb  | 12:56:15 |
| 3 | B 249.677†         | 330.5     | 11.9      | 0.5850 µg/L  | 0.5850 ppb  | 12:56:15 |
| 3 | Ba 233.527†        | -18.7     | 1.2       | 0.0271 µg/L  | 0.0271 ppb  | 12:56:15 |
| 3 | Be 313.107†        | -1601.4   | -19.4     | -0.0124 µg/L | -0.0124 ppb | 12:55:55 |
| 3 | Cd 226.502†        | -179.7    | -8.3      | -0.2103 µg/L | -0.2103 ppb | 12:56:15 |
| 3 | Co 228.616†        | 31.0      | 5.3       | 0.2416 µg/L  | 0.2416 ppb  | 12:56:15 |
| 3 | Cr 267.716†        | 71.8      | 9.7       | 0.2251 µg/L  | 0.2251 ppb  | 12:56:15 |
| 3 | Cu 324.752†        | 4213.0    | -177.8    | -1.2499 µg/L | -1.2499 ppb | 12:55:55 |
| 3 | Mn 257.610†        | -826.4    | -53.8     | -0.1803 µg/L | -0.1803 ppb | 12:56:15 |
| 3 | Mo 202.031†        | 14.7      | 4.5       | 0.4700 µg/L  | 0.4700 ppb  | 12:56:15 |
| 3 | Ni 231.604†        | 369.8     | 5.3       | 0.3126 µg/L  | 0.3126 ppb  | 12:56:15 |
| 3 | P 214.914†         | 299.0     | 3.3       | 5.7424 µg/L  | 5.7424 ppb  | 12:56:15 |
| 3 | Pb 220.353†        | 56.1      | 11.2      | 3.1219 µg/L  | 3.1219 ppb  | 12:56:15 |
| 3 | S 181.975 Axial†   | 24.9      | 2.2       | 7.3640 µg/L  | 7.3640 ppb  | 12:56:15 |
| 3 | Sb 206.836†        | 25.5      | -2.2      | -2.0858 µg/L | -2.0858 ppb | 12:56:15 |
| 3 | Se 196.026†        | 21.9      | -5.4      | -5.4482 µg/L | -5.4482 ppb | 12:56:15 |
| 3 | SiO2†              | 2846.8    | -83.7     | -15.821 µg/L | -15.821 ppb | 12:55:55 |
| 3 | Si 251.611†        | 476.0     | 40.7      | 2.8998 µg/L  | 2.8998 ppb  | 12:56:15 |
| 3 | Sn 189.927†        | -3.0      | -1.1      | -0.4707 µg/L | -0.4707 ppb | 12:56:15 |
| 3 | Ti 334.940†        | -563.8    | 159.9     | 0.3991 µg/L  | 0.3991 ppb  | 12:55:55 |
| 3 | Tl 190.801†        | -36.6     | 1.5       | 1.5765 µg/L  | 1.5765 ppb  | 12:56:15 |
| 3 | U 409.014†         | 28.4      | 85.5      | 8.1561 µg/L  | 8.1561 ppb  | 12:55:55 |
| 3 | V 292.402†         | 114.6     | -7.7      | -0.0838 µg/L | -0.0838 ppb | 12:55:55 |
| 3 | Zn 213.857†        | 665.7     | 14.0      | 0.3375 µg/L  | 0.3375 ppb  | 12:56:15 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|-------------|--------|----------|---------|
| Sc 361.383  | 1887924.8                | 103.67 %     |        | 1.089    |             |        |          | 1.05%   |
| Sc RADIAL   | 87495.0                  | 102 %        |        | 0.8      |             |        |          | 0.79%   |
| Y 371.029   | 1303401.0                | 103.51 %     |        | 1.120    |             |        |          | 1.08%   |
| Ag 328.068†   | 8.9                      | 0.0752 µg/L  |        | 0.21905  | 0.0752 ppb  |        | 0.21905  | 291.39% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |        |          |             |        |          |         |
| Al 396.153Radial†   | -17.4                    | -9.0563 µg/L |        | 9.02891  | -9.0563 ppb |        | 9.02891  | 99.70%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |        |          |             |        |          |         |
| As 188.979†   | -0.3                     | -0.4013 µg/L |        | 4.25412  | -0.4013 ppb |        | 4.25412  | >999.9% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |        |          |             |        |          |         |
| B 249.677†  | 16.0                     | 0.7852 µg/L  |        | 0.56651  | 0.7852 ppb  |        | 0.56651  | 72.15%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |        |          |             |        |          |         |
| Ba 233.527†   | 1.8                      | 0.0420 µg/L  |        | 0.04980  | 0.0420 ppb  |        | 0.04980  | 118.55% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |        |          |             |        |          |         |
| Be 313.107†   | 4.9                      | 0.0029 µg/L  |        | 0.03789  | 0.0029 ppb  |        | 0.03789  | >999.9% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |        |          |             |        |          |         |
| Ca 317.933Radial†   | 29.7                     | 11.015 µg/L  |        | 0.7332   | 11.015 ppb  |        | 0.7332   | 6.66%   |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |              |        |          |             |        |          |         |
| Cd 226.502†   | -8.5                     | -0.2165 µg/L |        | 0.13459  | -0.2165 ppb |        | 0.13459  | 62.18%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |              |        |          |             |        |          |         |
| Co 228.616†   | 6.5                      | 0.2988 µg/L  |        | 0.05133  | 0.2988 ppb  |        | 0.05133  | 17.18%  |



|  |        |              |          |             |          |         |  |
|--|--------|--------------|----------|-------------|----------|---------|--|
| QC value within limits for Co 228.616 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Cr 267.716†  | 7.7    | 0.1775 µg/L  | 0.04344  | 0.1775 ppb  | 0.04344  | 24.48%  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Cu 324.752†  | -232.7 | -1.6336 µg/L | 0.35443  | -1.6336 ppb | 0.35443  | 21.70%  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Fe 238.204 Radial†   | 0.0    | 0.2762 µg/L  | 20.24667 | 0.2762 ppb  | 20.24667 | >999.9% |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |        |              |          |             |          |         |  |
| K 766.490 Radial†  | -36.4  | -18.405 µg/L | 13.2978  | -18.405 ppb | 13.2978  | 72.25%  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |        |              |          |             |          |         |  |
| Mg 279.077 IEC†  | 2.3    | 28.936 µg/L  | 16.5185  | 28.936 ppb  | 16.5185  | 57.09%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |        |              |          |             |          |         |  |
| Mn 257.610†  | -59.6  | -0.1975 µg/L | 0.02373  | -0.1975 ppb | 0.02373  | 12.02%  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Mo 202.031†  | 3.7    | 0.3929 µg/L  | 0.45016  | 0.3929 ppb  | 0.45016  | 114.57% |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Na 589.592 Radial†   | 21.4   | 10.191 µg/L  | 7.6140   | 10.191 ppb  | 7.6140   | 74.71%  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |        |              |          |             |          |         |  |
| Ni 231.604†  | -0.1   | -0.0067 µg/L | 0.28114  | -0.0067 ppb | 0.28114  | >999.9% |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |        |              |          |             |          |         |  |
| P 214.914†   | -2.0   | -3.2681 µg/L | 10.78606 | -3.2681 ppb | 10.78606 | 330.04% |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |        |              |          |             |          |         |  |
| Pb 220.353†  | 5.8    | 1.6175 µg/L  | 2.41993  | 1.6175 ppb  | 2.41993  | 149.61% |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |        |              |          |             |          |         |  |
| S 181.975 Axial†   | 2.3    | 7.5160 µg/L  | 7.47388  | 7.5160 ppb  | 7.47388  | 99.44%  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |        |              |          |             |          |         |  |
| Sb 206.836†  | 1.2    | 1.1480 µg/L  | 3.24021  | 1.1480 ppb  | 3.24021  | 282.24% |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Se 196.026†  | -4.3   | -4.3163 µg/L | 7.00101  | -4.3163 ppb | 7.00101  | 162.20% |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |        |              |          |             |          |         |  |
| SiO2†  | -88.8  | -16.791 µg/L | 4.0595   | -16.791 ppb | 4.0595   | 24.18%  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |        |              |          |             |          |         |  |
| Si 251.611†  | 46.8   | 3.3289 µg/L  | 0.44054  | 3.3289 ppb  | 0.44054  | 13.23%  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Sn 189.927†  | -0.7   | -0.3128 µg/L | 0.83818  | -0.3128 ppb | 0.83818  | 267.99% |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Sr 421.552†  | 57.4   | 0.3493 µg/L  | 0.23513  | 0.3493 ppb  | 0.23513  | 67.32%  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Ti 334.940†  | 176.4  | 0.4420 µg/L  | 0.22946  | 0.4420 ppb  | 0.22946  | 51.91%  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |        |              |          |             |          |         |  |
| Tl 190.801†  | -0.1   | -0.0814 µg/L | 4.19282  | -0.0814 ppb | 4.19282  | >999.9% |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |        |              |          |             |          |         |  |
| U 409.014†   | 39.8   | 3.7976 µg/L  | 3.78980  | 3.7976 ppb  | 3.78980  | 99.79%  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |        |              |          |             |          |         |  |
| V 292.402†   | -11.1  | -0.1331 µg/L | 0.05902  | -0.1331 ppb | 0.05902  | 44.33%  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |        |              |          |             |          |         |  |
| Zn 213.857†  | -13.8  | -0.3334 µg/L | 0.59671  | -0.3334 ppb | 0.59671  | 178.99% |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |        |              |          |             |          |         |  |

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: 247188009|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 320

Date Collected: 3/11/2010 12:56:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188009|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87654.4          | 87654.4                | 102 %                 |                       | 12:57:04         |
| 1     | Al 396.153Radial†  | 9344.8           | 9405.0                 | 4897.2 µg/L           | 4897.2 ppb            | 12:57:04         |
| 1     | Ca 317.933Radial†  | 6480.8           | 6019.0                 | 2229.0 µg/L           | 2229.0 ppb            | 12:57:24         |
| 1     | Fe 238.204 Radial† | 5628.8           | 5495.2                 | 62551 µg/L            | 62551 ppb             | 12:57:24         |
| 1     | K 766.490 Radial†  | 5051.7           | 4571.5                 | 2314.0 µg/L           | 2314.0 ppb            | 12:57:04         |
| 1     | Mg 279.077 IEC†    | 110.8            | 102.5                  | 1232.5 µg/L           | 1232.5 ppb            | 12:57:24         |
| 1     | Na 589.592 Radial† | 3347.0           | 3064.1                 | 1461.1 µg/L           | 1461.1 ppb            | 12:57:04         |
| 1     | Sr 421.552†        | 1516.5           | 1366.0                 | 8.3134 µg/L           | 8.3134 ppb            | 12:57:04         |
| 1     | Sc 361.383         | 1941894.0        | 1941894.0              | 106.63 %              |                       | 12:58:29         |
| 1     | Y 371.029          | 1421260.9        | 1421260.9              | 112.88 %              |                       | 12:58:29         |
| 1     | Ag 328.068†        | -1244.2          | -629.3                 | -0.4141 µg/L          | -0.4141 ppb           | 12:58:34         |
| 1     | As 188.979†        | 1.3              | 3.8                    | -2.1952 µg/L          | -2.1952 ppb           | 12:58:55         |
| 1     | B 249.677†         | 742.9            | 387.6                  | -13.654 µg/L          | -13.654 ppb           | 12:58:34         |
| 1     | Ba 233.527†        | 3751.6           | 3537.6                 | 82.850 µg/L           | 82.850 ppb            | 12:58:55         |
| 1     | Be 313.107†        | 5817.0           | 6990.9                 | 3.2238 µg/L           | 3.2238 ppb            | 12:58:34         |
| 1     | Cd 226.502†        | 170.9            | 326.5                  | 1.2394 µg/L           | 1.2394 ppb            | 12:58:55         |
| 1     | Co 228.616†        | 285.3            | 242.7                  | 4.6771 µg/L           | 4.6771 ppb            | 12:58:55         |
| 1     | Cr 267.716†        | 665.3            | 563.9                  | 13.061 µg/L           | 13.061 ppb            | 12:58:55         |
| 1     | Cu 324.752†        | 4479.2           | -68.0                  | 11.282 µg/L           | 11.282 ppb            | 12:58:34         |
| 1     | Mn 257.610†        | 701669.4         | 658785.2               | 2166.6 µg/L           | 2166.6 ppb            | 12:58:29         |
| 1     | Mo 202.031†        | 57.3             | 43.9                   | 6.9843 µg/L           | 6.9843 ppb            | 12:58:55         |
| 1     | Ni 231.604†        | 496.9            | 112.3                  | 7.4461 µg/L           | 7.4461 ppb            | 12:58:55         |
| 1     | P 214.914†         | 531.5            | 211.5                  | 311.20 µg/L           | 311.20 ppb            | 12:58:55         |
| 1     | Pb 220.353†        | 134.4            | 82.7                   | 24.739 µg/L           | 24.739 ppb            | 12:58:55         |
| 1     | S 181.975 Axial†   | 28.0             | 4.2                    | 14.022 µg/L           | 14.022 ppb            | 12:58:55         |
| 1     | Sb 206.836†        | 19.2             | -9.0                   | -8.5769 µg/L          | -8.5769 ppb           | 12:58:55         |
| 1     | Se 196.026†        | -29.9            | -54.7                  | 143.53 µg/L           | 143.53 ppb            | 12:58:55         |
| 1     | SiO2†              | 189392.3         | 174767.0               | 33030 µg/L            | 33030 ppb             | 12:58:29         |
| 1     | Si 251.611†        | 231014.0         | 216227.1               | 15387 µg/L            | 15387 ppb             | 12:58:29         |
| 1     | Sn 189.927†        | -25.8            | -22.4                  | -9.5264 µg/L          | -9.5264 ppb           | 12:58:55         |
| 1     | Ti 334.940†        | 1305032.5        | 1224587.4              | 3083.0 µg/L           | 3083.0 ppb            | 12:58:29         |
| 1     | Tl 190.801†        | -81.0            | -38.9                  | 3.2376 µg/L           | 3.2376 ppb            | 12:58:55         |
| 1     | U 409.014†         | -1412.2          | -1266.6                | -129.71 µg/L          | -129.71 ppb           | 12:58:29         |
| 1     | V 292.402†         | 2483.8           | 2210.4                 | 16.445 µg/L           | 16.445 ppb            | 12:58:34         |
| 1     | Zn 213.857†        | 19864.7          | 17997.0                | 433.03 µg/L           | 433.03 ppb            | 12:58:34         |
| 2     | Sc RADIAL          | 89080.0          | 89080.0                | 104 %                 |                       | 12:57:30         |
| 2     | Al 396.153Radial†  | 9417.2           | 9328.3                 | 4857.2 µg/L           | 4857.2 ppb            | 12:57:30         |
| 2     | Ca 317.933Radial†  | 6498.6           | 5934.6                 | 2197.7 µg/L           | 2197.7 ppb            | 12:57:50         |
| 2     | Fe 238.204 Radial† | 5633.5           | 5411.5                 | 61598 µg/L            | 61598 ppb             | 12:57:50         |
| 2     | K 766.490 Radial†  | 5103.7           | 4542.5                 | 2299.3 µg/L           | 2299.3 ppb            | 12:57:30         |
| 2     | Mg 279.077 IEC†    | 107.0            | 97.2                   | 1165.8 µg/L           | 1165.8 ppb            | 12:57:50         |
| 2     | Na 589.592 Radial† | 3415.3           | 3077.4                 | 1467.4 µg/L           | 1467.4 ppb            | 12:57:30         |
| 2     | Sr 421.552†        | 1546.1           | 1370.8                 | 8.3425 µg/L           | 8.3425 ppb            | 12:57:30         |
| 2     | Sc 361.383         | 1949258.6        | 1949258.6              | 107.04 %              |                       | 12:59:02         |
| 2     | Y 371.029          | 1425470.6        | 1425470.6              | 113.21 %              |                       | 12:59:02         |
| 2     | Ag 328.068†        | -1254.9          | -634.9                 | -0.5336 µg/L          | -0.5336 ppb           | 12:59:08         |
| 2     | As 188.979†        | 5.0              | 7.2                    | 3.2325 µg/L           | 3.2325 ppb            | 12:59:29         |
| 2     | B 249.677†         | 721.3            | 364.9                  | -14.271 µg/L          | -14.271 ppb           | 12:59:08         |
| 2     | Ba 233.527†        | 3751.3           | 3524.0                 | 82.533 µg/L           | 82.533 ppb            | 12:59:29         |
| 2     | Be 313.107†        | 5693.2           | 6854.5                 | 3.1395 µg/L           | 3.1395 ppb            | 12:59:08         |
| 2     | Cd 226.502†        | 153.2            | 309.3                  | 0.9114 µg/L           | 0.9114 ppb            | 12:59:29         |
| 2     | Co 228.616†        | 294.8            | 250.6                  | 5.0478 µg/L           | 5.0478 ppb            | 12:59:29         |
| 2     | Cr 267.716†        | 653.1            | 550.1                  | 12.743 µg/L           | 12.743 ppb            | 12:59:29         |
| 2     | Cu 324.752†        | 4423.2           | -136.2                 | 10.624 µg/L           | 10.624 ppb            | 12:59:08         |
| 2     | Mn 257.610†        | 702078.8         | 656681.5               | 2159.6 µg/L           | 2159.6 ppb            | 12:59:02         |
| 2     | Mo 202.031†        | 60.5             | 46.7                   | 7.2439 µg/L           | 7.2439 ppb            | 12:59:29         |
| 2     | Ni 231.604†        | 513.8            | 126.3                  | 8.2623 µg/L           | 8.2623 ppb            | 12:59:29         |
| 2     | P 214.914†         | 536.3            | 214.1                  | 316.50 µg/L           | 316.50 ppb            | 12:59:29         |
| 2     | Pb 220.353†        | 132.3            | 80.3                   | 24.065 µg/L           | 24.065 ppb            | 12:59:29         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 17.7      | -5.4      | -17.921 µg/L | -17.921 ppb | 12:59:29 |
| 2 | Sb 206.836†        | 19.0      | -9.2      | -8.7470 µg/L | -8.7470 ppb | 12:59:29 |
| 2 | Se 196.026†        | -18.9     | -44.4     | 150.82 µg/L  | 150.82 ppb  | 12:59:29 |
| 2 | SiO2†              | 189802.1  | 174478.9  | 32975 µg/L   | 32975 ppb   | 12:59:02 |
| 2 | Si 251.611†        | 231960.6  | 216292.9  | 15392 µg/L   | 15392 ppb   | 12:59:02 |
| 2 | Sn 189.927†        | -20.2     | -17.0     | -7.2530 µg/L | -7.2530 ppb | 12:59:29 |
| 2 | Ti 334.940†        | 1308363.1 | 1223075.0 | 3079.2 µg/L  | 3079.2 ppb  | 12:59:02 |
| 2 | Tl 190.801†        | -87.1     | -44.4     | -2.6939 µg/L | -2.6939 ppb | 12:59:29 |
| 2 | U 409.014†         | -1533.9   | -1375.2   | -139.95 µg/L | -139.95 ppb | 12:59:02 |
| 2 | V 292.402†         | 2519.0    | 2234.5    | 16.917 µg/L  | 16.917 ppb  | 12:59:08 |
| 2 | Zn 213.857†        | 19797.3   | 17863.7   | 429.85 µg/L  | 429.85 ppb  | 12:59:08 |
| 3 | Sc RADIAL          | 89716.0   | 89716.0   | 105 %        |             | 12:57:55 |
| 3 | Al 396.153Radial†  | 9463.8    | 9308.6    | 4847.0 µg/L  | 4847.0 ppb  | 12:57:55 |
| 3 | Ca 317.933Radial†  | 6471.8    | 5864.6    | 2171.8 µg/L  | 2171.8 ppb  | 12:58:16 |
| 3 | Fe 238.204 Radial† | 5610.5    | 5351.1    | 60910 µg/L   | 60910 ppb   | 12:58:16 |
| 3 | K 766.490 Radial†  | 5030.2    | 4437.3    | 2246.1 µg/L  | 2246.1 ppb  | 12:57:55 |
| 3 | Mg 279.077 IEC†    | 109.5     | 98.8      | 1187.3 µg/L  | 1187.3 ppb  | 12:58:16 |
| 3 | Na 589.592 Radial† | 3457.3    | 3094.3    | 1475.5 µg/L  | 1475.5 ppb  | 12:57:55 |
| 3 | Sr 421.552†        | 1487.5    | 1304.3    | 7.9374 µg/L  | 7.9374 ppb  | 12:57:55 |
| 3 | Sc 361.383         | 1952162.5 | 1952162.5 | 107.19 %     |             | 12:59:37 |
| 3 | Y 371.029          | 1424527.0 | 1424527.0 | 113.13 %     |             | 12:59:37 |
| 3 | Ag 328.068†        | -1170.3   | -554.3    | 0.0951 µg/L  | 0.0951 ppb  | 12:59:42 |
| 3 | As 188.979†        | 1.2       | 3.7       | -2.0471 µg/L | -2.0471 ppb | 13:00:02 |
| 3 | B 249.677†         | 691.9     | 336.4     | -15.305 µg/L | -15.305 ppb | 12:59:42 |
| 3 | Ba 233.527†        | 3376.7    | 3169.4    | 74.230 µg/L  | 74.230 ppb  | 13:00:02 |
| 3 | Be 313.107†        | 5229.8    | 6414.3    | 2.9145 µg/L  | 2.9145 ppb  | 12:59:42 |
| 3 | Cd 226.502†        | 105.8     | 264.9     | -0.1394 µg/L | -0.1394 ppb | 13:00:02 |
| 3 | Co 228.616†        | 251.9     | 210.2     | 3.4811 µg/L  | 3.4811 ppb  | 13:00:02 |
| 3 | Cr 267.716†        | 634.6     | 531.9     | 12.321 µg/L  | 12.321 ppb  | 13:00:02 |
| 3 | Cu 324.752†        | 4349.2    | -211.4    | 9.9669 µg/L  | 9.9669 ppb  | 12:59:42 |
| 3 | Mn 257.610†        | 677073.5  | 632378.8  | 2079.8 µg/L  | 2079.8 ppb  | 12:59:37 |
| 3 | Mo 202.031†        | 52.3      | 39.0      | 6.4065 µg/L  | 6.4065 ppb  | 13:00:02 |
| 3 | Ni 231.604†        | 506.2     | 118.5     | 7.7937 µg/L  | 7.7937 ppb  | 13:00:02 |
| 3 | P 214.914†         | 495.9     | 175.6     | 251.45 µg/L  | 251.45 ppb  | 13:00:02 |
| 3 | Pb 220.353†        | 133.0     | 80.7      | 24.143 µg/L  | 24.143 ppb  | 13:00:02 |
| 3 | S 181.975 Axial†   | 26.2      | 2.4       | 8.0201 µg/L  | 8.0201 ppb  | 13:00:02 |
| 3 | Sb 206.836†        | 16.3      | -11.8     | -11.185 µg/L | -11.185 ppb | 13:00:02 |
| 3 | Se 196.026†        | -11.3     | -37.3     | 155.65 µg/L  | 155.65 ppb  | 13:00:02 |
| 3 | SiO2†              | 185067.3  | 169798.1  | 32090 µg/L   | 32090 ppb   | 12:59:37 |
| 3 | Si 251.611†        | 225778.6  | 210203.5  | 14958 µg/L   | 14958 ppb   | 12:59:37 |
| 3 | Sn 189.927†        | -22.5     | -19.2     | -8.1497 µg/L | -8.1497 ppb | 13:00:02 |
| 3 | Ti 334.940†        | 1252238.8 | 1168899.4 | 2942.8 µg/L  | 2942.8 ppb  | 12:59:37 |
| 3 | Tl 190.801†        | -81.3     | -38.9     | 1.5004 µg/L  | 1.5004 ppb  | 13:00:02 |
| 3 | U 409.014†         | -1327.7   | -1180.7   | -121.28 µg/L | -121.28 ppb | 12:59:37 |
| 3 | V 292.402†         | 2375.0    | 2096.6    | 15.308 µg/L  | 15.308 ppb  | 12:59:42 |
| 3 | Zn 213.857†        | 18754.6   | 16863.4   | 405.64 µg/L  | 405.64 ppb  | 12:59:42 |

## Mean Data: 247188009|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1947771.7                | 106.95 %           | 0.291    |                    |          | 0.27%   |
| Sc RADIAL          | 88816.8                  | 104 %              | 1.2      |                    |          | 1.19%   |
| Y 371.029          | 1423752.8                | 113.07 %           | 0.175    |                    |          | 0.16%   |
| Ag 328.068†        | -606.2                   | -0.2842 µg/L       | 0.33387  | -0.2842 ppb        | 0.33387  | 117.48% |
| Al 396.153Radial†  | 9347.3                   | 4867.1 µg/L        | 26.50    | 4867.1 ppb         | 26.50    | 0.54%   |
| As 188.979†        | 4.9                      | -0.3366 µg/L       | 3.09185  | -0.3366 ppb        | 3.09185  | 918.52% |
| B 249.677†         | 363.0                    | -14.410 µg/L       | 0.8340   | -14.410 ppb        | 0.8340   | 5.79%   |
| Ba 233.527†        | 3410.3                   | 79.871 µg/L        | 4.8878   | 79.871 ppb         | 4.8878   | 6.12%   |
| Be 313.107†        | 6753.2                   | 3.0926 µg/L        | 0.15991  | 3.0926 ppb         | 0.15991  | 5.17%   |
| Ca 317.933Radial†  | 5939.4                   | 2199.5 µg/L        | 28.62    | 2199.5 ppb         | 28.62    | 1.30%   |
| Cd 226.502†        | 300.2                    | 0.6705 µg/L        | 0.72032  | 0.6705 ppb         | 0.72032  | 107.43% |
| Co 228.616†        | 234.5                    | 4.4020 µg/L        | 0.81877  | 4.4020 ppb         | 0.81877  | 18.60%  |
| Cr 267.716†        | 548.6                    | 12.708 µg/L        | 0.3712   | 12.708 ppb         | 0.3712   | 2.92%   |
| Cu 324.752†        | -138.5                   | 10.624 µg/L        | 0.6576   | 10.624 ppb         | 0.6576   | 6.19%   |
| Fe 238.204 Radial† | 5419.2                   | 61686 µg/L         | 823.9    | 61686 ppb          | 823.9    | 1.34%   |
| K 766.490 Radial†  | 4517.1                   | 2286.5 µg/L        | 35.73    | 2286.5 ppb         | 35.73    | 1.56%   |
| Mg 279.077 IEC†    | 99.5                     | 1195.2 µg/L        | 34.04    | 1195.2 ppb         | 34.04    | 2.85%   |
| Mn 257.610†        | 649281.9                 | 2135.3 µg/L        | 48.23    | 2135.3 ppb         | 48.23    | 2.26%   |
| Mo 202.031†        | 43.2                     | 6.8782 µg/L        | 0.42861  | 6.8782 ppb         | 0.42861  | 6.23%   |
| Na 589.592 Radial† | 3078.6                   | 1468.0 µg/L        | 7.22     | 1468.0 ppb         | 7.22     | 0.49%   |

|                  |           |              |          |             |          |         |
|------------------|-----------|--------------|----------|-------------|----------|---------|
| Ni 231.604†      | 119.0     | 7.8340 µg/L  | 0.40959  | 7.8340 ppb  | 0.40959  | 5.23%   |
| P 214.914†       | 200.4     | 293.05 µg/L  | 36.126   | 293.05 ppb  | 36.126   | 12.33%  |
| Pb 220.353†      | 81.2      | 24.315 µg/L  | 0.3687   | 24.315 ppb  | 0.3687   | 1.52%   |
| S 181.975 Axial† | 0.4       | 1.3740 µg/L  | 16.97702 | 1.3740 ppb  | 16.97702 | >999.9% |
| Sb 206.836†      | -10.0     | -9.5029 µg/L | 1.45905  | -9.5029 ppb | 1.45905  | 15.35%  |
| Se 196.026†      | -45.5     | 150.00 µg/L  | 6.100    | 150.00 ppb  | 6.100    | 4.07%   |
| SiO2†            | 173014.7  | 32698 µg/L   | 527.2    | 32698 ppb   | 527.2    | 1.61%   |
| Si 251.611†      | 214241.2  | 15246 µg/L   | 248.8    | 15246 ppb   | 248.8    | 1.63%   |
| Sn 189.927†      | -19.6     | -8.3097 µg/L | 1.14510  | -8.3097 ppb | 1.14510  | 13.78%  |
| Sr 421.552†      | 1347.0    | 8.1978 µg/L  | 0.22597  | 8.1978 ppb  | 0.22597  | 2.76%   |
| Ti 334.940†      | 1205520.6 | 3035.0 µg/L  | 79.87    | 3035.0 ppb  | 79.87    | 2.63%   |
| Tl 190.801†      | -40.7     | 0.6814 µg/L  | 3.04941  | 0.6814 ppb  | 3.04941  | 447.55% |
| U 409.014†       | -1274.2   | -130.31 µg/L | 9.346    | -130.31 ppb | 9.346    | 7.17%   |
| V 292.402†       | 2180.5    | 16.223 µg/L  | 0.8272   | 16.223 ppb  | 0.8272   | 5.10%   |
| Zn 213.857†      | 17574.7   | 422.84 µg/L  | 14.979   | 422.84 ppb  | 14.979   | 3.54%   |

Sequence No.: 27

Sample ID: 247188010|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 321

Date Collected: 3/11/2010 13:00:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188010|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86563.7       | 86563.7             | 101 %              |                    | 13:00:45      |
| 1     | Al 396.153Radial†  | 12732.9       | 12878.7             | 6705.9 µg/L        | 6705.9 ppb         | 13:00:45      |
| 1     | Ca 317.933Radial†  | 7381.1        | 6991.4              | 2589.1 µg/L        | 2589.1 ppb         | 13:00:45      |
| 1     | Fe 238.204 Radial† | 6246.9        | 6177.3              | 70315 µg/L         | 70315 ppb          | 13:01:05      |
| 1     | K 766.490 Radial†  | 7337.9        | 6900.0              | 3492.7 µg/L        | 3492.7 ppb         | 13:00:45      |
| 1     | Mg 279.077 IEC†    | 131.4         | 124.3               | 1500.5 µg/L        | 1500.5 ppb         | 13:01:05      |
| 1     | Na 589.592 Radial† | 5067.4        | 4810.7              | 2293.9 µg/L        | 2293.9 ppb         | 13:00:45      |
| 1     | Sr 421.552†        | 1722.8        | 1589.2              | 9.6716 µg/L        | 9.6716 ppb         | 13:00:45      |
| 1     | Sc 361.383         | 1893725.6     | 1893725.6           | 103.99 %           |                    | 13:02:10      |
| 1     | Y 371.029          | 1374374.8     | 1374374.8           | 109.15 %           |                    | 13:02:10      |
| 1     | Ag 328.068†        | -1317.9       | -729.9              | -0.6230 µg/L       | -0.6230 ppb        | 13:02:16      |
| 1     | As 188.979†        | 2.6           | 5.1                 | -1.1801 µg/L       | -1.1801 ppb        | 13:02:36      |
| 1     | B 249.677†         | 805.9         | 466.0               | -13.854 µg/L       | -13.854 ppb        | 13:02:16      |
| 1     | Ba 233.527†        | 5081.4        | 4905.9              | 114.89 µg/L        | 114.89 ppb         | 13:02:16      |
| 1     | Be 313.107†        | 6729.1        | 8006.8              | 3.7465 µg/L        | 3.7465 ppb         | 13:02:16      |
| 1     | Cd 226.502†        | 198.0         | 356.6               | 1.1297 µg/L        | 1.1297 ppb         | 13:02:36      |
| 1     | Co 228.616†        | 319.1         | 282.1               | 5.8417 µg/L        | 5.8417 ppb         | 13:02:36      |
| 1     | Cr 267.716†        | 1136.4        | 1032.8              | 23.913 µg/L        | 23.913 ppb         | 13:02:36      |
| 1     | Cu 324.752†        | 4552.2        | 109.0               | 13.984 µg/L        | 13.984 ppb         | 13:02:16      |
| 1     | Mn 257.610†        | 718842.4      | 692037.7            | 2276.2 µg/L        | 2276.2 ppb         | 13:02:10      |
| 1     | Mo 202.031†        | 80.6          | 67.7                | 9.7795 µg/L        | 9.7795 ppb         | 13:02:36      |
| 1     | Ni 231.604†        | 508.0         | 134.8               | 8.8756 µg/L        | 8.8756 ppb         | 13:02:36      |
| 1     | P 214.914†         | 647.0         | 335.2               | 516.33 µg/L        | 516.33 ppb         | 13:02:36      |
| 1     | Pb 220.353†        | 156.1         | 106.7               | 31.788 µg/L        | 31.788 ppb         | 13:02:36      |
| 1     | S 181.975 Axial†   | 14.8          | -7.7                | -25.514 µg/L       | -25.514 ppb        | 13:02:36      |
| 1     | Sb 206.836†        | 13.4          | -14.1               | -13.485 µg/L       | -13.485 ppb        | 13:02:36      |
| 1     | Se 196.026†        | -23.6         | -49.5               | 173.22 µg/L        | 173.22 ppb         | 13:02:36      |
| 1     | SiO2†              | 234706.2      | 222861.8            | 42119 µg/L         | 42119 ppb          | 13:02:10      |
| 1     | Si 251.611†        | 287289.6      | 275856.2            | 19630 µg/L         | 19630 ppb          | 13:02:10      |
| 1     | Sn 189.927†        | -11.1         | -8.9                | -3.8240 µg/L       | -3.8240 ppb        | 13:02:36      |
| 1     | Ti 334.940†        | 1398920.8     | 1346007.3           | 3388.7 µg/L        | 3388.7 ppb         | 13:02:10      |
| 1     | Tl 190.801†        | -87.2         | -46.9               | -0.9509 µg/L       | -0.9509 ppb        | 13:02:36      |
| 1     | U 409.014†         | -1684.4       | -1561.9             | -159.00 µg/L       | -159.00 ppb        | 13:02:10      |
| 1     | V 292.402†         | 3154.3        | 2914.4              | 23.953 µg/L        | 23.953 ppb         | 13:02:16      |
| 1     | Zn 213.857†        | 21715.6       | 20250.9             | 487.26 µg/L        | 487.26 ppb         | 13:02:16      |
| 2     | Sc RADIAL          | 86977.0       | 86977.0             | 101 %              |                    | 13:01:11      |
| 2     | Al 396.153Radial†  | 13065.3       | 13146.7             | 6845.4 µg/L        | 6845.4 ppb         | 13:01:11      |
| 2     | Ca 317.933Radial†  | 7556.7        | 7129.9              | 2640.4 µg/L        | 2640.4 ppb         | 13:01:11      |
| 2     | Fe 238.204 Radial† | 6289.7        | 6190.1              | 70461 µg/L         | 70461 ppb          | 13:01:31      |
| 2     | K 766.490 Radial†  | 7467.3        | 6993.2              | 3539.8 µg/L        | 3539.8 ppb         | 13:01:11      |
| 2     | Mg 279.077 IEC†    | 126.4         | 118.7               | 1430.0 µg/L        | 1430.0 ppb         | 13:01:31      |
| 2     | Na 589.592 Radial† | 5157.8        | 4876.0              | 2325.1 µg/L        | 2325.1 ppb         | 13:01:11      |
| 2     | Sr 421.552†        | 1737.8        | 1596.0              | 9.7129 µg/L        | 9.7129 ppb         | 13:01:11      |
| 2     | Sc 361.383         | 1915487.2     | 1915487.2           | 105.18 %           |                    | 13:02:44      |
| 2     | Y 371.029          | 1392636.6     | 1392636.6           | 110.60 %           |                    | 13:02:44      |
| 2     | Ag 328.068†        | -1317.4       | -715.1              | -0.4830 µg/L       | -0.4830 ppb        | 13:02:49      |
| 2     | As 188.979†        | 1.3           | 3.8                 | -3.1950 µg/L       | -3.1950 ppb        | 13:03:10      |
| 2     | B 249.677†         | 804.9         | 456.1               | -14.411 µg/L       | -14.411 ppb        | 13:02:49      |
| 2     | Ba 233.527†        | 5116.1        | 4883.4              | 114.37 µg/L        | 114.37 ppb         | 13:02:49      |
| 2     | Be 313.107†        | 6768.7        | 7970.9              | 3.7273 µg/L        | 3.7273 ppb         | 13:02:49      |
| 2     | Cd 226.502†        | 181.1         | 338.4               | 0.6504 µg/L        | 0.6504 ppb         | 13:03:10      |
| 2     | Co 228.616†        | 304.7         | 264.9               | 5.0765 µg/L        | 5.0765 ppb         | 13:03:10      |
| 2     | Cr 267.716†        | 1146.4        | 1029.9              | 23.846 µg/L        | 23.846 ppb         | 13:03:10      |
| 2     | Cu 324.752†        | 4587.5        | 92.9                | 13.898 µg/L        | 13.898 ppb         | 13:02:49      |
| 2     | Mn 257.610†        | 726654.6      | 691611.4            | 2274.8 µg/L        | 2274.8 ppb         | 13:02:44      |
| 2     | Mo 202.031†        | 88.0          | 73.8                | 10.428 µg/L        | 10.428 ppb         | 13:03:10      |
| 2     | Ni 231.604†        | 503.5         | 125.0               | 8.2996 µg/L        | 8.2996 ppb         | 13:03:10      |
| 2     | P 214.914†         | 647.2         | 328.3               | 504.47 µg/L        | 504.47 ppb         | 13:03:10      |
| 2     | Pb 220.353†        | 161.3         | 110.0               | 32.712 µg/L        | 32.712 ppb         | 13:03:10      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 20.5      | -2.5      | -8.1123 µg/L | -8.1123 ppb | 13:03:10 |
| 2 | Sb 206.836†        | 12.7      | -14.9     | -14.172 µg/L | -14.172 ppb | 13:03:10 |
| 2 | Se 196.026†        | -29.5     | -54.8     | 168.47 µg/L  | 168.47 ppb  | 13:03:10 |
| 2 | SiO2†              | 236996.3  | 222474.9  | 42046 µg/L   | 42046 ppb   | 13:02:44 |
| 2 | Si 251.611†        | 290068.9  | 275359.8  | 19595 µg/L   | 19595 ppb   | 13:02:44 |
| 2 | Sn 189.927†        | -14.0     | -11.5     | -4.9063 µg/L | -4.9063 ppb | 13:03:10 |
| 2 | Ti 334.940†        | 1411331.9 | 1342523.3 | 3380.0 µg/L  | 3380.0 ppb  | 13:02:44 |
| 2 | Tl 190.801†        | -84.7     | -43.5     | 2.4729 µg/L  | 2.4729 ppb  | 13:03:10 |
| 2 | U 409.014†         | -1676.6   | -1536.1   | -156.56 µg/L | -156.56 ppb | 13:02:44 |
| 2 | V 292.402†         | 3203.8    | 2927.0    | 24.094 µg/L  | 24.094 ppb  | 13:02:49 |
| 2 | Zn 213.857†        | 21862.2   | 20152.9   | 484.88 µg/L  | 484.88 ppb  | 13:02:49 |
| 3 | Sc RADIAL          | 87415.9   | 87415.9   | 102 %        |             | 13:01:37 |
| 3 | Al 396.153Radial†  | 13096.7   | 13112.8   | 6827.8 µg/L  | 6827.8 ppb  | 13:01:37 |
| 3 | Ca 317.933Radial†  | 7584.9    | 7120.2    | 2636.8 µg/L  | 2636.8 ppb  | 13:01:37 |
| 3 | Fe 238.204 Radial† | 6260.9    | 6130.7    | 69785 µg/L   | 69785 ppb   | 13:01:57 |
| 3 | K 766.490 Radial†  | 7417.6    | 6907.3    | 3496.4 µg/L  | 3496.4 ppb  | 13:01:37 |
| 3 | Mg 279.077 IEC†    | 130.4     | 122.0     | 1472.5 µg/L  | 1472.5 ppb  | 13:01:57 |
| 3 | Na 589.592 Radial† | 5187.8    | 4879.9    | 2327.0 µg/L  | 2327.0 ppb  | 13:01:37 |
| 3 | Sr 421.552†        | 1730.8    | 1580.5    | 9.6185 µg/L  | 9.6185 ppb  | 13:01:37 |
| 3 | Sc 361.383         | 1929882.3 | 1929882.3 | 105.97 %     |             | 13:03:18 |
| 3 | Y 371.029          | 1398244.2 | 1398244.2 | 111.05 %     |             | 13:03:18 |
| 3 | Ag 328.068†        | -1307.7   | -696.5    | -0.3928 µg/L | -0.3928 ppb | 13:03:23 |
| 3 | As 188.979†        | 4.4       | 6.8       | 1.4477 µg/L  | 1.4477 ppb  | 13:03:44 |
| 3 | B 249.677†         | 751.6     | 400.2     | -16.801 µg/L | -16.801 ppb | 13:03:23 |
| 3 | Ba 233.527†        | 4875.7    | 4620.2    | 108.20 µg/L  | 108.20 ppb  | 13:03:23 |
| 3 | Be 313.107†        | 6073.8    | 7267.1    | 3.3481 µg/L  | 3.3481 ppb  | 13:03:23 |
| 3 | Cd 226.502†        | 156.1     | 313.5     | 0.0931 µg/L  | 0.0931 ppb  | 13:03:44 |
| 3 | Co 228.616†        | 288.3     | 247.2     | 4.6151 µg/L  | 4.6151 ppb  | 13:03:44 |
| 3 | Cr 267.716†        | 1048.1    | 929.0     | 21.511 µg/L  | 21.511 ppb  | 13:03:44 |
| 3 | Cu 324.752†        | 4473.8    | -47.0     | 12.789 µg/L  | 12.789 ppb  | 13:03:23 |
| 3 | Mn 257.610†        | 699846.3  | 661160.5  | 2174.8 µg/L  | 2174.8 ppb  | 13:03:18 |
| 3 | Mo 202.031†        | 79.8      | 65.4      | 9.5210 µg/L  | 9.5210 ppb  | 13:03:44 |
| 3 | Ni 231.604†        | 517.3     | 134.4     | 8.8510 µg/L  | 8.8510 ppb  | 13:03:44 |
| 3 | P 214.914†         | 619.2     | 297.3     | 452.31 µg/L  | 452.31 ppb  | 13:03:44 |
| 3 | Pb 220.353†        | 170.3     | 117.4     | 34.777 µg/L  | 34.777 ppb  | 13:03:44 |
| 3 | S 181.975 Axial†   | 22.7      | -0.6      | -1.9269 µg/L | -1.9269 ppb | 13:03:44 |
| 3 | Sb 206.836†        | 14.0      | -13.8     | -13.127 µg/L | -13.127 ppb | 13:03:44 |
| 3 | Se 196.026†        | -26.9     | -52.2     | 168.88 µg/L  | 168.88 ppb  | 13:03:44 |
| 3 | SiO2†              | 230110.6  | 214296.5  | 40500 µg/L   | 40500 ppb   | 13:03:18 |
| 3 | Si 251.611†        | 281616.6  | 265326.8  | 18881 µg/L   | 18881 ppb   | 13:03:18 |
| 3 | Sn 189.927†        | -24.5     | -21.3     | -9.0568 µg/L | -9.0568 ppb | 13:03:44 |
| 3 | Ti 334.940†        | 1351669.2 | 1276213.7 | 3213.0 µg/L  | 3213.0 ppb  | 13:03:18 |
| 3 | Tl 190.801†        | -71.4     | -30.4     | 14.297 µg/L  | 14.297 ppb  | 13:03:44 |
| 3 | U 409.014†         | -1680.0   | -1527.5   | -155.64 µg/L | -155.64 ppb | 13:03:18 |
| 3 | V 292.402†         | 3009.3    | 2720.7    | 21.592 µg/L  | 21.592 ppb  | 13:03:23 |
| 3 | Zn 213.857†        | 20814.0   | 19008.8   | 457.19 µg/L  | 457.19 ppb  | 13:03:23 |

## Mean Data: 247188010|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1913031.7                | 105.05 %           | 1.000    |                    |          | 0.95%   |
| Sc RADIAL          | 86985.5                  | 101 %              | 0.5      |                    |          | 0.49%   |
| Y 371.029          | 1388418.5                | 110.27 %           | 0.991    |                    |          | 0.90%   |
| Ag 328.068†        | -713.9                   | -0.4996 µg/L       | 0.11601  | -0.4996 ppb        | 0.11601  | 23.22%  |
| Al 396.153Radial†  | 13046.1                  | 6793.1 µg/L        | 75.97    | 6793.1 ppb         | 75.97    | 1.12%   |
| As 188.979†        | 5.2                      | -0.9758 µg/L       | 2.32805  | -0.9758 ppb        | 2.32805  | 238.58% |
| B 249.677†         | 440.8                    | -15.022 µg/L       | 1.5653   | -15.022 ppb        | 1.5653   | 10.42%  |
| Ba 233.527†        | 4803.2                   | 112.49 µg/L        | 3.721    | 112.49 ppb         | 3.721    | 3.31%   |
| Be 313.107†        | 7748.3                   | 3.6073 µg/L        | 0.22467  | 3.6073 ppb         | 0.22467  | 6.23%   |
| Ca 317.933Radial†  | 7080.5                   | 2622.1 µg/L        | 28.63    | 2622.1 ppb         | 28.63    | 1.09%   |
| Cd 226.502†        | 336.2                    | 0.6244 µg/L        | 0.51876  | 0.6244 ppb         | 0.51876  | 83.08%  |
| Co 228.616†        | 264.7                    | 5.1778 µg/L        | 0.61954  | 5.1778 ppb         | 0.61954  | 11.97%  |
| Cr 267.716†        | 997.2                    | 23.090 µg/L        | 1.3680   | 23.090 ppb         | 1.3680   | 5.92%   |
| Cu 324.752†        | 51.6                     | 13.557 µg/L        | 0.6665   | 13.557 ppb         | 0.6665   | 4.92%   |
| Fe 238.204 Radial† | 6166.0                   | 70187 µg/L         | 355.8    | 70187 ppb          | 355.8    | 0.51%   |
| K 766.490 Radial†  | 6933.5                   | 3509.6 µg/L        | 26.21    | 3509.6 ppb         | 26.21    | 0.75%   |
| Mg 279.077 IEC†    | 121.7                    | 1467.7 µg/L        | 35.49    | 1467.7 ppb         | 35.49    | 2.42%   |
| Mn 257.610†        | 681603.2                 | 2241.9 µg/L        | 58.15    | 2241.9 ppb         | 58.15    | 2.59%   |
| Mo 202.031†        | 69.0                     | 9.9094 µg/L        | 0.46710  | 9.9094 ppb         | 0.46710  | 4.71%   |
| Na 589.592 Radial† | 4855.5                   | 2315.3 µg/L        | 18.56    | 2315.3 ppb         | 18.56    | 0.80%   |

|                  |           |              |         |             |         |         |
|------------------|-----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 131.4     | 8.6754 µg/L  | 0.32566 | 8.6754 ppb  | 0.32566 | 3.75%   |
| P 214.914†       | 320.3     | 491.04 µg/L  | 34.061  | 491.04 ppb  | 34.061  | 6.94%   |
| Pb 220.353†      | 111.4     | 33.092 µg/L  | 1.5305  | 33.092 ppb  | 1.5305  | 4.62%   |
| S 181.975 Axial† | -3.6      | -11.851 µg/L | 12.2300 | -11.851 ppb | 12.2300 | 103.20% |
| Sb 206.836†      | -14.3     | -13.595 µg/L | 0.5313  | -13.595 ppb | 0.5313  | 3.91%   |
| Se 196.026†      | -52.1     | 170.19 µg/L  | 2.634   | 170.19 ppb  | 2.634   | 1.55%   |
| SiO2†            | 219877.7  | 41555 µg/L   | 914.2   | 41555 ppb   | 914.2   | 2.20%   |
| Si 251.611†      | 272181.0  | 19369 µg/L   | 422.8   | 19369 ppb   | 422.8   | 2.18%   |
| Sn 189.927†      | -13.9     | -5.9290 µg/L | 2.76226 | -5.9290 ppb | 2.76226 | 46.59%  |
| Sr 421.552†      | 1588.6    | 9.6676 µg/L  | 0.04733 | 9.6676 ppb  | 0.04733 | 0.49%   |
| Ti 334.940†      | 1321581.5 | 3327.2 µg/L  | 99.02   | 3327.2 ppb  | 99.02   | 2.98%   |
| Tl 190.801†      | -40.3     | 5.2730 µg/L  | 8.00029 | 5.2730 ppb  | 8.00029 | 151.72% |
| U 409.014†       | -1541.9   | -157.07 µg/L | 1.734   | -157.07 ppb | 1.734   | 1.10%   |
| V 292.402†       | 2854.0    | 23.213 µg/L  | 1.4052  | 23.213 ppb  | 1.4052  | 6.05%   |
| Zn 213.857†      | 19804.2   | 476.44 µg/L  | 16.718  | 476.44 ppb  | 16.718  | 3.51%   |

Sequence No.: 28

Sample ID: 247188011|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 322

Date Collected: 3/11/2010 13:03:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188011|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87791.6          | 87791.6                | 102 %                 |                       | 13:04:26         |
| 1     | Al 396.153Radial†  | 11305.4          | 11306.9                | 5887.5 µg/L           | 5887.5 ppb            | 13:04:26         |
| 1     | Ca 317.933Radial†  | 6234.5           | 5768.4                 | 2136.2 µg/L           | 2136.2 ppb            | 13:04:47         |
| 1     | Fe 238.204 Radial† | 5857.7           | 5710.3                 | 64999 µg/L            | 64999 ppb             | 13:04:47         |
| 1     | K 766.490 Radial†  | 7172.8           | 6636.9                 | 3359.5 µg/L           | 3359.5 ppb            | 13:04:26         |
| 1     | Mg 279.077 IEC†    | 111.3            | 102.9                  | 1234.6 µg/L           | 1234.6 ppb            | 13:04:47         |
| 1     | Na 589.592 Radial† | 5069.9           | 4742.9                 | 2261.6 µg/L           | 2261.6 ppb            | 13:04:26         |
| 1     | Sr 421.552†        | 1396.8           | 1246.7                 | 7.5874 µg/L           | 7.5874 ppb            | 13:04:26         |
| 1     | Sc 361.383         | 1920291.5        | 1920291.5              | 105.44 %              |                       | 13:05:52         |
| 1     | Y 371.029          | 1395222.9        | 1395222.9              | 110.81 %              |                       | 13:05:52         |
| 1     | Ag 328.068†        | -1344.3          | -737.4                 | -1.1476 µg/L          | -1.1476 ppb           | 13:05:57         |
| 1     | As 188.979†        | 2.2              | 4.7                    | -1.0680 µg/L          | -1.0680 ppb           | 13:06:18         |
| 1     | B 249.677†         | 751.2            | 403.3                  | -14.148 µg/L          | -14.148 ppb           | 13:05:57         |
| 1     | Ba 233.527†        | 4142.2           | 3947.6                 | 92.449 µg/L           | 92.449 ppb            | 13:06:18         |
| 1     | Be 313.107†        | 5685.6           | 6927.6                 | 3.1826 µg/L           | 3.1826 ppb            | 13:05:57         |
| 1     | Cd 226.502†        | 156.3            | 314.5                  | 0.6567 µg/L           | 0.6567 ppb            | 13:06:18         |
| 1     | Co 228.616†        | 284.1            | 244.6                  | 4.7583 µg/L           | 4.7583 ppb            | 13:06:18         |
| 1     | Cr 267.716†        | 1134.1           | 1015.5                 | 23.509 µg/L           | 23.509 ppb            | 13:06:18         |
| 1     | Cu 324.752†        | 4711.7           | 199.7                  | 13.622 µg/L           | 13.622 ppb            | 13:05:57         |
| 1     | Mn 257.610†        | 684954.1         | 650335.6               | 2139.0 µg/L           | 2139.0 ppb            | 13:05:52         |
| 1     | Mo 202.031†        | 71.4             | 57.9                   | 8.5482 µg/L           | 8.5482 ppb            | 13:06:18         |
| 1     | Ni 231.604†        | 475.8            | 97.4                   | 6.6001 µg/L           | 6.6001 ppb            | 13:06:18         |
| 1     | P 214.914†         | 594.6            | 276.9                  | 420.89 µg/L           | 420.89 ppb            | 13:06:18         |
| 1     | Pb 220.353†        | 172.5            | 120.2                  | 35.399 µg/L           | 35.399 ppb            | 13:06:18         |
| 1     | S 181.975 Axial†   | 29.4             | 5.9                    | 19.510 µg/L           | 19.510 ppb            | 13:06:18         |
| 1     | Sb 206.836†        | 15.7             | -12.1                  | -11.590 µg/L          | -11.590 ppb           | 13:06:18         |
| 1     | Se 196.026†        | -27.0            | -52.3                  | 153.72 µg/L           | 153.72 ppb            | 13:06:18         |
| 1     | SiO2†              | 224749.7         | 210296.9               | 39744 µg/L            | 39744 ppb             | 13:05:52         |
| 1     | Si 251.611†        | 275192.1         | 260561.3               | 18542 µg/L            | 18542 ppb             | 13:05:52         |
| 1     | Sn 189.927†        | -14.7            | -12.1                  | -5.1978 µg/L          | -5.1978 ppb           | 13:06:18         |
| 1     | Ti 334.940†        | 1292032.7        | 1226027.0              | 3086.7 µg/L           | 3086.7 ppb            | 13:05:52         |
| 1     | Tl 190.801†        | -81.9            | -40.7                  | 1.6852 µg/L           | 1.6852 ppb            | 13:06:18         |
| 1     | U 409.014†         | -1534.9          | -1397.8                | -142.57 µg/L          | -142.57 ppb           | 13:05:52         |
| 1     | V 292.402†         | 2550.8           | 2300.1                 | 17.152 µg/L           | 17.152 ppb            | 13:05:57         |
| 1     | Zn 213.857†        | 20328.1          | 18646.0                | 448.64 µg/L           | 448.64 ppb            | 13:05:57         |
| 2     | Sc RADIAL          | 87398.9          | 87398.9                | 102 %                 |                       | 13:04:53         |
| 2     | Al 396.153Radial†  | 11354.3          | 11404.7                | 5938.4 µg/L           | 5938.4 ppb            | 13:04:53         |
| 2     | Ca 317.933Radial†  | 6237.4           | 5798.6                 | 2147.4 µg/L           | 2147.4 ppb            | 13:05:13         |
| 2     | Fe 238.204 Radial† | 5846.5           | 5725.0                 | 65167 µg/L            | 65167 ppb             | 13:05:13         |
| 2     | K 766.490 Radial†  | 7109.1           | 6605.9                 | 3343.8 µg/L           | 3343.8 ppb            | 13:04:53         |
| 2     | Mg 279.077 IEC†    | 110.1            | 102.2                  | 1225.6 µg/L           | 1225.6 ppb            | 13:05:13         |
| 2     | Na 589.592 Radial† | 5054.9           | 4750.4                 | 2265.2 µg/L           | 2265.2 ppb            | 13:04:53         |
| 2     | Sr 421.552†        | 1367.1           | 1223.8                 | 7.4476 µg/L           | 7.4476 ppb            | 13:04:53         |
| 2     | Sc 361.383         | 1928045.0        | 1928045.0              | 105.87 %              |                       | 13:06:26         |
| 2     | Y 371.029          | 1401999.4        | 1401999.4              | 111.35 %              |                       | 13:06:26         |
| 2     | Ag 328.068†        | -1316.6          | -706.1                 | -0.8637 µg/L          | -0.8637 ppb           | 13:06:31         |
| 2     | As 188.979†        | 4.6              | 6.9                    | 2.3255 µg/L           | 2.3255 ppb            | 13:06:52         |
| 2     | B 249.677†         | 775.5            | 423.4                  | -13.252 µg/L          | -13.252 ppb           | 13:06:31         |
| 2     | Ba 233.527†        | 4115.8           | 3906.8                 | 91.496 µg/L           | 91.496 ppb            | 13:06:52         |
| 2     | Be 313.107†        | 5631.1           | 6854.4                 | 3.1372 µg/L           | 3.1372 ppb            | 13:06:31         |
| 2     | Cd 226.502†        | 158.6            | 316.0                  | 0.6771 µg/L           | 0.6771 ppb            | 13:06:52         |
| 2     | Co 228.616†        | 281.6            | 241.2                  | 4.6052 µg/L           | 4.6052 ppb            | 13:06:52         |
| 2     | Cr 267.716†        | 1126.3           | 1003.8                 | 23.237 µg/L           | 23.237 ppb            | 13:06:52         |
| 2     | Cu 324.752†        | 4828.8           | 292.4                  | 14.304 µg/L           | 14.304 ppb            | 13:06:31         |
| 2     | Mn 257.610†        | 686365.6         | 649056.6               | 2134.8 µg/L           | 2134.8 ppb            | 13:06:26         |
| 2     | Mo 202.031†        | 70.2             | 56.5                   | 8.4040 µg/L           | 8.4040 ppb            | 13:06:52         |
| 2     | Ni 231.604†        | 470.1            | 90.2                   | 6.1752 µg/L           | 6.1752 ppb            | 13:06:52         |
| 2     | P 214.914†         | 599.0            | 278.8                  | 423.96 µg/L           | 423.96 ppb            | 13:06:52         |
| 2     | Pb 220.353†        | 173.9            | 120.9                  | 35.597 µg/L           | 35.597 ppb            | 13:06:52         |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 20.6      | -2.5      | -8.3616 µg/L | -8.3616 ppb | 13:06:52 |
| 2 | Sb 206.836†        | 15.8      | -12.1     | -11.553 µg/L | -11.553 ppb | 13:06:52 |
| 2 | Se 196.026†        | -35.7     | -60.4     | 146.21 µg/L  | 146.21 ppb  | 13:06:52 |
| 2 | SiO2†              | 225378.4  | 210033.6  | 39695 µg/L   | 39695 ppb   | 13:06:26 |
| 2 | Si 251.611†        | 275751.8  | 260040.5  | 18505 µg/L   | 18505 ppb   | 13:06:26 |
| 2 | Sn 189.927†        | -12.9     | -10.4     | -4.4727 µg/L | -4.4727 ppb | 13:06:52 |
| 2 | Ti 334.940†        | 1296535.8 | 1225352.8 | 3085.0 µg/L  | 3085.0 ppb  | 13:06:26 |
| 2 | Tl 190.801†        | -81.1     | -39.6     | 2.7824 µg/L  | 2.7824 ppb  | 13:06:52 |
| 2 | U 409.014†         | -1579.9   | -1434.4   | -146.09 µg/L | -146.09 ppb | 13:06:26 |
| 2 | V 292.402†         | 2586.4    | 2324.0    | 17.419 µg/L  | 17.419 ppb  | 13:06:31 |
| 2 | Zn 213.857†        | 20339.2   | 18579.1   | 447.01 µg/L  | 447.01 ppb  | 13:06:31 |
| 3 | Sc RADIAL          | 87814.1   | 87814.1   | 102 %        |             | 13:05:18 |
| 3 | Al 396.153Radial†  | 11390.0   | 11386.8   | 5929.1 µg/L  | 5929.1 ppb  | 13:05:18 |
| 3 | Ca 317.933Radial†  | 6248.7    | 5780.7    | 2140.7 µg/L  | 2140.7 ppb  | 13:05:39 |
| 3 | Fe 238.204 Radial† | 5866.2    | 5717.1    | 65077 µg/L   | 65077 ppb   | 13:05:39 |
| 3 | K 766.490 Radial†  | 7172.3    | 6634.6    | 3358.3 µg/L  | 3358.3 ppb  | 13:05:18 |
| 3 | Mg 279.077 IEC†    | 109.2     | 100.8     | 1207.7 µg/L  | 1207.7 ppb  | 13:05:39 |
| 3 | Na 589.592 Radial† | 5091.4    | 4762.6    | 2271.0 µg/L  | 2271.0 ppb  | 13:05:18 |
| 3 | Sr 421.552†        | 1405.2    | 1254.6    | 7.6352 µg/L  | 7.6352 ppb  | 13:05:18 |
| 3 | Sc 361.383         | 1914428.1 | 1914428.1 | 105.12 %     |             | 13:06:59 |
| 3 | Y 371.029          | 1387371.1 | 1387371.1 | 110.18 %     |             | 13:06:59 |
| 3 | Ag 328.068†        | -1232.6   | -635.0    | -0.2746 µg/L | -0.2746 ppb | 13:07:05 |
| 3 | As 188.979†        | 7.0       | 9.2       | 5.8737 µg/L  | 5.8737 ppb  | 13:07:25 |
| 3 | B 249.677†         | 762.6     | 416.3     | -13.554 µg/L | -13.554 ppb | 13:07:05 |
| 3 | Ba 233.527†        | 3747.3    | 3583.9    | 83.934 µg/L  | 83.934 ppb  | 13:07:25 |
| 3 | Be 313.107†        | 5285.7    | 6563.7    | 3.0045 µg/L  | 3.0045 ppb  | 13:07:05 |
| 3 | Cd 226.502†        | 117.4     | 277.9     | -0.2819 µg/L | -0.2819 ppb | 13:07:25 |
| 3 | Co 228.616†        | 250.1     | 213.1     | 3.5940 µg/L  | 3.5940 ppb  | 13:07:25 |
| 3 | Cr 267.716†        | 1017.5    | 907.9     | 21.017 µg/L  | 21.017 ppb  | 13:07:25 |
| 3 | Cu 324.752†        | 4657.0    | 161.3     | 13.367 µg/L  | 13.367 ppb  | 13:07:05 |
| 3 | Mn 257.610†        | 657128.8  | 625855.8  | 2058.6 µg/L  | 2058.6 ppb  | 13:06:59 |
| 3 | Mo 202.031†        | 61.1      | 48.3      | 7.5418 µg/L  | 7.5418 ppb  | 13:07:25 |
| 3 | Ni 231.604†        | 480.9     | 103.6     | 6.9700 µg/L  | 6.9700 ppb  | 13:07:25 |
| 3 | P 214.914†         | 576.0     | 260.9     | 393.55 µg/L  | 393.55 ppb  | 13:07:25 |
| 3 | Pb 220.353†        | 156.9     | 105.9     | 31.382 µg/L  | 31.382 ppb  | 13:07:25 |
| 3 | S 181.975 Axial†   | 27.6      | 4.2       | 13.952 µg/L  | 13.952 ppb  | 13:07:25 |
| 3 | Sb 206.836†        | 17.2      | -10.6     | -10.163 µg/L | -10.163 ppb | 13:07:25 |
| 3 | Se 196.026†        | -29.9     | -55.2     | 151.12 µg/L  | 151.12 ppb  | 13:07:25 |
| 3 | SiO2†              | 217819.3  | 204357.0  | 38622 µg/L   | 38622 ppb   | 13:06:59 |
| 3 | Si 251.611†        | 266295.7  | 252897.7  | 17997 µg/L   | 17997 ppb   | 13:06:59 |
| 3 | Sn 189.927†        | -21.0     | -18.2     | -7.7666 µg/L | -7.7666 ppb | 13:07:25 |
| 3 | Ti 334.940†        | 1232385.8 | 1173039.5 | 2953.3 µg/L  | 2953.3 ppb  | 13:06:59 |
| 3 | Tl 190.801†        | -77.7     | -36.9     | 4.1727 µg/L  | 4.1727 ppb  | 13:07:25 |
| 3 | U 409.014†         | -1492.4   | -1361.8   | -139.15 µg/L | -139.15 ppb | 13:06:59 |
| 3 | V 292.402†         | 2375.1    | 2140.4    | 15.104 µg/L  | 15.104 ppb  | 13:07:05 |
| 3 | Zn 213.857†        | 19326.3   | 17752.2   | 426.98 µg/L  | 426.98 ppb  | 13:07:05 |

Mean Data: 247188011|954676|1

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1920921.5                | 105.48 %           | 0.375    |                    |          | 0.36%   |
| Sc RADIAL          | 87668.2                  | 102 %              | 0.3      |                    |          | 0.27%   |
| Y 371.029          | 1394864.5                | 110.78 %           | 0.581    |                    |          | 0.52%   |
| Ag 328.068†        | -692.9                   | -0.7620 µg/L       | 0.44530  | -0.7620 ppb        | 0.44530  | 58.44%  |
| Al 396.153Radial†  | 11366.1                  | 5918.3 µg/L        | 27.10    | 5918.3 ppb         | 27.10    | 0.46%   |
| As 188.979†        | 7.0                      | 2.3771 µg/L        | 3.47113  | 2.3771 ppb         | 3.47113  | 146.03% |
| B 249.677†         | 414.4                    | -13.651 µg/L       | 0.4558   | -13.651 ppb        | 0.4558   | 3.34%   |
| Ba 233.527†        | 3812.8                   | 89.293 µg/L        | 4.6654   | 89.293 ppb         | 4.6654   | 5.22%   |
| Be 313.107†        | 6781.9                   | 3.1081 µg/L        | 0.09257  | 3.1081 ppb         | 0.09257  | 2.98%   |
| Ca 317.933Radial†  | 5782.6                   | 2141.4 µg/L        | 5.63     | 2141.4 ppb         | 5.63     | 0.26%   |
| Cd 226.502†        | 302.8                    | 0.3507 µg/L        | 0.54791  | 0.3507 ppb         | 0.54791  | 156.25% |
| Co 228.616†        | 233.0                    | 4.3192 µg/L        | 0.63268  | 4.3192 ppb         | 0.63268  | 14.65%  |
| Cr 267.716†        | 975.7                    | 22.588 µg/L        | 1.3673   | 22.588 ppb         | 1.3673   | 6.05%   |
| Cu 324.752†        | 217.8                    | 13.765 µg/L        | 0.4845   | 13.765 ppb         | 0.4845   | 3.52%   |
| Fe 238.204 Radial† | 5717.5                   | 65081 µg/L         | 83.8     | 65081 ppb          | 83.8     | 0.13%   |
| K 766.490 Radial†  | 6625.8                   | 3353.9 µg/L        | 8.75     | 3353.9 ppb         | 8.75     | 0.26%   |
| Mg 279.077 IEC†    | 101.9                    | 1222.6 µg/L        | 13.67    | 1222.6 ppb         | 13.67    | 1.12%   |
| Mn 257.610†        | 641749.3                 | 2110.8 µg/L        | 45.24    | 2110.8 ppb         | 45.24    | 2.14%   |
| Mo 202.031†        | 54.2                     | 8.1647 µg/L        | 0.54418  | 8.1647 ppb         | 0.54418  | 6.67%   |
| Na 589.592 Radial† | 4752.0                   | 2266.0 µg/L        | 4.76     | 2266.0 ppb         | 4.76     | 0.21%   |

|                  |           |              |          |             |          |         |
|------------------|-----------|--------------|----------|-------------|----------|---------|
| Ni 231.604†      | 97.1      | 6.5818 µg/L  | 0.39769  | 6.5818 ppb  | 0.39769  | 6.04%   |
| P 214.914†       | 272.2     | 412.80 µg/L  | 16.737   | 412.80 ppb  | 16.737   | 4.05%   |
| Pb 220.353†      | 115.7     | 34.126 µg/L  | 2.3785   | 34.126 ppb  | 2.3785   | 6.97%   |
| S 181.975 Axial† | 2.5       | 8.3668 µg/L  | 14.75136 | 8.3668 ppb  | 14.75136 | 176.31% |
| Sb 206.836†      | -11.6     | -11.102 µg/L | 0.8138   | -11.102 ppb | 0.8138   | 7.33%   |
| Se 196.026†      | -56.0     | 150.35 µg/L  | 3.815    | 150.35 ppb  | 3.815    | 2.54%   |
| SiO2†            | 208229.2  | 39354 µg/L   | 634.2    | 39354 ppb   | 634.2    | 1.61%   |
| Si 251.611†      | 257833.1  | 18348 µg/L   | 304.7    | 18348 ppb   | 304.7    | 1.66%   |
| Sn 189.927†      | -13.6     | -5.8124 µg/L | 1.73082  | -5.8124 ppb | 1.73082  | 29.78%  |
| Sr 421.552†      | 1241.7    | 7.5567 µg/L  | 0.09749  | 7.5567 ppb  | 0.09749  | 1.29%   |
| Ti 334.940†      | 1208139.8 | 3041.6 µg/L  | 76.54    | 3041.6 ppb  | 76.54    | 2.52%   |
| Tl 190.801†      | -39.1     | 2.8801 µg/L  | 1.24661  | 2.8801 ppb  | 1.24661  | 43.28%  |
| U 409.014†       | -1398.0   | -142.60 µg/L | 3.471    | -142.60 ppb | 3.471    | 2.43%   |
| V 292.402†       | 2254.8    | 16.559 µg/L  | 1.2667   | 16.559 ppb  | 1.2667   | 7.65%   |
| Zn 213.857†      | 18325.8   | 440.88 µg/L  | 12.065   | 440.88 ppb  | 12.065   | 2.74%   |

Sequence No.: 29

Sample ID: 247188012|954676|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 323

Date Collected: 3/11/2010 13:07:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188012|954676|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc. Units  | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|--------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87958.5          | 87958.5                | 103 %        |                       |                       | 13:08:08         |
| 1     | Al 396.153Radial†  | 17379.0          | 17211.1                | 8961.8 µg/L  | 8961.8 ppb            | 8961.8 ppb            | 13:08:08         |
| 1     | Ca 317.933Radial†  | 18620.8          | 17840.1                | 6606.6 µg/L  | 6606.6 ppb            | 6606.6 ppb            | 13:08:08         |
| 1     | Fe 238.204 Radial† | 5285.3           | 5141.1                 | 58520 µg/L   | 58520 ppb             | 58520 ppb             | 13:08:28         |
| 1     | K 766.490 Radial†  | 10925.2          | 10284.2                | 5205.7 µg/L  | 5205.7 ppb            | 5205.7 ppb            | 13:08:08         |
| 1     | Mg 279.077 IEC†    | 103.0            | 94.5                   | 1135.4 µg/L  | 1135.4 ppb            | 1135.4 ppb            | 13:08:28         |
| 1     | Na 589.592 Radial† | 7980.0           | 7572.4                 | 3610.9 µg/L  | 3610.9 ppb            | 3610.9 ppb            | 13:08:08         |
| 1     | Sr 421.552†        | 2461.0           | 2282.4                 | 13.890 µg/L  | 13.890 ppb            | 13.890 ppb            | 13:08:08         |
| 1     | Sc 361.383         | 1942576.0        | 1942576.0              | 106.67 %     |                       |                       | 13:09:33         |
| 1     | Y 371.029          | 1485234.4        | 1485234.4              | 117.96 %     |                       |                       | 13:09:33         |
| 1     | Ag 328.068†        | -1243.3          | -628.1                 | -0.7236 µg/L | -0.7236 ppb           | -0.7236 ppb           | 13:09:39         |
| 1     | As 188.979†        | 9.8              | 11.8                   | 10.020 µg/L  | 10.020 ppb            | 10.020 ppb            | 13:09:59         |
| 1     | B 249.677†         | 773.3            | 415.9                  | -10.106 µg/L | -10.106 ppb           | -10.106 ppb           | 13:09:39         |
| 1     | Ba 233.527†        | 6415.2           | 6033.4                 | 141.26 µg/L  | 141.26 ppb            | 141.26 ppb            | 13:09:39         |
| 1     | Be 313.107†        | 8438.2           | 9446.2                 | 4.9670 µg/L  | 4.9670 ppb            | 4.9670 ppb            | 13:09:39         |
| 1     | Cd 226.502†        | 126.3            | 284.5                  | 0.6405 µg/L  | 0.6405 ppb            | 0.6405 ppb            | 13:09:59         |
| 1     | Co 228.616†        | 303.5            | 259.7                  | 6.5455 µg/L  | 6.5455 ppb            | 6.5455 ppb            | 13:09:59         |
| 1     | Cr 267.716†        | 2476.6           | 2261.8                 | 52.334 µg/L  | 52.334 ppb            | 52.334 ppb            | 13:09:39         |
| 1     | Cu 324.752†        | 4650.1           | 90.7                   | 11.639 µg/L  | 11.639 ppb            | 11.639 ppb            | 13:09:39         |
| 1     | Mn 257.610†        | 925045.5         | 867966.2               | 2853.1 µg/L  | 2853.1 ppb            | 2853.1 ppb            | 13:09:33         |
| 1     | Mo 202.031†        | 108.1            | 91.5                   | 11.831 µg/L  | 11.831 ppb            | 11.831 ppb            | 13:09:59         |
| 1     | Ni 231.604†        | 698.9            | 301.4                  | 18.590 µg/L  | 18.590 ppb            | 18.590 ppb            | 13:09:59         |
| 1     | P 214.914†         | 548.7            | 227.4                  | 342.75 µg/L  | 342.75 ppb            | 342.75 ppb            | 13:09:59         |
| 1     | Pb 220.353†        | 211.9            | 155.3                  | 45.389 µg/L  | 45.389 ppb            | 45.389 ppb            | 13:09:59         |
| 1     | S 181.975 Axial†   | 28.2             | 4.5                    | 14.708 µg/L  | 14.708 ppb            | 14.708 ppb            | 13:09:59         |
| 1     | Sb 206.836†        | 19.1             | -9.1                   | -9.0627 µg/L | -9.0627 ppb           | -9.0627 ppb           | 13:09:59         |
| 1     | Se 196.026†        | -26.0            | -51.1                  | 133.94 µg/L  | 133.94 ppb            | 133.94 ppb            | 13:09:59         |
| 1     | SiO2†              | 281461.6         | 261018.4               | 49330 µg/L   | 49330 ppb             | 49330 ppb             | 13:09:33         |
| 1     | Si 251.611†        | 345009.8         | 323020.5               | 22987 µg/L   | 22987 ppb             | 22987 ppb             | 13:09:33         |
| 1     | Sn 189.927†        | -25.1            | -21.7                  | -8.7866 µg/L | -8.7866 ppb           | -8.7866 ppb           | 13:09:59         |
| 1     | Ti 334.940†        | 1084902.1        | 1017788.4              | 2562.5 µg/L  | 2562.5 ppb            | 2562.5 ppb            | 13:09:33         |
| 1     | Tl 190.801†        | -80.1            | -38.1                  | 0.9226 µg/L  | 0.9226 ppb            | 0.9226 ppb            | 13:09:59         |
| 1     | U 409.014†         | -1653.0          | -1491.8                | -150.91 µg/L | -150.91 ppb           | -150.91 ppb           | 13:09:33         |
| 1     | V 292.402†         | 2358.9           | 2092.4                 | 15.792 µg/L  | 15.792 ppb            | 15.792 ppb            | 13:09:39         |
| 1     | Zn 213.857†        | 20626.4          | 18704.5                | 450.32 µg/L  | 450.32 ppb            | 450.32 ppb            | 13:09:39         |
| 2     | Sc RADIAL          | 88400.9          | 88400.9                | 103 %        |                       |                       | 13:08:34         |
| 2     | Al 396.153Radial†  | 17416.7          | 17162.7                | 8936.6 µg/L  | 8936.6 ppb            | 8936.6 ppb            | 13:08:34         |
| 2     | Ca 317.933Radial†  | 18672.5          | 17799.3                | 6591.5 µg/L  | 6591.5 ppb            | 6591.5 ppb            | 13:08:34         |
| 2     | Fe 238.204 Radial† | 5284.8           | 5114.8                 | 58220 µg/L   | 58220 ppb             | 58220 ppb             | 13:08:54         |
| 2     | K 766.490 Radial†  | 11124.8          | 10424.6                | 5276.8 µg/L  | 5276.8 ppb            | 5276.8 ppb            | 13:08:34         |
| 2     | Mg 279.077 IEC†    | 102.5            | 93.5                   | 1123.1 µg/L  | 1123.1 ppb            | 1123.1 ppb            | 13:08:54         |
| 2     | Na 589.592 Radial† | 8087.1           | 7637.4                 | 3641.8 µg/L  | 3641.8 ppb            | 3641.8 ppb            | 13:08:34         |
| 2     | Sr 421.552†        | 2524.1           | 2331.5                 | 14.189 µg/L  | 14.189 ppb            | 14.189 ppb            | 13:08:34         |
| 2     | Sc 361.383         | 1949785.1        | 1949785.1              | 107.06 %     |                       |                       | 13:10:07         |
| 2     | Y 371.029          | 1488688.6        | 1488688.6              | 118.23 %     |                       |                       | 13:10:07         |
| 2     | Ag 328.068†        | -1285.1          | -662.9                 | -1.0459 µg/L | -1.0459 ppb           | -1.0459 ppb           | 13:10:13         |
| 2     | As 188.979†        | 3.4              | 5.7                    | 0.8056 µg/L  | 0.8056 ppb            | 0.8056 ppb            | 13:10:33         |
| 2     | B 249.677†         | 801.3            | 439.4                  | -8.7997 µg/L | -8.7997 ppb           | -8.7997 ppb           | 13:10:13         |
| 2     | Ba 233.527†        | 6362.6           | 5962.1                 | 139.60 µg/L  | 139.60 ppb            | 139.60 ppb            | 13:10:13         |
| 2     | Be 313.107†        | 8298.7           | 9286.7                 | 4.8760 µg/L  | 4.8760 ppb            | 4.8760 ppb            | 13:10:13         |
| 2     | Cd 226.502†        | 121.8            | 279.9                  | 0.5562 µg/L  | 0.5562 ppb            | 0.5562 ppb            | 13:10:33         |
| 2     | Co 228.616†        | 295.6            | 251.3                  | 6.2103 µg/L  | 6.2103 ppb            | 6.2103 ppb            | 13:10:33         |
| 2     | Cr 267.716†        | 2479.8           | 2256.2                 | 52.205 µg/L  | 52.205 ppb            | 52.205 ppb            | 13:10:13         |
| 2     | Cu 324.752†        | 4685.6           | 107.8                  | 11.702 µg/L  | 11.702 ppb            | 11.702 ppb            | 13:10:13         |
| 2     | Mn 257.610†        | 920140.0         | 860178.0               | 2827.5 µg/L  | 2827.5 ppb            | 2827.5 ppb            | 13:10:07         |
| 2     | Mo 202.031†        | 108.0            | 91.0                   | 11.765 µg/L  | 11.765 ppb            | 11.765 ppb            | 13:10:33         |
| 2     | Ni 231.604†        | 681.3            | 282.6                  | 17.472 µg/L  | 17.472 ppb            | 17.472 ppb            | 13:10:33         |
| 2     | P 214.914†         | 540.7            | 218.1                  | 327.02 µg/L  | 327.02 ppb            | 327.02 ppb            | 13:10:33         |
| 2     | Pb 220.353†        | 213.2            | 155.8                  | 45.521 µg/L  | 45.521 ppb            | 45.521 ppb            | 13:10:33         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 26.3      | 2.6       | 8.5841 µg/L  | 8.5841 ppb  | 13:10:33 |
| 2 | Sb 206.836†        | 14.0      | -13.9     | -13.636 µg/L | -13.636 ppb | 13:10:33 |
| 2 | Se 196.026†        | -17.1     | -42.7     | 141.33 µg/L  | 141.33 ppb  | 13:10:33 |
| 2 | SiO2†              | 279897.0  | 258581.5  | 48870 µg/L   | 48870 ppb   | 13:10:07 |
| 2 | Si 251.611†        | 342982.8  | 319931.3  | 22767 µg/L   | 22767 ppb   | 13:10:07 |
| 2 | Sn 189.927†        | -20.6     | -17.4     | -6.9670 µg/L | -6.9670 ppb | 13:10:33 |
| 2 | Ti 334.940†        | 1078521.6 | 1008068.4 | 2538.0 µg/L  | 2538.0 ppb  | 13:10:07 |
| 2 | Tl 190.801†        | -77.5     | -35.4     | 3.4182 µg/L  | 3.4182 ppb  | 13:10:33 |
| 2 | U 409.014†         | -1756.8   | -1583.0   | -159.58 µg/L | -159.58 ppb | 13:10:07 |
| 2 | V 292.402†         | 2358.3    | 2083.7    | 15.727 µg/L  | 15.727 ppb  | 13:10:13 |
| 2 | Zn 213.857†        | 20548.8   | 18560.6   | 446.85 µg/L  | 446.85 ppb  | 13:10:13 |
| 3 | Sc RADIAL          | 88273.6   | 88273.6   | 103 %        |             | 13:09:00 |
| 3 | Al 396.153Radial†  | 17265.0   | 17039.7   | 8872.6 µg/L  | 8872.6 ppb  | 13:09:00 |
| 3 | Ca 317.933Radial†  | 18522.2   | 17679.4   | 6547.1 µg/L  | 6547.1 ppb  | 13:09:00 |
| 3 | Fe 238.204 Radial† | 5279.9    | 5117.4    | 58250 µg/L   | 58250 ppb   | 13:09:20 |
| 3 | K 766.490 Radial†  | 10909.1   | 10230.5   | 5178.5 µg/L  | 5178.5 ppb  | 13:09:00 |
| 3 | Mg 279.077 IEC†    | 109.3     | 100.3     | 1209.7 µg/L  | 1209.7 ppb  | 13:09:20 |
| 3 | Na 589.592 Radial† | 8014.7    | 7578.4    | 3613.7 µg/L  | 3613.7 ppb  | 13:09:00 |
| 3 | Sr 421.552†        | 2487.7    | 2299.7    | 13.995 µg/L  | 13.995 ppb  | 13:09:00 |
| 3 | Sc 361.383         | 1963440.1 | 1963440.1 | 107.81 %     |             | 13:10:41 |
| 3 | Y 371.029          | 1487939.2 | 1487939.2 | 118.17 %     |             | 13:10:41 |
| 3 | Ag 328.068†        | -1228.9   | -602.3    | -0.5433 µg/L | -0.5433 ppb | 13:10:47 |
| 3 | As 188.979†        | 8.7       | 10.6      | 8.3352 µg/L  | 8.3352 ppb  | 13:11:07 |
| 3 | B 249.677†         | 688.1     | 329.2     | -14.216 µg/L | -14.216 ppb | 13:10:47 |
| 3 | Ba 233.527†        | 5984.2    | 5569.8    | 130.41 µg/L  | 130.41 ppb  | 13:10:47 |
| 3 | Be 313.107†        | 7578.8    | 8565.1    | 4.4795 µg/L  | 4.4795 ppb  | 13:10:47 |
| 3 | Cd 226.502†        | 79.7      | 240.1     | -0.4607 µg/L | -0.4607 ppb | 13:11:07 |
| 3 | Co 228.616†        | 272.6     | 228.0     | 5.4604 µg/L  | 5.4604 ppb  | 13:11:07 |
| 3 | Cr 267.716†        | 2267.1    | 2042.8    | 47.266 µg/L  | 47.266 ppb  | 13:10:47 |
| 3 | Cu 324.752†        | 4627.3    | 23.3      | 11.114 µg/L  | 11.114 ppb  | 13:10:47 |
| 3 | Mn 257.610†        | 877400.5  | 814559.0  | 2677.8 µg/L  | 2677.8 ppb  | 13:10:41 |
| 3 | Mo 202.031†        | 88.3      | 72.1      | 9.7763 µg/L  | 9.7763 ppb  | 13:11:07 |
| 3 | Ni 231.604†        | 663.1     | 261.3     | 16.214 µg/L  | 16.214 ppb  | 13:11:07 |
| 3 | P 214.914†         | 515.8     | 191.4     | 281.53 µg/L  | 281.53 ppb  | 13:11:07 |
| 3 | Pb 220.353†        | 203.2     | 145.1     | 42.505 µg/L  | 42.505 ppb  | 13:11:07 |
| 3 | S 181.975 Axial†   | 23.7      | 0.0       | 0.1143 µg/L  | 0.1143 ppb  | 13:11:07 |
| 3 | Sb 206.836†        | 20.7      | -7.8      | -7.8274 µg/L | -7.8274 ppb | 13:11:07 |
| 3 | Se 196.026†        | -13.3     | -39.0     | 144.97 µg/L  | 144.97 ppb  | 13:11:07 |
| 3 | SiO2†              | 270368.6  | 247925.5  | 46856 µg/L   | 46856 ppb   | 13:10:41 |
| 3 | Si 251.611†        | 331189.3  | 306764.7  | 21830 µg/L   | 21830 ppb   | 13:10:41 |
| 3 | Sn 189.927†        | -17.2     | -14.2     | -5.6148 µg/L | -5.6148 ppb | 13:11:07 |
| 3 | Ti 334.940†        | 1021357.5 | 948041.5  | 2386.9 µg/L  | 2386.9 ppb  | 13:10:41 |
| 3 | Tl 190.801†        | -72.5     | -30.2     | 6.9305 µg/L  | 6.9305 ppb  | 13:11:07 |
| 3 | U 409.014†         | -1605.6   | -1431.3   | -145.10 µg/L | -145.10 ppb | 13:10:41 |
| 3 | V 292.402†         | 2118.2    | 1845.7    | 12.693 µg/L  | 12.693 ppb  | 13:10:47 |
| 3 | Zn 213.857†        | 19315.6   | 17283.3   | 415.90 µg/L  | 415.90 ppb  | 13:10:47 |

## Mean Data: 247188012|954676|1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1951933.7                | 107.18 %     | %            | 0.582    |                    |          | 0.54%   |
| Sc RADIAL          | 88211.0                  | 103 %        | %            | 0.3      |                    |          | 0.26%   |
| Y 371.029          | 1487287.4                | 118.12 %     | %            | 0.144    |                    |          | 0.12%   |
| Ag 328.068†        | -631.1                   | -0.7709 µg/L | µg/L         | 0.25463  | -0.7709 ppb        | 0.25463  | 33.03%  |
| Al 396.153Radial†  | 17137.9                  | 8923.6 µg/L  | µg/L         | 45.98    | 8923.6 ppb         | 45.98    | 0.52%   |
| As 188.979†        | 9.4                      | 6.3868 µg/L  | µg/L         | 4.90624  | 6.3868 ppb         | 4.90624  | 76.82%  |
| B 249.677†         | 394.8                    | -11.041 µg/L | µg/L         | 2.8263   | -11.041 ppb        | 2.8263   | 25.60%  |
| Ba 233.527†        | 5855.1                   | 137.09 µg/L  | µg/L         | 5.846    | 137.09 ppb         | 5.846    | 4.26%   |
| Be 313.107†        | 9099.3                   | 4.7742 µg/L  | µg/L         | 0.25920  | 4.7742 ppb         | 0.25920  | 5.43%   |
| Ca 317.933Radial†  | 17773.0                  | 6581.8 µg/L  | µg/L         | 30.93    | 6581.8 ppb         | 30.93    | 0.47%   |
| Cd 226.502†        | 268.2                    | 0.2453 µg/L  | µg/L         | 0.61291  | 0.2453 ppb         | 0.61291  | 249.84% |
| Co 228.616†        | 246.3                    | 6.0721 µg/L  | µg/L         | 0.55557  | 6.0721 ppb         | 0.55557  | 9.15%   |
| Cr 267.716†        | 2186.9                   | 50.602 µg/L  | µg/L         | 2.8894   | 50.602 ppb         | 2.8894   | 5.71%   |
| Cu 324.752†        | 73.9                     | 11.485 µg/L  | µg/L         | 0.3225   | 11.485 ppb         | 0.3225   | 2.81%   |
| Fe 238.204 Radial† | 5124.4                   | 58330 µg/L   | µg/L         | 165.0    | 58330 ppb          | 165.0    | 0.28%   |
| K 766.490 Radial†  | 10313.1                  | 5220.3 µg/L  | µg/L         | 50.73    | 5220.3 ppb         | 50.73    | 0.97%   |
| Mg 279.077 IEC†    | 96.1                     | 1156.0 µg/L  | µg/L         | 46.85    | 1156.0 ppb         | 46.85    | 4.05%   |
| Mn 257.610†        | 847567.8                 | 2786.1 µg/L  | µg/L         | 94.73    | 2786.1 ppb         | 94.73    | 3.40%   |
| Mo 202.031†        | 84.9                     | 11.124 µg/L  | µg/L         | 1.1677   | 11.124 ppb         | 1.1677   | 10.50%  |
| Na 589.592 Radial† | 7596.1                   | 3622.1 µg/L  | µg/L         | 17.12    | 3622.1 ppb         | 17.12    | 0.47%   |

|                  |          |              |         |             |         |        |
|------------------|----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 281.8    | 17.425 µg/L  | 1.1885  | 17.425 ppb  | 1.1885  | 6.82%  |
| P 214.914†       | 212.3    | 317.10 µg/L  | 31.795  | 317.10 ppb  | 31.795  | 10.03% |
| Pb 220.353†      | 152.1    | 44.472 µg/L  | 1.7045  | 44.472 ppb  | 1.7045  | 3.83%  |
| S 181.975 Axial† | 2.4      | 7.8021 µg/L  | 7.32823 | 7.8021 ppb  | 7.32823 | 93.93% |
| Sb 206.836†      | -10.3    | -10.175 µg/L | 3.0600  | -10.175 ppb | 3.0600  | 30.07% |
| Se 196.026†      | -44.3    | 140.08 µg/L  | 5.621   | 140.08 ppb  | 5.621   | 4.01%  |
| SiO2†            | 255841.8 | 48352 µg/L   | 1316.0  | 48352 ppb   | 1316.0  | 2.72%  |
| Si 251.611†      | 316572.2 | 22528 µg/L   | 614.3   | 22528 ppb   | 614.3   | 2.73%  |
| Sn 189.927†      | -17.8    | -7.1228 µg/L | 1.59166 | -7.1228 ppb | 1.59166 | 22.35% |
| Sr 421.552†      | 2304.5   | 14.025 µg/L  | 0.1518  | 14.025 ppb  | 0.1518  | 1.08%  |
| Ti 334.940†      | 991299.4 | 2495.8 µg/L  | 95.11   | 2495.8 ppb  | 95.11   | 3.81%  |
| Tl 190.801†      | -34.6    | 3.7571 µg/L  | 3.01823 | 3.7571 ppb  | 3.01823 | 80.33% |
| U 409.014†       | -1502.1  | -151.86 µg/L | 7.285   | -151.86 ppb | 7.285   | 4.80%  |
| V 292.402†       | 2007.3   | 14.737 µg/L  | 1.7706  | 14.737 ppb  | 1.7706  | 12.01% |
| Zn 213.857†      | 18182.8  | 437.69 µg/L  | 18.950  | 437.69 ppb  | 18.950  | 4.33%  |

Sequence No.: 30  
 Sample ID: 247188013|954676|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 324  
 Date Collected: 3/11/2010 13:11:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 247188013|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 86532.9       | 86532.9             | 101 %        |              |                    | 13:11:49      |
| 1     | Al 396.153Radial†  | 16424.4       | 16543.7             | 8614.3 µg/L  |              | 8614.3 ppb         | 13:11:49      |
| 1     | Ca 317.933Radial†  | 8239.0        | 7844.7              | 2905.1 µg/L  |              | 2905.1 ppb         | 13:11:49      |
| 1     | Fe 238.204 Radial† | 6027.6        | 5962.0              | 67864 µg/L   |              | 67864 ppb          | 13:12:09      |
| 1     | K 766.490 Radial†  | 8061.7        | 7620.3              | 3857.3 µg/L  |              | 3857.3 ppb         | 13:11:49      |
| 1     | Mg 279.077 IEC†    | 146.0         | 138.8               | 1687.4 µg/L  |              | 1687.4 ppb         | 13:12:09      |
| 1     | Na 589.592 Radial† | 6726.2        | 6457.4              | 3079.2 µg/L  |              | 3079.2 ppb         | 13:11:49      |
| 1     | Sr 421.552†        | 2533.8        | 2394.1              | 14.570 µg/L  |              | 14.570 ppb         | 13:11:49      |
| 1     | Sc 361.383         | 1913314.7     | 1913314.7           | 105.06 %     |              |                    | 13:13:14      |
| 1     | Y 371.029          | 1426937.3     | 1426937.3           | 113.33 %     |              |                    | 13:13:14      |
| 1     | Ag 328.068†        | -1354.2       | -751.5              | -1.0175 µg/L |              | -1.0175 ppb        | 13:13:20      |
| 1     | As 188.979†        | 6.2           | 8.4                 | 4.2252 µg/L  |              | 4.2252 ppb         | 13:13:40      |
| 1     | B 249.677†         | 784.1         | 437.2               | -13.930 µg/L |              | -13.930 ppb        | 13:13:20      |
| 1     | Ba 233.527†        | 5595.5        | 5345.2              | 125.17 µg/L  |              | 125.17 ppb         | 13:13:20      |
| 1     | Be 313.107†        | 6628.6        | 7844.8              | 3.6576 µg/L  |              | 3.6576 ppb         | 13:13:20      |
| 1     | Cd 226.502†        | 163.7         | 322.0               | 0.5477 µg/L  |              | 0.5477 ppb         | 13:13:40      |
| 1     | Co 228.616†        | 306.5         | 266.9               | 5.2205 µg/L  |              | 5.2205 ppb         | 13:13:40      |
| 1     | Cr 267.716†        | 2631.6        | 2444.8              | 56.573 µg/L  |              | 56.573 ppb         | 13:13:20      |
| 1     | Cu 324.752†        | 4329.2        | -148.0              | 11.719 µg/L  |              | 11.719 ppb         | 13:13:20      |
| 1     | Mn 257.610†        | 729005.1      | 694633.1            | 2284.5 µg/L  |              | 2284.5 ppb         | 13:13:14      |
| 1     | Mo 202.031†        | 73.6          | 60.2                | 8.8986 µg/L  |              | 8.8986 ppb         | 13:13:40      |
| 1     | Ni 231.604†        | 887.0         | 490.5               | 29.905 µg/L  |              | 29.905 ppb         | 13:13:40      |
| 1     | P 214.914†         | 690.8         | 370.6               | 579.54 µg/L  |              | 579.54 ppb         | 13:13:40      |
| 1     | Pb 220.353†        | 139.9         | 89.8                | 27.164 µg/L  |              | 27.164 ppb         | 13:13:40      |
| 1     | S 181.975 Axial†   | 29.3          | 5.9                 | 19.492 µg/L  |              | 19.492 ppb         | 13:13:40      |
| 1     | Sb 206.836†        | 13.7          | -14.0               | -13.727 µg/L |              | -13.727 ppb        | 13:13:40      |
| 1     | Se 196.026†        | -26.9         | -52.3               | 162.40 µg/L  |              | 162.40 ppb         | 13:13:40      |
| 1     | SiO2†              | 277722.6      | 261495.0            | 49420 µg/L   |              | 49420 ppb          | 13:13:14      |
| 1     | Si 251.611†        | 340408.1      | 323587.0            | 23027 µg/L   |              | 23027 ppb          | 13:13:14      |
| 1     | Sn 189.927†        | 11.6          | 12.8                | 5.3771 µg/L  |              | 5.3771 ppb         | 13:13:40      |
| 1     | Ti 334.940†        | 1399140.3     | 1332442.6           | 3354.6 µg/L  |              | 3354.6 ppb         | 13:13:14      |
| 1     | Tl 190.801†        | -82.8         | -41.8               | 3.7185 µg/L  |              | 3.7185 ppb         | 13:13:40      |
| 1     | U 409.014†         | -1967.9       | -1815.2             | -182.85 µg/L |              | -182.85 ppb        | 13:13:14      |
| 1     | V 292.402†         | 2923.5        | 2663.7              | 21.264 µg/L  |              | 21.264 ppb         | 13:13:20      |
| 1     | Zn 213.857†        | 19288.8       | 17727.1             | 426.11 µg/L  |              | 426.11 ppb         | 13:13:20      |
| 2     | Sc RADIAL          | 86248.1       | 86248.1             | 101 %        |              |                    | 13:12:15      |
| 2     | Al 396.153Radial†  | 16481.7       | 16654.5             | 8672.0 µg/L  |              | 8672.0 ppb         | 13:12:15      |
| 2     | Ca 317.933Radial†  | 8281.7        | 7914.2              | 2930.8 µg/L  |              | 2930.8 ppb         | 13:12:15      |
| 2     | Fe 238.204 Radial† | 6050.8        | 6004.9              | 68353 µg/L   |              | 68353 ppb          | 13:12:35      |
| 2     | K 766.490 Radial†  | 8102.8        | 7687.7              | 3891.4 µg/L  |              | 3891.4 ppb         | 13:12:15      |
| 2     | Mg 279.077 IEC†    | 143.4         | 136.7               | 1660.4 µg/L  |              | 1660.4 ppb         | 13:12:35      |
| 2     | Na 589.592 Radial† | 6754.0        | 6507.1              | 3102.9 µg/L  |              | 3102.9 ppb         | 13:12:15      |
| 2     | Sr 421.552†        | 2504.0        | 2372.7              | 14.440 µg/L  |              | 14.440 ppb         | 13:12:15      |
| 2     | Sc 361.383         | 1911297.7     | 1911297.7           | 104.95 %     |              |                    | 13:13:48      |
| 2     | Y 371.029          | 1425545.6     | 1425545.6           | 113.22 %     |              |                    | 13:13:48      |
| 2     | Ag 328.068†        | -1333.9       | -733.5              | -0.8259 µg/L |              | -0.8259 ppb        | 13:13:54      |
| 2     | As 188.979†        | 3.5           | 5.9                 | 0.2070 µg/L  |              | 0.2070 ppb         | 13:14:14      |
| 2     | B 249.677†         | 782.5         | 436.5               | -14.222 µg/L |              | -14.222 ppb        | 13:13:54      |
| 2     | Ba 233.527†        | 5580.1        | 5336.1              | 124.96 µg/L  |              | 124.96 ppb         | 13:13:54      |
| 2     | Be 313.107†        | 6457.2        | 7688.2              | 3.5587 µg/L  |              | 3.5587 ppb         | 13:13:54      |
| 2     | Cd 226.502†        | 157.4         | 316.1               | 0.3441 µg/L  |              | 0.3441 ppb         | 13:14:14      |
| 2     | Co 228.616†        | 311.5         | 272.0               | 5.4497 µg/L  |              | 5.4497 ppb         | 13:14:14      |
| 2     | Cr 267.716†        | 2589.7        | 2407.6              | 55.711 µg/L  |              | 55.711 ppb         | 13:13:54      |
| 2     | Cu 324.752†        | 4338.7        | -134.6              | 11.905 µg/L  |              | 11.905 ppb         | 13:13:54      |
| 2     | Mn 257.610†        | 729164.2      | 695517.0            | 2287.5 µg/L  |              | 2287.5 ppb         | 13:13:48      |
| 2     | Mo 202.031†        | 73.2          | 59.9                | 8.8897 µg/L  |              | 8.8897 ppb         | 13:14:14      |
| 2     | Ni 231.604†        | 885.3         | 489.8               | 29.869 µg/L  |              | 29.869 ppb         | 13:14:14      |
| 2     | P 214.914†         | 708.2         | 387.8               | 608.56 µg/L  |              | 608.56 ppb         | 13:14:14      |
| 2     | Pb 220.353†        | 137.3         | 87.4                | 26.514 µg/L  |              | 26.514 ppb         | 13:14:14      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 30.0      | 6.6       | 21.685 µg/L  | 21.685 ppb  | 13:14:14 |
| 2 | Sb 206.836†        | 16.8      | -11.0     | -10.876 µg/L | -10.876 ppb | 13:14:14 |
| 2 | Se 196.026†        | -31.4     | -56.7     | 159.70 µg/L  | 159.70 ppb  | 13:14:14 |
| 2 | SiO2†              | 277566.7  | 261625.5  | 49445 µg/L   | 49445 ppb   | 13:13:48 |
| 2 | Si 251.611†        | 340285.9  | 323812.6  | 23043 µg/L   | 23043 ppb   | 13:13:48 |
| 2 | Sn 189.927†        | 11.3      | 12.5      | 5.2560 µg/L  | 5.2560 ppb  | 13:14:14 |
| 2 | Ti 334.940†        | 1398134.4 | 1332889.5 | 3355.7 µg/L  | 3355.7 ppb  | 13:13:48 |
| 2 | Tl 190.801†        | -83.9     | -42.9     | 2.6579 µg/L  | 2.6579 ppb  | 13:14:14 |
| 2 | U 409.014†         | -1940.7   | -1791.3   | -180.64 µg/L | -180.64 ppb | 13:13:48 |
| 2 | V 292.402†         | 2914.2    | 2657.7    | 21.099 µg/L  | 21.099 ppb  | 13:13:54 |
| 2 | Zn 213.857†        | 19153.2   | 17617.3   | 423.43 µg/L  | 423.43 ppb  | 13:13:54 |
| 3 | Sc RADIAL          | 86448.8   | 86448.8   | 101 %        |             | 13:12:41 |
| 3 | Al 396.153Radial†  | 16506.2   | 16640.8   | 8664.9 µg/L  | 8664.9 ppb  | 13:12:41 |
| 3 | Ca 317.933Radial†  | 8250.2    | 7863.8    | 2912.1 µg/L  | 2912.1 ppb  | 13:12:41 |
| 3 | Fe 238.204 Radial† | 6067.6    | 6007.6    | 68383 µg/L   | 68383 ppb   | 13:13:01 |
| 3 | K 766.490 Radial†  | 8218.3    | 7783.5    | 3939.9 µg/L  | 3939.9 ppb  | 13:12:41 |
| 3 | Mg 279.077 IEC†    | 148.0     | 141.0     | 1714.2 µg/L  | 1714.2 ppb  | 13:13:01 |
| 3 | Na 589.592 Radial† | 6783.8    | 6521.1    | 3109.5 µg/L  | 3109.5 ppb  | 13:12:41 |
| 3 | Sr 421.552†        | 2570.0    | 2432.4    | 14.803 µg/L  | 14.803 ppb  | 13:12:41 |
| 3 | Sc 361.383         | 1910818.5 | 1910818.5 | 104.92 %     |             | 13:14:22 |
| 3 | Y 371.029          | 1422097.3 | 1422097.3 | 112.94 %     |             | 13:14:22 |
| 3 | Ag 328.068†        | -1339.8   | -739.5    | -0.8925 µg/L | -0.8925 ppb | 13:14:28 |
| 3 | As 188.979†        | 3.3       | 5.7       | -0.0488 µg/L | -0.0488 ppb | 13:14:48 |
| 3 | B 249.677†         | 765.0     | 420.0     | -15.048 µg/L | -15.048 ppb | 13:14:28 |
| 3 | Ba 233.527†        | 5329.5    | 5098.6    | 119.39 µg/L  | 119.39 ppb  | 13:14:28 |
| 3 | Be 313.107†        | 6094.8    | 7344.4    | 3.3983 µg/L  | 3.3983 ppb  | 13:14:28 |
| 3 | Cd 226.502†        | 139.4     | 299.1     | -0.0954 µg/L | -0.0954 ppb | 13:14:48 |
| 3 | Co 228.616†        | 274.1     | 236.4     | 4.1260 µg/L  | 4.1260 ppb  | 13:14:48 |
| 3 | Cr 267.716†        | 2431.0    | 2256.9    | 52.224 µg/L  | 52.224 ppb  | 13:14:28 |
| 3 | Cu 324.752†        | 4283.6    | -186.1    | 11.550 µg/L  | 11.550 ppb  | 13:14:28 |
| 3 | Mn 257.610†        | 701441.7  | 669269.8  | 2201.3 µg/L  | 2201.3 ppb  | 13:14:22 |
| 3 | Mo 202.031†        | 59.4      | 46.8      | 7.5118 µg/L  | 7.5118 ppb  | 13:14:48 |
| 3 | Ni 231.604†        | 846.8     | 453.2     | 27.707 µg/L  | 27.707 ppb  | 13:14:48 |
| 3 | P 214.914†         | 651.2     | 333.6     | 516.14 µg/L  | 516.14 ppb  | 13:14:48 |
| 3 | Pb 220.353†        | 133.7     | 84.0      | 25.548 µg/L  | 25.548 ppb  | 13:14:48 |
| 3 | S 181.975 Axial†   | 26.5      | 3.3       | 10.806 µg/L  | 10.806 ppb  | 13:14:48 |
| 3 | Sb 206.836†        | 20.8      | -7.2      | -7.2889 µg/L | -7.2889 ppb | 13:14:48 |
| 3 | Se 196.026†        | -26.4     | -51.9     | 164.45 µg/L  | 164.45 ppb  | 13:14:48 |
| 3 | SiO2†              | 269991.2  | 254471.8  | 48093 µg/L   | 48093 ppb   | 13:14:22 |
| 3 | Si 251.611†        | 330388.7  | 314461.2  | 22378 µg/L   | 22378 ppb   | 13:14:22 |
| 3 | Sn 189.927†        | 5.2       | 6.8       | 2.8212 µg/L  | 2.8212 ppb  | 13:14:48 |
| 3 | Ti 334.940†        | 1336504.3 | 1274486.0 | 3208.6 µg/L  | 3208.6 ppb  | 13:14:22 |
| 3 | Tl 190.801†        | -79.8     | -39.0     | 5.0963 µg/L  | 5.0963 ppb  | 13:14:48 |
| 3 | U 409.014†         | -1775.4   | -1634.2   | -165.65 µg/L | -165.65 ppb | 13:14:22 |
| 3 | V 292.402†         | 2691.0    | 2445.7    | 18.404 µg/L  | 18.404 ppb  | 13:14:28 |
| 3 | Zn 213.857†        | 18384.4   | 16889.1   | 405.79 µg/L  | 405.79 ppb  | 13:14:28 |

Mean Data: 247188013|954676|1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1911810.3                | 104.98 %     | %            | 0.073    |                    |          | 0.07%   |
| Sc RADIAL          | 86409.9                  | 101 %        | %            | 0.2      |                    |          | 0.17%   |
| Y 371.029          | 1424860.1                | 113.16 %     | %            | 0.198    |                    |          | 0.17%   |
| Ag 328.068†        | -741.5                   | -0.9120 µg/L | µg/L         | 0.09728  | -0.9120 ppb        | 0.09728  | 10.67%  |
| Al 396.153Radial†  | 16613.0                  | 8650.4 µg/L  | µg/L         | 31.45    | 8650.4 ppb         | 31.45    | 0.36%   |
| As 188.979†        | 6.7                      | 1.4611 µg/L  | µg/L         | 2.39715  | 1.4611 ppb         | 2.39715  | 164.06% |
| B 249.677†         | 431.3                    | -14.400 µg/L | µg/L         | 0.5802   | -14.400 ppb        | 0.5802   | 4.03%   |
| Ba 233.527†        | 5260.0                   | 123.17 µg/L  | µg/L         | 3.275    | 123.17 ppb         | 3.275    | 2.66%   |
| Be 313.107†        | 7625.8                   | 3.5382 µg/L  | µg/L         | 0.13085  | 3.5382 ppb         | 0.13085  | 3.70%   |
| Ca 317.933Radial†  | 7874.2                   | 2916.0 µg/L  | µg/L         | 13.30    | 2916.0 ppb         | 13.30    | 0.46%   |
| Cd 226.502†        | 312.4                    | 0.2654 µg/L  | µg/L         | 0.32866  | 0.2654 ppb         | 0.32866  | 123.81% |
| Co 228.616†        | 258.4                    | 4.9320 µg/L  | µg/L         | 0.70742  | 4.9320 ppb         | 0.70742  | 14.34%  |
| Cr 267.716†        | 2369.7                   | 54.836 µg/L  | µg/L         | 2.3028   | 54.836 ppb         | 2.3028   | 4.20%   |
| Cu 324.752†        | -156.2                   | 11.725 µg/L  | µg/L         | 0.1779   | 11.725 ppb         | 0.1779   | 1.52%   |
| Fe 238.204 Radial† | 5991.5                   | 68200 µg/L   | µg/L         | 291.2    | 68200 ppb          | 291.2    | 0.43%   |
| K 766.490 Radial†  | 7697.2                   | 3896.2 µg/L  | µg/L         | 41.52    | 3896.2 ppb         | 41.52    | 1.07%   |
| Mg 279.077 IEC†    | 138.9                    | 1687.3 µg/L  | µg/L         | 26.91    | 1687.3 ppb         | 26.91    | 1.59%   |
| Mn 257.610†        | 686473.3                 | 2257.8 µg/L  | µg/L         | 48.93    | 2257.8 ppb         | 48.93    | 2.17%   |
| Mo 202.031†        | 55.7                     | 8.4334 µg/L  | µg/L         | 0.79811  | 8.4334 ppb         | 0.79811  | 9.46%   |
| Na 589.592 Radial† | 6495.2                   | 3097.2 µg/L  | µg/L         | 15.96    | 3097.2 ppb         | 15.96    | 0.52%   |

|                  |           |              |         |             |         |        |
|------------------|-----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 477.9     | 29.160 µg/L  | 1.2588  | 29.160 ppb  | 1.2588  | 4.32%  |
| P 214.914†       | 364.0     | 568.08 µg/L  | 47.263  | 568.08 ppb  | 47.263  | 8.32%  |
| Pb 220.353†      | 87.1      | 26.408 µg/L  | 0.8131  | 26.408 ppb  | 0.8131  | 3.08%  |
| S 181.975 Axial† | 5.2       | 17.327 µg/L  | 5.7536  | 17.327 ppb  | 5.7536  | 33.21% |
| Sb 206.836†      | -10.7     | -10.631 µg/L | 3.2259  | -10.631 ppb | 3.2259  | 30.34% |
| Se 196.026†      | -53.6     | 162.18 µg/L  | 2.383   | 162.18 ppb  | 2.383   | 1.47%  |
| SiO2†            | 259197.4  | 48986 µg/L   | 773.6   | 48986 ppb   | 773.6   | 1.58%  |
| Si 251.611†      | 320620.3  | 22816 µg/L   | 379.7   | 22816 ppb   | 379.7   | 1.66%  |
| Sn 189.927†      | 10.7      | 4.4848 µg/L  | 1.44194 | 4.4848 ppb  | 1.44194 | 32.15% |
| Sr 421.552†      | 2399.8    | 14.604 µg/L  | 0.1841  | 14.604 ppb  | 0.1841  | 1.26%  |
| Ti 334.940†      | 1313272.7 | 3306.3 µg/L  | 84.57   | 3306.3 ppb  | 84.57   | 2.56%  |
| Tl 190.801†      | -41.2     | 3.8242 µg/L  | 1.22268 | 3.8242 ppb  | 1.22268 | 31.97% |
| U 409.014†       | -1746.9   | -176.38 µg/L | 9.358   | -176.38 ppb | 9.358   | 5.31%  |
| V 292.402†       | 2589.0    | 20.256 µg/L  | 1.6056  | 20.256 ppb  | 1.6056  | 7.93%  |
| Zn 213.857†      | 17411.2   | 418.45 µg/L  | 11.040  | 418.45 ppb  | 11.040  | 2.64%  |



Sequence No.: 31  
 Sample ID: 247188014|954676|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 325  
 Date Collected: 3/11/2010 13:14:57  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 247188014|954676|1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 85994.2       | 85994.2             | 100 %              |                    | 13:15:30      |
| 1     | Al 396.153Radial†  | 14483.3       | 14708.9             | 7658.9 µg/L        | 7658.9 ppb         | 13:15:30      |
| 1     | Ca 317.933Radial†  | 17147.5       | 16785.0             | 6215.9 µg/L        | 6215.9 ppb         | 13:15:30      |
| 1     | Fe 238.204 Radial† | 5918.2        | 5890.3              | 67049 µg/L         | 67049 ppb          | 13:15:51      |
| 1     | K 766.490 Radial†  | 9601.4        | 9206.8              | 4660.3 µg/L        | 4660.3 ppb         | 13:15:30      |
| 1     | Mg 279.077 IEC†    | 151.0         | 144.7               | 1762.6 µg/L        | 1762.6 ppb         | 13:15:51      |
| 1     | Na 589.592 Radial† | 6824.9        | 6597.6              | 3146.0 µg/L        | 3146.0 ppb         | 13:15:30      |
| 1     | Sr 421.552†        | 2371.4        | 2247.7              | 13.679 µg/L        | 13.679 ppb         | 13:15:30      |
| 1     | Sc 361.383         | 1926637.3     | 1926637.3           | 105.79 %           |                    | 13:16:55      |
| 1     | Y 371.029          | 1495440.7     | 1495440.7           | 118.77 %           |                    | 13:16:55      |
| 1     | Ag 328.068†        | -1440.2       | -823.9              | -1.6906 µg/L       | -1.6906 ppb        | 13:17:01      |
| 1     | As 188.979†        | 10.2          | 12.2                | 9.6992 µg/L        | 9.6992 ppb         | 13:17:21      |
| 1     | B 249.677†         | 811.6         | 458.1               | -12.547 µg/L       | -12.547 ppb        | 13:17:01      |
| 1     | Ba 233.527†        | 5909.4        | 5605.1              | 131.26 µg/L        | 131.26 ppb         | 13:17:01      |
| 1     | Be 313.107†        | 11656.6       | 12553.9             | 6.6546 µg/L        | 6.6546 ppb         | 13:17:01      |
| 1     | Cd 226.502†        | 169.2         | 326.1               | 0.7196 µg/L        | 0.7196 ppb         | 13:17:21      |
| 1     | Co 228.616†        | 298.1         | 257.0               | 4.9511 µg/L        | 4.9511 ppb         | 13:17:21      |
| 1     | Cr 267.716†        | 864.6         | 757.2               | 17.538 µg/L        | 17.538 ppb         | 13:17:21      |
| 1     | Cu 324.752†        | 5160.9        | 609.6               | 16.885 µg/L        | 16.885 ppb         | 13:17:01      |
| 1     | Mn 257.610†        | 1102058.8     | 1042461.0           | 3426.5 µg/L        | 3426.5 ppb         | 13:16:55      |
| 1     | Mo 202.031†        | 63.4          | 50.1                | 7.8066 µg/L        | 7.8066 ppb         | 13:17:21      |
| 1     | Ni 231.604†        | 444.2         | 66.1                | 4.7724 µg/L        | 4.7724 ppb         | 13:17:21      |
| 1     | P 214.914†         | 639.7         | 317.7               | 488.94 µg/L        | 488.94 ppb         | 13:17:21      |
| 1     | Pb 220.353†        | 253.0         | 195.8               | 56.799 µg/L        | 56.799 ppb         | 13:17:21      |
| 1     | S 181.975 Axial†   | 23.8          | 0.5                 | 1.7919 µg/L        | 1.7919 ppb         | 13:17:21      |
| 1     | Sb 206.836†        | 11.3          | -16.3               | -15.534 µg/L       | -15.534 ppb        | 13:17:21      |
| 1     | Se 196.026†        | -35.5         | -60.3               | 151.55 µg/L        | 151.55 ppb         | 13:17:21      |
| 1     | SiO2†              | 275697.3      | 257752.7            | 48713 µg/L         | 48713 ppb          | 13:16:55      |
| 1     | Si 251.611†        | 337928.9      | 319003.1            | 22701 µg/L         | 22701 ppb          | 13:16:55      |
| 1     | Sn 189.927†        | -23.2         | -20.2               | -8.1972 µg/L       | -8.1972 ppb        | 13:17:21      |
| 1     | Ti 334.940†        | 1371274.2     | 1296893.5           | 3265.1 µg/L        | 3265.1 ppb         | 13:16:55      |
| 1     | Tl 190.801†        | -82.8         | -41.3               | 7.2888 µg/L        | 7.2888 ppb         | 13:17:21      |
| 1     | U 409.014†         | -2081.3       | -1909.5             | -191.94 µg/L       | -191.94 ppb        | 13:16:55      |
| 1     | V 292.402†         | 3095.9        | 2807.4              | 23.136 µg/L        | 23.136 ppb         | 13:17:01      |
| 1     | Zn 213.857†        | 25700.0       | 23660.3             | 570.03 µg/L        | 570.03 ppb         | 13:17:01      |
| 2     | Sc RADIAL          | 86394.1       | 86394.1             | 101 %              |                    | 13:15:56      |
| 2     | Al 396.153Radial†  | 14418.1       | 14577.2             | 7590.4 µg/L        | 7590.4 ppb         | 13:15:56      |
| 2     | Ca 317.933Radial†  | 17057.1       | 16616.0             | 6153.3 µg/L        | 6153.3 ppb         | 13:15:56      |
| 2     | Fe 238.204 Radial† | 5930.2        | 5874.9              | 66873 µg/L         | 66873 ppb          | 13:16:17      |
| 2     | K 766.490 Radial†  | 9565.8        | 9127.1              | 4620.0 µg/L        | 4620.0 ppb         | 13:15:56      |
| 2     | Mg 279.077 IEC†    | 149.8         | 142.9               | 1739.5 µg/L        | 1739.5 ppb         | 13:16:17      |
| 2     | Na 589.592 Radial† | 6722.9        | 6464.8              | 3082.7 µg/L        | 3082.7 ppb         | 13:15:56      |
| 2     | Sr 421.552†        | 2319.0        | 2184.8              | 13.296 µg/L        | 13.296 ppb         | 13:15:56      |
| 2     | Sc 361.383         | 1931452.5     | 1931452.5           | 106.06 %           |                    | 13:17:29      |
| 2     | Y 371.029          | 1500265.7     | 1500265.7           | 119.15 %           |                    | 13:17:29      |
| 2     | Ag 328.068†        | -1392.2       | -775.2              | -1.2856 µg/L       | -1.2856 ppb        | 13:17:35      |
| 2     | As 188.979†        | 10.2          | 12.2                | 9.7255 µg/L        | 9.7255 ppb         | 13:17:55      |
| 2     | B 249.677†         | 769.5         | 416.5               | -14.489 µg/L       | -14.489 ppb        | 13:17:35      |
| 2     | Ba 233.527†        | 5934.6        | 5614.9              | 131.48 µg/L        | 131.48 ppb         | 13:17:35      |
| 2     | Be 313.107†        | 11697.9       | 12565.3             | 6.6622 µg/L        | 6.6622 ppb         | 13:17:35      |
| 2     | Cd 226.502†        | 172.3         | 328.7               | 0.8063 µg/L        | 0.8063 ppb         | 13:17:55      |
| 2     | Co 228.616†        | 290.4         | 249.0               | 4.5901 µg/L        | 4.5901 ppb         | 13:17:55      |
| 2     | Cr 267.716†        | 872.8         | 762.9               | 17.670 µg/L        | 17.670 ppb         | 13:17:55      |
| 2     | Cu 324.752†        | 5198.4        | 632.8               | 17.015 µg/L        | 17.015 ppb         | 13:17:35      |
| 2     | Mn 257.610†        | 1105253.0     | 1042875.8           | 3427.8 µg/L        | 3427.8 ppb         | 13:17:29      |
| 2     | Mo 202.031†        | 71.5          | 57.6                | 8.5854 µg/L        | 8.5854 ppb         | 13:17:55      |
| 2     | Ni 231.604†        | 470.4         | 89.7                | 6.1686 µg/L        | 6.1686 ppb         | 13:17:55      |
| 2     | P 214.914†         | 630.6         | 307.6               | 471.85 µg/L        | 471.85 ppb         | 13:17:55      |
| 2     | Pb 220.353†        | 229.8         | 173.4               | 50.511 µg/L        | 50.511 ppb         | 13:17:55      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 16.5      | -6.4      | -21.280 µg/L | -21.280 ppb | 13:17:55 |
| 2 | Sb 206.836†        | 17.6      | -10.4     | -9.9418 µg/L | -9.9418 ppb | 13:17:55 |
| 2 | Se 196.026†        | -18.2     | -43.9     | 167.27 µg/L  | 167.27 ppb  | 13:17:55 |
| 2 | SiO2†              | 276256.4  | 257630.2  | 48690 µg/L   | 48690 ppb   | 13:17:29 |
| 2 | Si 251.611†        | 338616.0  | 318854.6  | 22690 µg/L   | 22690 ppb   | 13:17:29 |
| 2 | Sn 189.927†        | -23.9     | -20.8     | -8.4616 µg/L | -8.4616 ppb | 13:17:55 |
| 2 | Ti 334.940†        | 1374172.2 | 1296394.6 | 3263.8 µg/L  | 3263.8 ppb  | 13:17:29 |
| 2 | Tl 190.801†        | -88.3     | -46.3     | 2.0143 µg/L  | 2.0143 ppb  | 13:17:55 |
| 2 | U 409.014†         | -2074.5   | -1898.1   | -190.83 µg/L | -190.83 ppb | 13:17:29 |
| 2 | V 292.402†         | 3102.3    | 2806.2    | 23.160 µg/L  | 23.160 ppb  | 13:17:35 |
| 2 | Zn 213.857†        | 25774.3   | 23669.8   | 570.26 µg/L  | 570.26 ppb  | 13:17:35 |
| 3 | Sc RADIAL          | 86846.2   | 86846.2   | 101 %        |             | 13:16:22 |
| 3 | Al 396.153Radial†  | 14499.6   | 14583.2   | 7593.5 µg/L  | 7593.5 ppb  | 13:16:22 |
| 3 | Ca 317.933Radial†  | 17251.4   | 16719.7   | 6191.7 µg/L  | 6191.7 ppb  | 13:16:22 |
| 3 | Fe 238.204 Radial† | 5946.4    | 5860.3    | 66706 µg/L   | 66706 ppb   | 13:16:42 |
| 3 | K 766.490 Radial†  | 9763.8    | 9273.2    | 4694.0 µg/L  | 4694.0 ppb  | 13:16:22 |
| 3 | Mg 279.077 IEC†    | 149.6     | 141.9     | 1727.0 µg/L  | 1727.0 ppb  | 13:16:42 |
| 3 | Na 589.592 Radial† | 6746.1    | 6453.0    | 3077.1 µg/L  | 3077.1 ppb  | 13:16:22 |
| 3 | Sr 421.552†        | 2383.3    | 2236.4    | 13.610 µg/L  | 13.610 ppb  | 13:16:22 |
| 3 | Sc 361.383         | 1919438.0 | 1919438.0 | 105.40 %     |             | 13:18:03 |
| 3 | Y 371.029          | 1482278.8 | 1482278.8 | 117.72 %     |             | 13:18:03 |
| 3 | Ag 328.068†        | -1288.8   | -685.3    | -0.5393 µg/L | -0.5393 ppb | 13:18:08 |
| 3 | As 188.979†        | 9.8       | 11.9      | 9.2873 µg/L  | 9.2873 ppb  | 13:18:29 |
| 3 | B 249.677†         | 775.3     | 426.5     | -13.916 µg/L | -13.916 ppb | 13:18:08 |
| 3 | Ba 233.527†        | 5578.0    | 5311.6    | 124.38 µg/L  | 124.38 ppb  | 13:18:08 |
| 3 | Be 313.107†        | 10705.8   | 11693.1   | 6.1704 µg/L  | 6.1704 ppb  | 13:18:08 |
| 3 | Cd 226.502†        | 132.5     | 291.9     | -0.1107 µg/L | -0.1107 ppb | 13:18:29 |
| 3 | Co 228.616†        | 264.2     | 225.9     | 3.8427 µg/L  | 3.8427 ppb  | 13:18:29 |
| 3 | Cr 267.716†        | 781.1     | 681.1     | 15.775 µg/L  | 15.775 ppb  | 13:18:29 |
| 3 | Cu 324.752†        | 5133.3    | 601.7     | 16.765 µg/L  | 16.765 ppb  | 13:18:08 |
| 3 | Mn 257.610†        | 1055486.0 | 1002180.5 | 3294.2 µg/L  | 3294.2 ppb  | 13:18:03 |
| 3 | Mo 202.031†        | 62.7      | 49.6      | 7.7460 µg/L  | 7.7460 ppb  | 13:18:29 |
| 3 | Ni 231.604†        | 465.0     | 87.4      | 6.0282 µg/L  | 6.0282 ppb  | 13:18:29 |
| 3 | P 214.914†         | 598.6     | 281.0     | 426.68 µg/L  | 426.68 ppb  | 13:18:29 |
| 3 | Pb 220.353†        | 226.2     | 171.3     | 49.917 µg/L  | 49.917 ppb  | 13:18:29 |
| 3 | S 181.975 Axial†   | 15.0      | -7.8      | -25.627 µg/L | -25.627 ppb | 13:18:29 |
| 3 | Sb 206.836†        | 16.1      | -11.7     | -11.223 µg/L | -11.223 ppb | 13:18:29 |
| 3 | Se 196.026†        | -33.5     | -58.6     | 152.20 µg/L  | 152.20 ppb  | 13:18:29 |
| 3 | SiO2†              | 266940.6  | 250421.9  | 47328 µg/L   | 47328 ppb   | 13:18:03 |
| 3 | Si 251.611†        | 326954.0  | 309788.4  | 22045 µg/L   | 22045 ppb   | 13:18:03 |
| 3 | Sn 189.927†        | -14.8     | -12.3     | -4.8828 µg/L | -4.8828 ppb | 13:18:29 |
| 3 | Ti 334.940†        | 1303034.3 | 1237010.0 | 3114.3 µg/L  | 3114.3 ppb  | 13:18:03 |
| 3 | Tl 190.801†        | -82.1     | -40.8     | 5.8356 µg/L  | 5.8356 ppb  | 13:18:29 |
| 3 | U 409.014†         | -1966.5   | -1808.0   | -182.20 µg/L | -182.20 ppb | 13:18:03 |
| 3 | V 292.402†         | 2917.5    | 2649.1    | 21.199 µg/L  | 21.199 ppb  | 13:18:08 |
| 3 | Zn 213.857†        | 24218.8   | 22346.1   | 538.19 µg/L  | 538.19 ppb  | 13:18:08 |

Mean Data: 247188014|954676|1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383         | 1925842.6                | 105.75 %     |        | 0.332    |                    |          | 0.31%   |
| Sc RADIAL          | 86411.5                  | 101 %        |        | 0.5      |                    |          | 0.49%   |
| Y 371.029          | 1492661.8                | 118.55 %     |        | 0.739    |                    |          | 0.62%   |
| Ag 328.068†        | -761.5                   | -1.1718 µg/L |        | 0.58401  | -1.1718 ppb        | 0.58401  | 49.84%  |
| Al 396.153Radial†  | 14623.1                  | 7614.3 µg/L  |        | 38.71    | 7614.3 ppb         | 38.71    | 0.51%   |
| As 188.979†        | 12.1                     | 9.5707 µg/L  |        | 0.24573  | 9.5707 ppb         | 0.24573  | 2.57%   |
| B 249.677†         | 433.7                    | -13.651 µg/L |        | 0.9980   | -13.651 ppb        | 0.9980   | 7.31%   |
| Ba 233.527†        | 5510.5                   | 129.04 µg/L  |        | 4.036    | 129.04 ppb         | 4.036    | 3.13%   |
| Be 313.107†        | 12270.8                  | 6.4957 µg/L  |        | 0.28175  | 6.4957 ppb         | 0.28175  | 4.34%   |
| Ca 317.933Radial†  | 16706.9                  | 6187.0 µg/L  |        | 31.56    | 6187.0 ppb         | 31.56    | 0.51%   |
| Cd 226.502†        | 315.6                    | 0.4717 µg/L  |        | 0.50626  | 0.4717 ppb         | 0.50626  | 107.33% |
| Co 228.616†        | 244.0                    | 4.4613 µg/L  |        | 0.56535  | 4.4613 ppb         | 0.56535  | 12.67%  |
| Cr 267.716†        | 733.8                    | 16.995 µg/L  |        | 1.0578   | 16.995 ppb         | 1.0578   | 6.22%   |
| Cu 324.752†        | 614.7                    | 16.889 µg/L  |        | 0.1248   | 16.889 ppb         | 0.1248   | 0.74%   |
| Fe 238.204 Radial† | 5875.2                   | 66876 µg/L   |        | 171.2    | 66876 ppb          | 171.2    | 0.26%   |
| K 766.490 Radial†  | 9202.4                   | 4658.1 µg/L  |        | 37.05    | 4658.1 ppb         | 37.05    | 0.80%   |
| Mg 279.077 IEC†    | 143.1                    | 1743.0 µg/L  |        | 18.06    | 1743.0 ppb         | 18.06    | 1.04%   |
| Mn 257.610†        | 1029172.4                | 3382.9 µg/L  |        | 76.76    | 3382.9 ppb         | 76.76    | 2.27%   |
| Mo 202.031†        | 52.4                     | 8.0460 µg/L  |        | 0.46813  | 8.0460 ppb         | 0.46813  | 5.82%   |
| Na 589.592 Radial† | 6505.1                   | 3101.9 µg/L  |        | 38.29    | 3101.9 ppb         | 38.29    | 1.23%   |

|                  |           |              |         |             |         |        |
|------------------|-----------|--------------|---------|-------------|---------|--------|
| Ni 231.604†      | 81.1      | 5.6564 µg/L  | 0.76879 | 5.6564 ppb  | 0.76879 | 13.59% |
| P 214.914†       | 302.1     | 462.49 µg/L  | 32.163  | 462.49 ppb  | 32.163  | 6.95%  |
| Pb 220.353†      | 180.1     | 52.409 µg/L  | 3.8137  | 52.409 ppb  | 3.8137  | 7.28%  |
| S 181.975 Axial† | -4.6      | -15.038 µg/L | 14.7366 | -15.038 ppb | 14.7366 | 97.99% |
| Sb 206.836†      | -12.8     | -12.233 µg/L | 2.9299  | -12.233 ppb | 2.9299  | 23.95% |
| Se 196.026†      | -54.2     | 157.01 µg/L  | 8.895   | 157.01 ppb  | 8.895   | 5.67%  |
| SiO2†            | 255268.3  | 48244 µg/L   | 793.3   | 48244 ppb   | 793.3   | 1.64%  |
| Si 251.611†      | 315882.0  | 22479 µg/L   | 375.6   | 22479 ppb   | 375.6   | 1.67%  |
| Sn 189.927†      | -17.7     | -7.1805 µg/L | 1.99430 | -7.1805 ppb | 1.99430 | 27.77% |
| Sr 421.552†      | 2223.0    | 13.528 µg/L  | 0.2041  | 13.528 ppb  | 0.2041  | 1.51%  |
| Ti 334.940†      | 1276766.0 | 3214.4 µg/L  | 86.68   | 3214.4 ppb  | 86.68   | 2.70%  |
| Tl 190.801†      | -42.8     | 5.0462 µg/L  | 2.72445 | 5.0462 ppb  | 2.72445 | 53.99% |
| U 409.014†       | -1871.9   | -188.32 µg/L | 5.331   | -188.32 ppb | 5.331   | 2.83%  |
| V 292.402†       | 2754.2    | 22.498 µg/L  | 1.1255  | 22.498 ppb  | 1.1255  | 5.00%  |
| Zn 213.857†      | 23225.4   | 559.49 µg/L  | 18.447  | 559.49 ppb  | 18.447  | 3.30%  |

Sequence No.: 33  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:  
 User canceled analysis.

Autosampler Location: 8  
 Date Collected: 3/11/2010 13:22:20  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Analysis Begun

Start Time: 3/11/2010 13:24:33 Plasma On Time: 3/6/2010 19:06:21  
 Logged In Analyst: optima Technique: ICP Continuous  
 Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031110E.sif  
 Batch ID:  
 Results Data Set: 031110  
 Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 32 Autosampler Location: 7  
 Sample ID: CCV Date Collected: 3/11/2010 13:24:33  
 Analyst: Data Type: Original  
 Initial Sample Wt: Initial Sample Vol:  
 Dilution: Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 92375.1       | 92375.1             | 108 %              |                    | 13:25:08      |
| 1     | Al 396.153Radial†  | 9654.9        | 9225.6              | 4792.6 µg/L        | 4792.6 ppb         | 13:25:08      |
| 1     | Ca 317.933Radial†  | 15676.0       | 14236.2             | 5272.0 µg/L        | 5272.0 ppb         | 13:25:08      |
| 1     | Fe 238.204 Radial† | 497.6         | 447.2               | 5102.1 µg/L        | 5102.1 ppb         | 13:25:28      |
| 1     | K 766.490 Radial†  | 10691.3       | 9557.4              | 4837.8 µg/L        | 4837.8 ppb         | 13:25:08      |
| 1     | Mg 279.077 IEC†    | 464.5         | 425.5               | 5398.4 µg/L        | 5398.4 ppb         | 13:25:28      |
| 1     | Na 589.592 Radial† | 21464.2       | 19725.6             | 9406.0 µg/L        | 9406.0 ppb         | 13:25:08      |
| 1     | Sr 421.552†        | 81634.3       | 75711.2             | 460.76 µg/L        | 460.76 ppb         | 13:25:08      |
| 1     | Sc 361.383         | 2004599.8     | 2004599.8           | 110.07 %           |                    | 13:26:31      |
| 1     | Y 371.029          | 1379747.8     | 1379747.8           | 109.58 %           |                    | 13:26:31      |
| 1     | Ag 328.068†        | 61731.7       | 56619.4             | 490.42 µg/L        | 490.42 ppb         | 13:26:37      |
| 1     | As 188.979†        | 402.6         | 368.3               | 563.93 µg/L        | 563.93 ppb         | 13:26:57      |
| 1     | B 249.677†         | 11584.1       | 10214.9             | 497.94 µg/L        | 497.94 ppb         | 13:26:37      |
| 1     | Ba 233.527†        | 24969.9       | 22704.0             | 532.33 µg/L        | 532.33 ppb         | 13:26:37      |
| 1     | Be 313.107†        | 910085.5      | 828330.0            | 520.98 µg/L        | 520.98 ppb         | 13:26:31      |
| 1     | Cd 226.502†        | 23708.7       | 21705.0             | 551.88 µg/L        | 551.88 ppb         | 13:26:37      |
| 1     | Co 228.616†        | 12888.2       | 11683.9             | 534.15 µg/L        | 534.15 ppb         | 13:26:57      |
| 1     | Cr 267.716†        | 25377.9       | 22995.3             | 532.23 µg/L        | 532.23 ppb         | 13:26:37      |
| 1     | Cu 324.752†        | 79892.3       | 68311.8             | 480.56 µg/L        | 480.56 ppb         | 13:26:37      |
| 1     | Mn 257.610†        | 173573.6      | 158436.8            | 520.12 µg/L        | 520.12 ppb         | 13:26:37      |
| 1     | Mo 202.031†        | 5731.7        | 5197.3              | 545.71 µg/L        | 545.71 ppb         | 13:26:57      |
| 1     | Ni 231.604†        | 10412.4       | 9105.7              | 538.46 µg/L        | 538.46 ppb         | 13:26:57      |
| 1     | P 214.914†         | 2122.5        | 1641.3              | 2754.2 µg/L        | 2754.2 ppb         | 13:26:57      |
| 1     | Pb 220.353†        | 2288.6        | 2035.7              | 571.66 µg/L        | 571.66 ppb         | 13:26:57      |
| 1     | S 181.975 Axial†   | 384.3         | 327.1               | 1079.7 µg/L        | 1079.7 ppb         | 13:26:57      |
| 1     | Sb 206.836†        | 635.1         | 550.0               | 519.48 µg/L        | 519.48 ppb         | 13:26:57      |
| 1     | Se 196.026†        | 622.6         | 538.9               | 545.30 µg/L        | 545.30 ppb         | 13:26:57      |
| 1     | SiO2†              | 34348.8       | 28357.2             | 5359.3 µg/L        | 5359.3 ppb         | 13:26:37      |
| 1     | Si 251.611†        | 39728.8       | 35671.3             | 2538.4 µg/L        | 2538.4 ppb         | 13:26:37      |
| 1     | Sn 189.927†        | 1499.1        | 1363.7              | 575.03 µg/L        | 575.03 ppb         | 13:26:57      |
| 1     | Ti 334.940†        | 214067.6      | 195183.5            | 491.07 µg/L        | 491.07 ppb         | 13:26:37      |
| 1     | Tl 190.801†        | 529.4         | 518.0               | 547.29 µg/L        | 547.29 ppb         | 13:26:57      |
| 1     | U 409.014†         | 5503.1        | 5057.3              | 481.63 µg/L        | 481.63 ppb         | 13:26:37      |
| 1     | V 292.402†         | 44685.4       | 40476.8             | 517.95 µg/L        | 517.95 ppb         | 13:26:37      |
| 1     | Zn 213.857†        | 24535.6       | 21657.7             | 521.11 µg/L        | 521.11 ppb         | 13:26:37      |
| 2     | Sc RADIAL          | 93163.6       | 93163.6             | 109 %              |                    | 13:25:34      |
| 2     | Al 396.153Radial†  | 9745.0        | 9232.6              | 4796.4 µg/L        | 4796.4 ppb         | 13:25:34      |
| 2     | Ca 317.933Radial†  | 15774.9       | 14204.0             | 5260.1 µg/L        | 5260.1 ppb         | 13:25:34      |
| 2     | Fe 238.204 Radial† | 496.7         | 442.5               | 5048.2 µg/L        | 5048.2 ppb         | 13:25:54      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | K 766.490 Radial†  | 10747.9   | 9525.5    | 4821.6 µg/L | 4821.6 ppb | 13:25:34 |
| 2 | Mg 279.077 IEC†    | 469.5     | 426.5     | 5410.6 µg/L | 5410.6 ppb | 13:25:54 |
| 2 | Na 589.592 Radial† | 21660.0   | 19737.2   | 9411.6 µg/L | 9411.6 ppb | 13:25:34 |
| 2 | Sr 421.552†        | 82178.9   | 75571.0   | 459.91 µg/L | 459.91 ppb | 13:25:34 |
| 2 | Sc 361.383         | 2011197.6 | 2011197.6 | 110.44 %    |            | 13:27:04 |
| 2 | Y 371.029          | 1384773.6 | 1384773.6 | 109.98 %    |            | 13:27:04 |
| 2 | Ag 328.068†        | 61766.4   | 56466.9   | 489.10 µg/L | 489.10 ppb | 13:27:10 |
| 2 | As 188.979†        | 395.9     | 361.1     | 552.74 µg/L | 552.74 ppb | 13:27:30 |
| 2 | B 249.677†         | 11617.2   | 10210.3   | 497.75 µg/L | 497.75 ppb | 13:27:10 |
| 2 | Ba 233.527†        | 24914.6   | 22579.5   | 529.41 µg/L | 529.41 ppb | 13:27:10 |
| 2 | Be 313.107†        | 916266.4  | 831214.4  | 522.79 µg/L | 522.79 ppb | 13:27:04 |
| 2 | Cd 226.502†        | 23710.5   | 21636.1   | 550.12 µg/L | 550.12 ppb | 13:27:10 |
| 2 | Co 228.616†        | 12750.4   | 11520.7   | 526.68 µg/L | 526.68 ppb | 13:27:30 |
| 2 | Cr 267.716†        | 25369.3   | 22911.9   | 530.30 µg/L | 530.30 ppb | 13:27:10 |
| 2 | Cu 324.752†        | 79914.9   | 68094.2   | 479.03 µg/L | 479.03 ppb | 13:27:10 |
| 2 | Mn 257.610†        | 173677.5  | 158013.6  | 518.73 µg/L | 518.73 ppb | 13:27:10 |
| 2 | Mo 202.031†        | 5701.8    | 5153.2    | 541.08 µg/L | 541.08 ppb | 13:27:30 |
| 2 | Ni 231.604†        | 10324.4   | 8995.0    | 531.92 µg/L | 531.92 ppb | 13:27:30 |
| 2 | P 214.914†         | 2117.0    | 1629.9    | 2735.0 µg/L | 2735.0 ppb | 13:27:30 |
| 2 | Pb 220.353†        | 2290.7    | 2030.9    | 570.28 µg/L | 570.28 ppb | 13:27:30 |
| 2 | S 181.975 Axial†   | 386.1     | 327.6     | 1081.4 µg/L | 1081.4 ppb | 13:27:30 |
| 2 | Sb 206.836†        | 633.6     | 546.7     | 516.37 µg/L | 516.37 ppb | 13:27:30 |
| 2 | Se 196.026†        | 620.9     | 535.5     | 541.71 µg/L | 541.71 ppb | 13:27:30 |
| 2 | SiO2†              | 34394.3   | 28296.0   | 5347.7 µg/L | 5347.7 ppb | 13:27:10 |
| 2 | Si 251.611†        | 39695.4   | 35522.7   | 2527.9 µg/L | 2527.9 ppb | 13:27:10 |
| 2 | Sn 189.927†        | 1485.7    | 1347.1    | 568.04 µg/L | 568.04 ppb | 13:27:30 |
| 2 | Ti 334.940†        | 213938.9  | 194429.0  | 489.16 µg/L | 489.16 ppb | 13:27:10 |
| 2 | Tl 190.801†        | 526.7     | 513.9     | 543.01 µg/L | 543.01 ppb | 13:27:30 |
| 2 | U 409.014†         | 5553.2    | 5086.3    | 484.40 µg/L | 484.40 ppb | 13:27:10 |
| 2 | V 292.402†         | 44737.8   | 40391.1   | 516.84 µg/L | 516.84 ppb | 13:27:10 |
| 2 | Zn 213.857†        | 24561.6   | 21608.2   | 519.94 µg/L | 519.94 ppb | 13:27:10 |
| 3 | Sc RADIAL          | 92914.1   | 92914.1   | 108 %       |            | 13:26:00 |
| 3 | Al 396.153Radial†  | 9662.4    | 9180.4    | 4770.9 µg/L | 4770.9 ppb | 13:26:00 |
| 3 | Ca 317.933Radial†  | 15662.3   | 14139.1   | 5236.0 µg/L | 5236.0 ppb | 13:26:00 |
| 3 | Fe 238.204 Radial† | 496.4     | 443.4     | 5057.2 µg/L | 5057.2 ppb | 13:26:20 |
| 3 | K 766.490 Radial†  | 10678.5   | 9487.9    | 4802.6 µg/L | 4802.6 ppb | 13:26:00 |
| 3 | Mg 279.077 IEC†    | 464.2     | 422.8     | 5362.1 µg/L | 5362.1 ppb | 13:26:20 |
| 3 | Na 589.592 Radial† | 21612.3   | 19746.7   | 9416.1 µg/L | 9416.1 ppb | 13:26:00 |
| 3 | Sr 421.552†        | 81836.8   | 75458.3   | 459.22 µg/L | 459.22 ppb | 13:26:00 |
| 3 | Sc 361.383         | 1952898.5 | 1952898.5 | 107.24 %    |            | 13:27:36 |
| 3 | Y 371.029          | 1348624.7 | 1348624.7 | 107.11 %    |            | 13:27:36 |
| 3 | Ag 328.068†        | 59396.6   | 55926.6   | 484.25 µg/L | 484.25 ppb | 13:27:42 |
| 3 | As 188.979†        | 334.6     | 314.6     | 481.50 µg/L | 481.50 ppb | 13:28:03 |
| 3 | B 249.677†         | 11083.1   | 10026.3   | 488.67 µg/L | 488.67 ppb | 13:27:42 |
| 3 | Ba 233.527†        | 23076.0   | 21538.3   | 504.99 µg/L | 504.99 ppb | 13:27:42 |
| 3 | Be 313.107†        | 865948.2  | 809059.2  | 508.87 µg/L | 508.87 ppb | 13:27:36 |
| 3 | Cd 226.502†        | 21921.1   | 20608.3   | 523.91 µg/L | 523.91 ppb | 13:27:42 |
| 3 | Co 228.616†        | 10532.1   | 9796.7    | 447.79 µg/L | 447.79 ppb | 13:28:03 |
| 3 | Cr 267.716†        | 22522.2   | 20942.6   | 484.73 µg/L | 484.73 ppb | 13:27:42 |
| 3 | Cu 324.752†        | 73651.1   | 64413.3   | 453.18 µg/L | 453.18 ppb | 13:27:42 |
| 3 | Mn 257.610†        | 158679.3  | 148722.0  | 488.23 µg/L | 488.23 ppb | 13:27:42 |
| 3 | Mo 202.031†        | 4719.8    | 4391.6    | 461.14 µg/L | 461.14 ppb | 13:28:03 |
| 3 | Ni 231.604†        | 8572.3    | 7640.2    | 451.81 µg/L | 451.81 ppb | 13:28:03 |
| 3 | P 214.914†         | 1813.4    | 1404.0    | 2351.1 µg/L | 2351.1 ppb | 13:28:03 |
| 3 | Pb 220.353†        | 1962.0    | 1786.3    | 501.53 µg/L | 501.53 ppb | 13:28:03 |
| 3 | S 181.975 Axial†   | 339.5     | 294.6     | 972.44 µg/L | 972.44 ppb | 13:28:03 |
| 3 | Sb 206.836†        | 543.8     | 480.1     | 452.99 µg/L | 452.99 ppb | 13:28:03 |
| 3 | Se 196.026†        | 546.8     | 483.2     | 489.99 µg/L | 489.99 ppb | 13:28:03 |
| 3 | SiO2†              | 32590.2   | 27543.4   | 5205.5 µg/L | 5205.5 ppb | 13:27:42 |
| 3 | Si 251.611†        | 37434.7   | 34487.5   | 2454.2 µg/L | 2454.2 ppb | 13:27:42 |
| 3 | Sn 189.927†        | 1209.8    | 1130.0    | 476.58 µg/L | 476.58 ppb | 13:28:03 |
| 3 | Ti 334.940†        | 192904.2  | 180596.6  | 454.34 µg/L | 454.34 ppb | 13:27:42 |
| 3 | Tl 190.801†        | 477.6     | 482.4     | 509.81 µg/L | 509.81 ppb | 13:28:03 |
| 3 | U 409.014†         | 4966.7    | 4689.4    | 446.53 µg/L | 446.53 ppb | 13:27:42 |
| 3 | V 292.402†         | 40733.1   | 37865.9   | 484.08 µg/L | 484.08 ppb | 13:27:42 |
| 3 | Zn 213.857†        | 22566.3   | 20411.4   | 491.34 µg/L | 491.34 ppb | 13:27:42 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|

|   |           |             |        |            |        |        |
|---|-----------|-------------|--------|------------|--------|--------|
| Sc 361.383  | 1989565.3 | 109.25 %    | 1.753  |            |        | 1.60%  |
| Sc RADIAL   | 92817.6   | 108 %       | 0.5    |            |        | 0.43%  |
| Y 371.029   | 1371048.7 | 108.89 %    | 1.555  |            |        | 1.43%  |
| Ag 328.068†   | 56337.7   | 487.92 µg/L | 3.252  | 487.92 ppb | 3.252  | 0.67%  |
| QC value within limits for Ag 328.068 Recovery = 97.58%         |           |             |        |            |        |        |
| Al 396.153Radial†   | 9212.9    | 4786.6 µg/L | 13.79  | 4786.6 ppb | 13.79  | 0.29%  |
| QC value within limits for Al 396.153Radial Recovery = 95.73%   |           |             |        |            |        |        |
| As 188.979†   | 348.0     | 532.72 µg/L | 44.711 | 532.72 ppb | 44.711 | 8.39%  |
| QC value within limits for As 188.979 Recovery = 106.54%        |           |             |        |            |        |        |
| B 249.677†  | 10150.5   | 494.79 µg/L | 5.300  | 494.79 ppb | 5.300  | 1.07%  |
| QC value within limits for B 249.677 Recovery = 98.96%          |           |             |        |            |        |        |
| Ba 233.527†   | 22273.9   | 522.24 µg/L | 15.015 | 522.24 ppb | 15.015 | 2.88%  |
| QC value within limits for Ba 233.527 Recovery = 104.45%        |           |             |        |            |        |        |
| Be 313.107†   | 822867.9  | 517.54 µg/L | 7.571  | 517.54 ppb | 7.571  | 1.46%  |
| QC value within limits for Be 313.107 Recovery = 103.51%        |           |             |        |            |        |        |
| Ca 317.933Radial†   | 14193.1   | 5256.1 µg/L | 18.32  | 5256.1 ppb | 18.32  | 0.35%  |
| QC value within limits for Ca 317.933Radial Recovery = 105.12%  |           |             |        |            |        |        |
| Cd 226.502†   | 21316.5   | 541.97 µg/L | 15.666 | 541.97 ppb | 15.666 | 2.89%  |
| QC value within limits for Cd 226.502 Recovery = 108.39%        |           |             |        |            |        |        |
| Co 228.616†   | 11000.4   | 502.88 µg/L | 47.850 | 502.88 ppb | 47.850 | 9.52%  |
| QC value within limits for Co 228.616 Recovery = 100.58%        |           |             |        |            |        |        |
| Cr 267.716†   | 22283.3   | 515.75 µg/L | 26.886 | 515.75 ppb | 26.886 | 5.21%  |
| QC value within limits for Cr 267.716 Recovery = 103.15%        |           |             |        |            |        |        |
| Cu 324.752†   | 66939.8   | 470.92 µg/L | 15.383 | 470.92 ppb | 15.383 | 3.27%  |
| QC value within limits for Cu 324.752 Recovery = 94.18%         |           |             |        |            |        |        |
| Fe 238.204 Radial†  | 444.4     | 5069.1 µg/L | 28.86  | 5069.1 ppb | 28.86  | 0.57%  |
| QC value within limits for Fe 238.204 Radial Recovery = 101.38% |           |             |        |            |        |        |
| K 766.490 Radial†   | 9523.6    | 4820.7 µg/L | 17.60  | 4820.7 ppb | 17.60  | 0.37%  |
| QC value within limits for K 766.490 Radial Recovery = 96.41%   |           |             |        |            |        |        |
| Mg 279.077 IEC†   | 424.9     | 5390.4 µg/L | 25.20  | 5390.4 ppb | 25.20  | 0.47%  |
| QC value within limits for Mg 279.077 IEC Recovery = 107.81%    |           |             |        |            |        |        |
| Mn 257.610†   | 155057.4  | 509.03 µg/L | 18.026 | 509.03 ppb | 18.026 | 3.54%  |
| QC value within limits for Mn 257.610 Recovery = 101.81%        |           |             |        |            |        |        |
| Mo 202.031†   | 4914.0    | 515.98 µg/L | 47.547 | 515.98 ppb | 47.547 | 9.21%  |
| QC value within limits for Mo 202.031 Recovery = 103.20%        |           |             |        |            |        |        |
| Na 589.592 Radial†  | 19736.5   | 9411.2 µg/L | 5.04   | 9411.2 ppb | 5.04   | 0.05%  |
| QC value within limits for Na 589.592 Radial Recovery = 94.11%  |           |             |        |            |        |        |
| Ni 231.604†   | 8580.3    | 507.40 µg/L | 48.250 | 507.40 ppb | 48.250 | 9.51%  |
| QC value within limits for Ni 231.604 Recovery = 101.48%        |           |             |        |            |        |        |
| P 214.914†  | 1558.4    | 2613.4 µg/L | 227.39 | 2613.4 ppb | 227.39 | 8.70%  |
| QC value within limits for P 214.914 Recovery = 104.54%         |           |             |        |            |        |        |
| Pb 220.353†   | 1951.0    | 547.82 µg/L | 40.094 | 547.82 ppb | 40.094 | 7.32%  |
| QC value within limits for Pb 220.353 Recovery = 109.56%        |           |             |        |            |        |        |
| S 181.975 Axial†  | 316.5     | 1044.5 µg/L | 62.44  | 1044.5 ppb | 62.44  | 5.98%  |
| QC value within limits for S 181.975 Axial Recovery = 104.45%   |           |             |        |            |        |        |
| Sb 206.836†   | 525.6     | 496.28 µg/L | 37.521 | 496.28 ppb | 37.521 | 7.56%  |
| QC value within limits for Sb 206.836 Recovery = 99.26%         |           |             |        |            |        |        |
| Se 196.026†   | 519.2     | 525.67 µg/L | 30.951 | 525.67 ppb | 30.951 | 5.89%  |
| QC value within limits for Se 196.026 Recovery = 105.13%        |           |             |        |            |        |        |
| SiO2†   | 28065.5   | 5304.2 µg/L | 85.66  | 5304.2 ppb | 85.66  | 1.61%  |
| QC value within limits for SiO2 Recovery = 99.19%               |           |             |        |            |        |        |
| Si 251.611†   | 35227.2   | 2506.8 µg/L | 45.89  | 2506.8 ppb | 45.89  | 1.83%  |
| QC value within limits for Si 251.611 Recovery = 100.27%        |           |             |        |            |        |        |
| Sn 189.927†   | 1280.2    | 539.88 µg/L | 54.935 | 539.88 ppb | 54.935 | 10.18% |
| QC value within limits for Sn 189.927 Recovery = 107.98%        |           |             |        |            |        |        |
| Sr 421.552†   | 75580.2   | 459.96 µg/L | 0.771  | 459.96 ppb | 0.771  | 0.17%  |
| QC value within limits for Sr 421.552 Recovery = 91.99%         |           |             |        |            |        |        |
| Ti 334.940†   | 190069.7  | 478.19 µg/L | 20.675 | 478.19 ppb | 20.675 | 4.32%  |
| QC value within limits for Ti 334.940 Recovery = 95.64%         |           |             |        |            |        |        |
| Tl 190.801†   | 504.8     | 533.37 µg/L | 20.518 | 533.37 ppb | 20.518 | 3.85%  |
| QC value within limits for Tl 190.801 Recovery = 106.67%        |           |             |        |            |        |        |
| U 409.014†  | 4944.3    | 470.85 µg/L | 21.112 | 470.85 ppb | 21.112 | 4.48%  |
| QC value within limits for U 409.014 Recovery = 94.17%          |           |             |        |            |        |        |
| V 292.402†  | 39577.9   | 506.29 µg/L | 19.245 | 506.29 ppb | 19.245 | 3.80%  |
| QC value within limits for V 292.402 Recovery = 101.26%         |           |             |        |            |        |        |
| Zn 213.857†   | 21225.7   | 510.80 µg/L | 16.861 | 510.80 ppb | 16.861 | 3.30%  |
| QC value within limits for Zn 213.857 Recovery = 102.16%        |           |             |        |            |        |        |
| All analyte(s) passed QC.                                       |           |             |        |            |        |        |

Sequence No.: 33  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/11/2010 13:28:12  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87955.8          | 87955.8                | 103 %                 |                       | 13:28:45         |
| 1     | Al 396.153Radial†  | -270.2           | -6.4                   | -3.3632 µg/L          | -3.3632 ppb           | 13:28:45         |
| 1     | Ca 317.933Radial†  | 377.3            | 42.9                   | 15.876 µg/L           | 15.876 ppb            | 13:29:06         |
| 1     | Fe 238.204 Radial† | 15.0             | -0.4                   | -4.2572 µg/L          | -4.2572 ppb           | 13:29:06         |
| 1     | K 766.490 Radial†  | 458.9            | 73.9                   | 37.423 µg/L           | 37.423 ppb            | 13:28:45         |
| 1     | Mg 279.077 IEC†    | 9.7              | 3.5                    | 44.050 µg/L           | 44.050 ppb            | 13:29:06         |
| 1     | Na 589.592 Radial† | 239.7            | 21.5                   | 10.248 µg/L           | 10.248 ppb            | 13:28:45         |
| 1     | Sr 421.552†        | 150.0            | 27.9                   | 0.1697 µg/L           | 0.1697 ppb            | 13:28:45         |
| 1     | Sc 361.383         | 1980480.9        | 1980480.9              | 108.75 %              |                       | 13:30:08         |
| 1     | Y 371.029          | 1369569.2        | 1369569.2              | 108.77 %              |                       | 13:30:08         |
| 1     | Ag 328.068†        | -635.1           | -46.5                  | -0.3983 µg/L          | -0.3983 ppb           | 13:30:13         |
| 1     | As 188.979†        | -3.1             | -0.3                   | -0.3870 µg/L          | -0.3870 ppb           | 13:30:34         |
| 1     | B 249.677†         | 357.7            | 19.8                   | 0.9721 µg/L           | 0.9721 ppb            | 13:30:34         |
| 1     | Ba 233.527†        | -25.6            | -4.3                   | -0.0993 µg/L          | -0.0993 ppb           | 13:30:34         |
| 1     | Be 313.107†        | -1613.6          | 51.8                   | 0.0324 µg/L           | 0.0324 ppb            | 13:30:13         |
| 1     | Cd 226.502†        | -185.7           | -4.6                   | -0.1171 µg/L          | -0.1171 ppb           | 13:30:34         |
| 1     | Co 228.616†        | 33.9             | 6.3                    | 0.2895 µg/L           | 0.2895 ppb            | 13:30:34         |
| 1     | Cr 267.716†        | 67.0             | 1.6                    | 0.0369 µg/L           | 0.0369 ppb            | 13:30:34         |
| 1     | Cu 324.752†        | 4235.1           | -374.3                 | -2.6288 µg/L          | -2.6288 ppb           | 13:30:13         |
| 1     | Mn 257.610†        | -987.0           | -158.9                 | -0.5251 µg/L          | -0.5251 ppb           | 13:30:34         |
| 1     | Mo 202.031†        | 15.0             | 4.0                    | 0.4192 µg/L           | 0.4192 ppb            | 13:30:34         |
| 1     | Ni 231.604†        | 358.4            | -24.3                  | -1.4360 µg/L          | -1.4360 ppb           | 13:30:34         |
| 1     | P 214.914†         | 298.9            | -12.1                  | -20.413 µg/L          | -20.413 ppb           | 13:30:34         |
| 1     | Pb 220.353†        | 62.3             | 13.9                   | 3.9112 µg/L           | 3.9112 ppb            | 13:30:34         |
| 1     | S 181.975 Axial†   | 30.7             | 6.2                    | 20.466 µg/L           | 20.466 ppb            | 13:30:34         |
| 1     | Sb 206.836†        | 26.5             | -2.7                   | -2.5002 µg/L          | -2.5002 ppb           | 13:30:34         |
| 1     | Se 196.026†        | 12.9             | -14.9                  | -14.813 µg/L          | -14.813 ppb           | 13:30:34         |
| 1     | SiO2†              | 2865.0           | -213.5                 | -40.345 µg/L          | -40.345 ppb           | 13:30:13         |
| 1     | Si 251.611†        | 480.6            | 20.5                   | 1.4572 µg/L           | 1.4572 ppb            | 13:30:34         |
| 1     | Sn 189.927†        | 1.8              | 3.4                    | 1.4401 µg/L           | 1.4401 ppb            | 13:30:34         |
| 1     | Ti 334.940†        | -544.8           | 206.5                  | 0.5166 µg/L           | 0.5166 ppb            | 13:30:13         |
| 1     | Tl 190.801†        | -37.9            | 2.2                    | 2.2634 µg/L           | 2.2634 ppb            | 13:30:34         |
| 1     | U 409.014†         | -52.7            | 9.4                    | 0.8925 µg/L           | 0.8925 ppb            | 13:30:13         |
| 1     | V 292.402†         | 151.8            | 20.6                   | 0.2663 µg/L           | 0.2663 ppb            | 13:30:13         |
| 1     | Zn 213.857†        | 625.1            | -57.6                  | -1.3882 µg/L          | -1.3882 ppb           | 13:30:34         |
| 2     | Sc RADIAL          | 87988.7          | 87988.7                | 103 %                 |                       | 13:29:11         |
| 2     | Al 396.153Radial†  | -336.8           | -71.3                  | -37.140 µg/L          | -37.140 ppb           | 13:29:11         |
| 2     | Ca 317.933Radial†  | 372.1            | 37.7                   | 13.967 µg/L           | 13.967 ppb            | 13:29:31         |
| 2     | Fe 238.204 Radial† | 16.7             | 1.3                    | 15.171 µg/L           | 15.171 ppb            | 13:29:31         |
| 2     | K 766.490 Radial†  | 453.1            | 68.2                   | 34.507 µg/L           | 34.507 ppb            | 13:29:11         |
| 2     | Mg 279.077 IEC†    | 12.1             | 5.8                    | 73.968 µg/L           | 73.968 ppb            | 13:29:31         |
| 2     | Na 589.592 Radial† | 252.5            | 33.8                   | 16.126 µg/L           | 16.126 ppb            | 13:29:11         |
| 2     | Sr 421.552†        | 168.3            | 45.6                   | 0.2777 µg/L           | 0.2777 ppb            | 13:29:11         |
| 2     | Sc 361.383         | 1973680.2        | 1973680.2              | 108.38 %              |                       | 13:30:40         |
| 2     | Y 371.029          | 1363533.8        | 1363533.8              | 108.29 %              |                       | 13:30:40         |
| 2     | Ag 328.068†        | -637.5           | -50.7                  | -0.4337 µg/L          | -0.4337 ppb           | 13:30:45         |
| 2     | As 188.979†        | 2.2              | 4.6                    | 7.0879 µg/L           | 7.0879 ppb            | 13:31:06         |
| 2     | B 249.677†         | 363.5            | 26.3                   | 1.2804 µg/L           | 1.2804 ppb            | 13:31:06         |
| 2     | Ba 233.527†        | -15.8            | 4.7                    | 0.1100 µg/L           | 0.1100 ppb            | 13:31:06         |
| 2     | Be 313.107†        | -1787.1          | -113.4                 | -0.0714 µg/L          | -0.0714 ppb           | 13:30:45         |
| 2     | Cd 226.502†        | -180.3           | -0.2                   | -0.0064 µg/L          | -0.0064 ppb           | 13:31:06         |
| 2     | Co 228.616†        | 31.9             | 4.7                    | 0.2134 µg/L           | 0.2134 ppb            | 13:31:06         |
| 2     | Cr 267.716†        | 85.6             | 18.9                   | 0.4377 µg/L           | 0.4377 ppb            | 13:31:06         |
| 2     | Cu 324.752†        | 4216.4           | -378.2                 | -2.6524 µg/L          | -2.6524 ppb           | 13:30:45         |
| 2     | Mn 257.610†        | -976.5           | -152.3                 | -0.5043 µg/L          | -0.5043 ppb           | 13:31:06         |
| 2     | Mo 202.031†        | 12.8             | 2.0                    | 0.2131 µg/L           | 0.2131 ppb            | 13:31:06         |
| 2     | Ni 231.604†        | 373.4            | -9.3                   | -0.5486 µg/L          | -0.5486 ppb           | 13:31:06         |
| 2     | P 214.914†         | 291.9            | -17.6                  | -29.847 µg/L          | -29.847 ppb           | 13:31:06         |
| 2     | Pb 220.353†        | 57.2             | 9.4                    | 2.6382 µg/L           | 2.6382 ppb            | 13:31:06         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 25.6      | 1.6       | 5.3054 µg/L  | 5.3054 ppb  | 13:31:06 |
| 2 | Sb 206.836†        | 28.4      | -0.8      | -0.7776 µg/L | -0.7776 ppb | 13:31:06 |
| 2 | Se 196.026†        | 27.2      | -1.7      | -1.6641 µg/L | -1.6641 ppb | 13:31:06 |
| 2 | SiO2†              | 2901.5    | -170.7    | -32.263 µg/L | -32.263 ppb | 13:30:45 |
| 2 | Si 251.611†        | 479.8     | 21.2      | 1.5109 µg/L  | 1.5109 ppb  | 13:31:06 |
| 2 | Sn 189.927†        | -3.6      | -1.5      | -0.6362 µg/L | -0.6362 ppb | 13:31:06 |
| 2 | Ti 334.940†        | -650.8    | 106.9     | 0.2635 µg/L  | 0.2635 ppb  | 13:30:45 |
| 2 | Tl 190.801†        | -42.3     | -2.1      | -2.1666 µg/L | -2.1666 ppb | 13:31:06 |
| 2 | U 409.014†         | -42.6     | 18.6      | 1.7689 µg/L  | 1.7689 ppb  | 13:30:45 |
| 2 | V 292.402†         | 143.5     | 13.4      | 0.1719 µg/L  | 0.1719 ppb  | 13:30:45 |
| 2 | Zn 213.857†        | 636.9     | -44.7     | -1.0812 µg/L | -1.0812 ppb | 13:31:06 |
| 3 | Sc RADIAL          | 88623.5   | 88623.5   | 103 %        |             | 13:29:37 |
| 3 | Al 396.153Radial†  | -270.7    | -4.9      | -2.5340 µg/L | -2.5340 ppb | 13:29:37 |
| 3 | Ca 317.933Radial†  | 370.3     | 33.3      | 12.343 µg/L  | 12.343 ppb  | 13:29:57 |
| 3 | Fe 238.204 Radial† | 16.2      | 0.8       | 8.5758 µg/L  | 8.5758 ppb  | 13:29:57 |
| 3 | K 766.490 Radial†  | 409.6     | 22.9      | 11.582 µg/L  | 11.582 ppb  | 13:29:37 |
| 3 | Mg 279.077 IEC†    | 9.8       | 3.5       | 44.730 µg/L  | 44.730 ppb  | 13:29:57 |
| 3 | Na 589.592 Radial† | 234.8     | 15.0      | 7.1397 µg/L  | 7.1397 ppb  | 13:29:37 |
| 3 | Sr 421.552†        | 175.3     | 51.3      | 0.3120 µg/L  | 0.3120 ppb  | 13:29:37 |
| 3 | Sc 361.383         | 1983242.9 | 1983242.9 | 108.90 %     |             | 13:31:12 |
| 3 | Y 371.029          | 1369404.9 | 1369404.9 | 108.76 %     |             | 13:31:12 |
| 3 | Ag 328.068†        | -654.1    | -63.2     | -0.5414 µg/L | -0.5414 ppb | 13:31:17 |
| 3 | As 188.979†        | -0.3      | 2.3       | 3.5718 µg/L  | 3.5718 ppb  | 13:31:38 |
| 3 | B 249.677†         | 366.7     | 27.6      | 1.3483 µg/L  | 1.3483 ppb  | 13:31:38 |
| 3 | Ba 233.527†        | -31.5     | -9.6      | -0.2243 µg/L | -0.2243 ppb | 13:31:38 |
| 3 | Be 313.107†        | -1715.1   | -39.4     | -0.0249 µg/L | -0.0249 ppb | 13:31:17 |
| 3 | Cd 226.502†        | -185.0    | -3.7      | -0.0954 µg/L | -0.0954 ppb | 13:31:38 |
| 3 | Co 228.616†        | 39.0      | 11.0      | 0.5040 µg/L  | 0.5040 ppb  | 13:31:38 |
| 3 | Cr 267.716†        | 82.1      | 15.4      | 0.3563 µg/L  | 0.3563 ppb  | 13:31:38 |
| 3 | Cu 324.752†        | 4183.4    | -427.2    | -2.9980 µg/L | -2.9980 ppb | 13:31:17 |
| 3 | Mn 257.610†        | -904.5    | -81.9     | -0.2715 µg/L | -0.2715 ppb | 13:31:38 |
| 3 | Mo 202.031†        | 6.9       | -3.5      | -0.3694 µg/L | -0.3694 ppb | 13:31:38 |
| 3 | Ni 231.604†        | 382.0     | -3.0      | -0.1794 µg/L | -0.1794 ppb | 13:31:38 |
| 3 | P 214.914†         | 292.0     | -18.9     | -31.857 µg/L | -31.857 ppb | 13:31:38 |
| 3 | Pb 220.353†        | 56.3      | 8.4       | 2.3467 µg/L  | 2.3467 ppb  | 13:31:38 |
| 3 | S 181.975 Axial†   | 29.7      | 5.3       | 17.469 µg/L  | 17.469 ppb  | 13:31:38 |
| 3 | Sb 206.836†        | 31.4      | 1.8       | 1.6680 µg/L  | 1.6680 ppb  | 13:31:38 |
| 3 | Se 196.026†        | 17.4      | -10.8     | -10.676 µg/L | -10.676 ppb | 13:31:38 |
| 3 | SiO2†              | 2898.1    | -186.7    | -35.291 µg/L | -35.291 ppb | 13:31:17 |
| 3 | Si 251.611†        | 491.7     | 30.0      | 2.1335 µg/L  | 2.1335 ppb  | 13:31:38 |
| 3 | Sn 189.927†        | -2.1      | -0.2      | -0.0741 µg/L | -0.0741 ppb | 13:31:38 |
| 3 | Ti 334.940†        | -575.4    | 179.1     | 0.4475 µg/L  | 0.4475 ppb  | 13:31:17 |
| 3 | Tl 190.801†        | -32.7     | 7.0       | 7.2921 µg/L  | 7.2921 ppb  | 13:31:38 |
| 3 | U 409.014†         | -61.5     | 1.4       | 0.1342 µg/L  | 0.1342 ppb  | 13:31:17 |
| 3 | V 292.402†         | 145.3     | 14.4      | 0.1792 µg/L  | 0.1792 ppb  | 13:31:17 |
| 3 | Zn 213.857†        | 685.1     | -3.3      | -0.0764 µg/L | -0.0764 ppb | 13:31:38 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1979134.7                | 108.68 %           | 0.270    |                    |          | 0.25%   |
| Sc RADIAL   | 88189.3                  | 103 %              | 0.4      |                    |          | 0.43%   |
| Y 371.029   | 1367502.7                | 108.61 %           | 0.273    |                    |          | 0.25%   |
| Ag 328.068†   | -53.5                    | -0.4578 µg/L       | 0.07451  | -0.4578 ppb        | 0.07451  | 16.28%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | -27.5                    | -14.346 µg/L       | 19.7446  | -14.346 ppb        | 19.7446  | 137.63% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 2.2                      | 3.4242 µg/L        | 3.73965  | 3.4242 ppb         | 3.73965  | 109.21% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 24.6                     | 1.2003 µg/L        | 0.20052  | 1.2003 ppb         | 0.20052  | 16.71%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | -3.1                     | -0.0712 µg/L       | 0.16890  | -0.0712 ppb        | 0.16890  | 237.25% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | -33.6                    | -0.0213 µg/L       | 0.05202  | -0.0213 ppb        | 0.05202  | 243.90% |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 38.0                     | 14.062 µg/L        | 1.7683   | 14.062 ppb         | 1.7683   | 12.57%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -2.8                     | -0.0730 µg/L       | 0.05869  | -0.0730 ppb        | 0.05869  | 80.41%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 7.4                      | 0.3356 µg/L        | 0.15070  | 0.3356 ppb         | 0.15070  | 44.90%  |



|  |                 |        |              |         |             |         |         |
|--|-----------------|--------|--------------|---------|-------------|---------|---------|
| Cr   | 267.716†        | 12.0   | 0.2770 µg/L  | 0.21186 | 0.2770 ppb  | 0.21186 | 76.49%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Cu   | 324.752†        | -393.3 | -2.7597 µg/L | 0.20671 | -2.7597 ppb | 0.20671 | 7.49%   |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Fe   | 238.204 Radial† | 0.6    | 6.4963 µg/L  | 9.87939 | 6.4963 ppb  | 9.87939 | 152.08% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |        |              |         |             |         |         |
| K  | 766.490 Radial† | 55.0   | 27.837 µg/L  | 14.1525 | 27.837 ppb  | 14.1525 | 50.84%  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |        |              |         |             |         |         |
| Mg   | 279.077 IEC†    | 4.3    | 54.249 µg/L  | 17.0803 | 54.249 ppb  | 17.0803 | 31.48%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |        |              |         |             |         |         |
| Mn   | 257.610†        | -131.1 | -0.4336 µg/L | 0.14080 | -0.4336 ppb | 0.14080 | 32.47%  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Mo   | 202.031†        | 0.8    | 0.0876 µg/L  | 0.40898 | 0.0876 ppb  | 0.40898 | 466.71% |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Na   | 589.592 Radial† | 23.4   | 11.171 µg/L  | 4.5636  | 11.171 ppb  | 4.5636  | 40.85%  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |        |              |         |             |         |         |
| Ni   | 231.604†        | -12.2  | -0.7213 µg/L | 0.64584 | -0.7213 ppb | 0.64584 | 89.53%  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| P  | 214.914†        | -16.2  | -27.372 µg/L | 6.1100  | -27.372 ppb | 6.1100  | 22.32%  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |        |              |         |             |         |         |
| Pb   | 220.353†        | 10.6   | 2.9654 µg/L  | 0.83194 | 2.9654 ppb  | 0.83194 | 28.06%  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| S  | 181.975 Axial†  | 4.4    | 14.413 µg/L  | 8.0287  | 14.413 ppb  | 8.0287  | 55.70%  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |        |              |         |             |         |         |
| Sb   | 206.836†        | -0.6   | -0.5366 µg/L | 2.09450 | -0.5366 ppb | 2.09450 | 390.32% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Se   | 196.026†        | -9.1   | -9.0511 µg/L | 6.72333 | -9.0511 ppb | 6.72333 | 74.28%  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| SiO2†  |                 | -190.3 | -35.966 µg/L | 4.0828  | -35.966 ppb | 4.0828  | 11.35%  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |        |              |         |             |         |         |
| Si   | 251.611†        | 23.9   | 1.7005 µg/L  | 0.37595 | 1.7005 ppb  | 0.37595 | 22.11%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Sn   | 189.927†        | 0.6    | 0.2433 µg/L  | 1.07394 | 0.2433 ppb  | 1.07394 | 441.46% |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Sr   | 421.552†        | 41.6   | 0.2531 µg/L  | 0.07429 | 0.2531 ppb  | 0.07429 | 29.35%  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Ti   | 334.940†        | 164.1  | 0.4092 µg/L  | 0.13083 | 0.4092 ppb  | 0.13083 | 31.97%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| Tl   | 190.801†        | 2.4    | 2.4630 µg/L  | 4.73253 | 2.4630 ppb  | 4.73253 | 192.15% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |        |              |         |             |         |         |
| U  | 409.014†        | 9.8    | 0.9318 µg/L  | 0.81803 | 0.9318 ppb  | 0.81803 | 87.79%  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |        |              |         |             |         |         |
| V  | 292.402†        | 16.2   | 0.2058 µg/L  | 0.05251 | 0.2058 ppb  | 0.05251 | 25.52%  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |        |              |         |             |         |         |
| Zn   | 213.857†        | -35.2  | -0.8486 µg/L | 0.68613 | -0.8486 ppb | 0.68613 | 80.86%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |        |              |         |             |         |         |

All analyte(s) passed QC.

## =====

Analysis Begun

Start Time: 3/15/2010 11:29:57

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031510.sif

Batch ID:

Results Data Set: 031510A

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/15/2010 11:29:59

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 91620.5          | 91620.5                | 99.8 %                | 11:30:30         |
| 1     | Al 396.153Radial†  | -171.5           | -171.8                 | [0.00] µg/L           | 11:30:30         |
| 1     | Ca 317.933Radial†  | 342.6            | 343.2                  | [0.00] µg/L           | 11:30:51         |
| 1     | Fe 238.204 Radial† | 13.4             | 13.4                   | [0.00] µg/L           | 11:30:51         |
| 1     | K 766.490 Radial†  | 342.3            | 342.9                  | [0.00] µg/L           | 11:30:30         |
| 1     | Mg 279.077 IEC†    | 7.9              | 7.9                    | [0.00] µg/L           | 11:30:51         |
| 1     | Na 589.592 Radial† | 186.4            | 186.7                  | [0.00] µg/L           | 11:30:30         |
| 1     | Sr 421.552†        | 101.7            | 101.8                  | [0.00] µg/L           | 11:30:30         |
| 1     | Sc 361.383         | 1976453.9        | 1976453.9              | 101.35 %              | 11:31:53         |
| 1     | Y 371.029          | 1350040.9        | 1350040.9              | 101.25 %              | 11:31:53         |
| 1     | Ag 328.068†        | -573.3           | -565.6                 | [0.00] µg/L           | 11:31:59         |
| 1     | As 188.979†        | -4.1             | -4.0                   | [0.00] µg/L           | 11:32:19         |
| 1     | B 249.677†         | 294.5            | 290.6                  | [0.00] µg/L           | 11:31:59         |
| 1     | Ba 233.527†        | -34.3            | -33.8                  | [0.00] µg/L           | 11:32:19         |
| 1     | Be 313.107†        | -1581.6          | -1560.5                | [0.00] µg/L           | 11:31:59         |
| 1     | Cd 226.502†        | -162.7           | -160.5                 | [0.00] µg/L           | 11:32:19         |
| 1     | Co 228.616†        | 32.2             | 31.7                   | [0.00] µg/L           | 11:32:19         |
| 1     | Cr 267.716†        | 77.2             | 76.2                   | [0.00] µg/L           | 11:31:59         |
| 1     | Cu 324.752†        | 4223.4           | 4167.2                 | [0.00] µg/L           | 11:31:59         |
| 1     | Mn 257.610†        | -744.1           | -734.1                 | [0.00] µg/L           | 11:32:19         |
| 1     | Mo 202.031†        | 17.9             | 17.7                   | [0.00] µg/L           | 11:32:19         |
| 1     | Ni 231.604†        | 359.8            | 355.0                  | [0.00] µg/L           | 11:32:19         |
| 1     | P 214.914†         | 285.0            | 281.2                  | [0.00] µg/L           | 11:32:19         |
| 1     | Pb 220.353†        | 33.3             | 32.9                   | [0.00] µg/L           | 11:32:19         |
| 1     | S 181.975 Axial†   | 18.2             | 18.0                   | [0.00] µg/L           | 11:32:19         |
| 1     | Sb 206.836†        | 32.0             | 31.6                   | [0.00] µg/L           | 11:32:19         |
| 1     | Se 196.026†        | 26.4             | 26.1                   | [0.00] µg/L           | 11:32:19         |
| 1     | SiO2†              | 2771.2           | 2734.2                 | [0.00] µg/L           | 11:31:59         |
| 1     | Si 251.611†        | 415.4            | 409.9                  | [0.00] µg/L           | 11:32:19         |
| 1     | Sn 189.927†        | -0.7             | -0.7                   | [0.00] µg/L           | 11:32:19         |
| 1     | Ti 334.940†        | -689.4           | -680.3                 | [0.00] µg/L           | 11:31:59         |
| 1     | Tl 190.801†        | -30.5            | -30.1                  | [0.00] µg/L           | 11:32:19         |
| 1     | U 409.014†         | -35.8            | -35.3                  | [0.00] µg/L           | 11:31:59         |
| 1     | V 292.402†         | 105.3            | 103.9                  | [0.00] µg/L           | 11:31:59         |
| 1     | Zn 213.857†        | 660.0            | 651.2                  | [0.00] µg/L           | 11:32:19         |
| 2     | Sc RADIAL          | 91483.8          | 91483.8                | 99.7 %                | 11:30:56         |
| 2     | Al 396.153Radial†  | -153.1           | -153.6                 | [0.00] µg/L           | 11:30:56         |
| 2     | Ca 317.933Radial†  | 342.9            | 344.0                  | [0.00] µg/L           | 11:31:17         |
| 2     | Fe 238.204 Radial† | 13.4             | 13.5                   | [0.00] µg/L           | 11:31:17         |
| 2     | K 766.490 Radial†  | 453.7            | 455.2                  | [0.00] µg/L           | 11:30:56         |
| 2     | Mg 279.077 IEC†    | 10.3             | 10.3                   | [0.00] µg/L           | 11:31:17         |
| 2     | Na 589.592 Radial† | 229.7            | 230.4                  | [0.00] µg/L           | 11:30:56         |
| 2     | Sr 421.552†        | 153.8            | 154.3                  | [0.00] µg/L           | 11:30:56         |
| 2     | Sc 361.383         | 1951395.6        | 1951395.6              | 100.07 %              | 11:32:25         |
| 2     | Y 371.029          | 1334482.9        | 1334482.9              | 100.09 %              | 11:32:25         |
| 2     | Ag 328.068†        | -472.5           | -472.2                 | [0.00] µg/L           | 11:32:31         |
| 2     | As 188.979†        | -2.4             | -2.4                   | [0.00] µg/L           | 11:32:51         |

|   |                    |           |           |        |      |          |
|---|--------------------|-----------|-----------|--------|------|----------|
| 2 | B 249.677†         | 253.1     | 253.0     | [0.00] | µg/L | 11:32:31 |
| 2 | Ba 233.527†        | -25.4     | -25.4     | [0.00] | µg/L | 11:32:51 |
| 2 | Be 313.107†        | -1547.5   | -1546.5   | [0.00] | µg/L | 11:32:31 |
| 2 | Cd 226.502†        | -161.6    | -161.5    | [0.00] | µg/L | 11:32:51 |
| 2 | Co 228.616†        | 33.7      | 33.6      | [0.00] | µg/L | 11:32:51 |
| 2 | Cr 267.716†        | 107.8     | 107.8     | [0.00] | µg/L | 11:32:31 |
| 2 | Cu 324.752†        | 4205.3    | 4202.5    | [0.00] | µg/L | 11:32:31 |
| 2 | Mn 257.610†        | -748.6    | -748.1    | [0.00] | µg/L | 11:32:51 |
| 2 | Mo 202.031†        | 11.8      | 11.8      | [0.00] | µg/L | 11:32:51 |
| 2 | Ni 231.604†        | 352.5     | 352.2     | [0.00] | µg/L | 11:32:51 |
| 2 | P 214.914†         | 286.4     | 286.2     | [0.00] | µg/L | 11:32:51 |
| 2 | Pb 220.353†        | 48.1      | 48.1      | [0.00] | µg/L | 11:32:51 |
| 2 | S 181.975 Axial†   | 26.6      | 26.6      | [0.00] | µg/L | 11:32:51 |
| 2 | Sb 206.836†        | 25.9      | 25.8      | [0.00] | µg/L | 11:32:51 |
| 2 | Se 196.026†        | 27.3      | 27.3      | [0.00] | µg/L | 11:32:51 |
| 2 | SiO2†              | 2720.8    | 2719.1    | [0.00] | µg/L | 11:32:31 |
| 2 | Si 251.611†        | 419.8     | 419.5     | [0.00] | µg/L | 11:32:51 |
| 2 | Sn 189.927†        | -8.1      | -8.1      | [0.00] | µg/L | 11:32:51 |
| 2 | Ti 334.940†        | -736.5    | -736.0    | [0.00] | µg/L | 11:32:31 |
| 2 | Tl 190.801†        | -36.3     | -36.3     | [0.00] | µg/L | 11:32:51 |
| 2 | U 409.014†         | -49.1     | -49.1     | [0.00] | µg/L | 11:32:31 |
| 2 | V 292.402†         | 92.2      | 92.1      | [0.00] | µg/L | 11:32:31 |
| 2 | Zn 213.857†        | 655.7     | 655.2     | [0.00] | µg/L | 11:32:51 |
| 3 | Sc RADIAL          | 92224.4   | 92224.4   | 100    | %    | 11:31:22 |
| 3 | Al 396.153Radial†  | -162.7    | -161.9    | [0.00] | µg/L | 11:31:22 |
| 3 | Ca 317.933Radial†  | 337.4     | 335.7     | [0.00] | µg/L | 11:31:43 |
| 3 | Fe 238.204 Radial† | 12.4      | 12.4      | [0.00] | µg/L | 11:31:43 |
| 3 | K 766.490 Radial†  | 419.4     | 417.4     | [0.00] | µg/L | 11:31:22 |
| 3 | Mg 279.077 IEC†    | 9.0       | 9.0       | [0.00] | µg/L | 11:31:43 |
| 3 | Na 589.592 Radial† | 154.1     | 153.4     | [0.00] | µg/L | 11:31:22 |
| 3 | Sr 421.552†        | 150.6     | 149.8     | [0.00] | µg/L | 11:31:22 |
| 3 | Sc 361.383         | 1922510.9 | 1922510.9 | 98.584 | %    | 11:32:57 |
| 3 | Y 371.029          | 1315440.0 | 1315440.0 | 98.659 | %    | 11:32:57 |
| 3 | Ag 328.068†        | -525.1    | -532.7    | [0.00] | µg/L | 11:33:03 |
| 3 | As 188.979†        | -3.6      | -3.7      | [0.00] | µg/L | 11:33:23 |
| 3 | B 249.677†         | 284.4     | 288.4     | [0.00] | µg/L | 11:33:03 |
| 3 | Ba 233.527†        | -21.7     | -22.0     | [0.00] | µg/L | 11:33:23 |
| 3 | Be 313.107†        | -1547.3   | -1569.5   | [0.00] | µg/L | 11:33:03 |
| 3 | Cd 226.502†        | -171.4    | -173.9    | [0.00] | µg/L | 11:33:23 |
| 3 | Co 228.616†        | 37.4      | 37.9      | [0.00] | µg/L | 11:33:23 |
| 3 | Cr 267.716†        | 91.7      | 93.0      | [0.00] | µg/L | 11:33:03 |
| 3 | Cu 324.752†        | 4241.2    | 4302.1    | [0.00] | µg/L | 11:33:03 |
| 3 | Mn 257.610†        | -725.6    | -736.0    | [0.00] | µg/L | 11:33:23 |
| 3 | Mo 202.031†        | 7.4       | 7.5       | [0.00] | µg/L | 11:33:23 |
| 3 | Ni 231.604†        | 359.9     | 365.1     | [0.00] | µg/L | 11:33:23 |
| 3 | P 214.914†         | 292.3     | 296.5     | [0.00] | µg/L | 11:33:23 |
| 3 | Pb 220.353†        | 37.3      | 37.8      | [0.00] | µg/L | 11:33:23 |
| 3 | S 181.975 Axial†   | 23.9      | 24.2      | [0.00] | µg/L | 11:33:23 |
| 3 | Sb 206.836†        | 25.8      | 26.2      | [0.00] | µg/L | 11:33:23 |
| 3 | Se 196.026†        | 11.9      | 12.1      | [0.00] | µg/L | 11:33:23 |
| 3 | SiO2†              | 2732.6    | 2771.8    | [0.00] | µg/L | 11:33:03 |
| 3 | Si 251.611†        | 429.6     | 435.7     | [0.00] | µg/L | 11:33:23 |
| 3 | Sn 189.927†        | -6.8      | -6.9      | [0.00] | µg/L | 11:33:23 |
| 3 | Ti 334.940†        | -648.6    | -657.9    | [0.00] | µg/L | 11:33:03 |
| 3 | Tl 190.801†        | -36.1     | -36.6     | [0.00] | µg/L | 11:33:23 |
| 3 | U 409.014†         | -34.7     | -35.2     | [0.00] | µg/L | 11:33:03 |
| 3 | V 292.402†         | 100.2     | 101.6     | [0.00] | µg/L | 11:33:03 |
| 3 | Zn 213.857†        | 659.0     | 668.5     | [0.00] | µg/L | 11:33:23 |

## Mean Data: S0

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD    | Conc.  | Calib Units |
|-------------------|--------------------------|----------|--------|--------|-------------|
| Sc 361.383        | 1950120.2                | 26994.11 | 1.38%  | 100.00 | %           |
| Sc RADIAL         | 91776.3                  | 394.09   | 0.43%  | 100    | %           |
| Y 371.029         | 1333321.3                | 17329.70 | 1.30%  | 100.00 | %           |
| Ag 328.068†       | -523.5                   | 47.37    | 9.05%  | [0.00] | µg/L        |
| Al 396.153Radial† | -162.4                   | 9.12     | 5.61%  | [0.00] | µg/L        |
| As 188.979†       | -3.4                     | 0.85     | 25.07% | [0.00] | µg/L        |
| B 249.677†        | 277.3                    | 21.13    | 7.62%  | [0.00] | µg/L        |
| Ba 233.527†       | -27.1                    | 6.08     | 22.43% | [0.00] | µg/L        |

|                    |         |       |        |        |      |
|--------------------|---------|-------|--------|--------|------|
| Be 313.107†        | -1558.8 | 11.57 | 0.74%  | [0.00] | µg/L |
| Ca 317.933Radial†  | 341.0   | 4.54  | 1.33%  | [0.00] | µg/L |
| Cd 226.502†        | -165.3  | 7.43  | 4.50%  | [0.00] | µg/L |
| Co 228.616†        | 34.4    | 3.16  | 9.17%  | [0.00] | µg/L |
| Cr 267.716†        | 92.3    | 15.79 | 17.11% | [0.00] | µg/L |
| Cu 324.752†        | 4223.9  | 69.98 | 1.66%  | [0.00] | µg/L |
| Fe 238.204 Radial† | 13.1    | 0.62  | 4.76%  | [0.00] | µg/L |
| K 766.490 Radial†  | 405.2   | 57.12 | 14.10% | [0.00] | µg/L |
| Mg 279.077 IEC†    | 9.1     | 1.24  | 13.62% | [0.00] | µg/L |
| Mn 257.610†        | -739.4  | 7.57  | 1.02%  | [0.00] | µg/L |
| Mo 202.031†        | 12.4    | 5.10  | 41.29% | [0.00] | µg/L |
| Na 589.592 Radial† | 190.1   | 38.63 | 20.32% | [0.00] | µg/L |
| Ni 231.604†        | 357.4   | 6.78  | 1.90%  | [0.00] | µg/L |
| P 214.914†         | 288.0   | 7.77  | 2.70%  | [0.00] | µg/L |
| Pb 220.353†        | 39.6    | 7.75  | 19.58% | [0.00] | µg/L |
| S 181.975 Axial†   | 22.9    | 4.44  | 19.37% | [0.00] | µg/L |
| Sb 206.836†        | 27.9    | 3.24  | 11.63% | [0.00] | µg/L |
| Se 196.026†        | 21.8    | 8.46  | 38.82% | [0.00] | µg/L |
| SiO2†              | 2741.7  | 27.16 | 0.99%  | [0.00] | µg/L |
| Si 251.611†        | 421.7   | 13.08 | 3.10%  | [0.00] | µg/L |
| Sn 189.927†        | -5.2    | 3.96  | 75.60% | [0.00] | µg/L |
| Sr 421.552†        | 135.3   | 29.10 | 21.50% | [0.00] | µg/L |
| Ti 334.940†        | -691.4  | 40.23 | 5.82%  | [0.00] | µg/L |
| Tl 190.801†        | -34.4   | 3.68  | 10.70% | [0.00] | µg/L |
| U 409.014†         | -39.9   | 7.96  | 19.95% | [0.00] | µg/L |
| V 292.402†         | 99.2    | 6.23  | 6.28%  | [0.00] | µg/L |
| Zn 213.857†        | 658.3   | 9.04  | 1.37%  | [0.00] | µg/L |

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/15/2010 11:33:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

| Repl# | Analyte           | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Analysis<br>Time |
|-------|-------------------|------------------|------------------------|-----------------------|------------------|
| 1     | Sc RADIAL         | 89510.7          | 89510.7                | 97.5 %                | 11:34:04         |
| 1     | K 766.490 Radial† | 2425.8           | 2082.0                 | [1000] µg/L           | 11:34:04         |
| 1     | Sr 421.552†       | 16303.1          | 16580.4                | [100] µg/L            | 11:34:04         |
| 1     | Sc 361.383        | 1879310.6        | 1879310.6              | 96.369 %              | 11:34:26         |
| 1     | Y 371.029         | 1285094.3        | 1285094.3              | 96.383 %              | 11:34:26         |
| 1     | Ag 328.068†       | 11541.5          | 12499.9                | [100] µg/L            | 11:34:31         |
| 1     | As 188.979†       | 67.6             | 73.5                   | [100] µg/L            | 11:34:52         |
| 1     | B 249.677†        | 2325.7           | 2136.0                 | [100] µg/L            | 11:34:31         |
| 1     | Ba 233.527†       | 4357.6           | 4548.8                 | [100] µg/L            | 11:34:52         |
| 1     | Be 313.107†       | 160891.9         | 168512.8               | [100] µg/L            | 11:34:26         |
| 1     | Cd 226.502†       | 3845.7           | 4155.9                 | [100] µg/L            | 11:34:52         |
| 1     | Co 228.616†       | 2294.8           | 2346.9                 | [100] µg/L            | 11:34:52         |
| 1     | Cr 267.716†       | 4513.9           | 4591.7                 | [100] µg/L            | 11:34:52         |
| 1     | Cu 324.752†       | 19310.9          | 15814.5                | [100] µg/L            | 11:34:31         |
| 1     | Mn 257.610†       | 31224.8          | 33140.7                | [100] µg/L            | 11:34:31         |
| 1     | Mo 202.031†       | 1029.8           | 1056.2                 | [100] µg/L            | 11:34:52         |
| 1     | Ni 231.604†       | 2112.8           | 1835.0                 | [100] µg/L            | 11:34:52         |
| 1     | P 214.914†        | 583.4            | 317.4                  | [500] µg/L            | 11:34:52         |
| 1     | Pb 220.353†       | 430.7            | 407.3                  | [100] µg/L            | 11:34:52         |
| 1     | S 181.975 Axial†  | 86.2             | 66.6                   | [200] µg/L            | 11:34:52         |
| 1     | Sb 206.836†       | 132.4            | 109.5                  | [100] µg/L            | 11:34:52         |
| 1     | Se 196.026†       | 112.6            | 95.1                   | [100] µg/L            | 11:34:52         |
| 1     | SiO2†             | 8360.3           | 5933.6                 | [1069.5] µg/L         | 11:34:31         |
| 1     | Si 251.611†       | 7435.7           | 7294.1                 | [500] µg/L            | 11:34:31         |
| 1     | Sn 189.927†       | 256.3            | 271.1                  | [100] µg/L            | 11:34:52         |
| 1     | Ti 334.940†       | 40077.6          | 42279.0                | [100] µg/L            | 11:34:31         |
| 1     | Tl 190.801†       | 68.9             | 105.9                  | [100] µg/L            | 11:34:52         |
| 1     | U 409.014†        | 1098.8           | 1180.0                 | [100] µg/L            | 11:34:31         |
| 1     | V 292.402†        | 8200.3           | 8410.1                 | [100] µg/L            | 11:34:31         |
| 1     | Zn 213.857†       | 4886.8           | 4412.7                 | [100] µg/L            | 11:34:52         |
| 2     | Sc RADIAL         | 89405.2          | 89405.2                | 97.4 %                | 11:34:10         |
| 2     | K 766.490 Radial† | 2440.9           | 2100.5                 | [1000] µg/L           | 11:34:10         |
| 2     | Sr 421.552†       | 16307.1          | 16604.2                | [100] µg/L            | 11:34:10         |
| 2     | Sc 361.383        | 1882297.7        | 1882297.7              | 96.522 %              | 11:34:58         |
| 2     | Y 371.029         | 1285720.5        | 1285720.5              | 96.430 %              | 11:34:58         |
| 2     | Ag 328.068†       | 11392.6          | 12326.6                | [100] µg/L            | 11:35:04         |
| 2     | As 188.979†       | 67.5             | 73.3                   | [100] µg/L            | 11:35:24         |
| 2     | B 249.677†        | 2285.2           | 2090.2                 | [100] µg/L            | 11:35:04         |
| 2     | Ba 233.527†       | 4330.4           | 4513.5                 | [100] µg/L            | 11:35:24         |
| 2     | Be 313.107†       | 161250.5         | 168619.5               | [100] µg/L            | 11:34:58         |
| 2     | Cd 226.502†       | 3835.1           | 4138.6                 | [100] µg/L            | 11:35:24         |
| 2     | Co 228.616†       | 2287.4           | 2335.4                 | [100] µg/L            | 11:35:24         |
| 2     | Cr 267.716†       | 4491.9           | 4561.5                 | [100] µg/L            | 11:35:24         |
| 2     | Cu 324.752†       | 19267.0          | 15737.3                | [100] µg/L            | 11:35:04         |
| 2     | Mn 257.610†       | 31050.4          | 32908.6                | [100] µg/L            | 11:35:04         |
| 2     | Mo 202.031†       | 1026.8           | 1051.5                 | [100] µg/L            | 11:35:24         |
| 2     | Ni 231.604†       | 2107.8           | 1826.3                 | [100] µg/L            | 11:35:24         |
| 2     | P 214.914†        | 593.3            | 326.7                  | [500] µg/L            | 11:35:24         |
| 2     | Pb 220.353†       | 424.3            | 400.0                  | [100] µg/L            | 11:35:24         |
| 2     | S 181.975 Axial†  | 85.4             | 65.5                   | [200] µg/L            | 11:35:24         |
| 2     | Sb 206.836†       | 134.3            | 111.2                  | [100] µg/L            | 11:35:24         |
| 2     | Se 196.026†       | 124.9            | 107.6                  | [100] µg/L            | 11:35:24         |
| 2     | SiO2†             | 8279.1           | 5835.7                 | [1069.5] µg/L         | 11:35:04         |
| 2     | Si 251.611†       | 7449.5           | 7296.2                 | [500] µg/L            | 11:35:04         |
| 2     | Sn 189.927†       | 250.6            | 264.8                  | [100] µg/L            | 11:35:24         |
| 2     | Ti 334.940†       | 39751.0          | 41874.7                | [100] µg/L            | 11:35:04         |
| 2     | Tl 190.801†       | 71.6             | 108.6                  | [100] µg/L            | 11:35:24         |
| 2     | U 409.014†        | 1022.9           | 1099.6                 | [100] µg/L            | 11:35:04         |
| 2     | V 292.402†        | 8140.1           | 8334.2                 | [100] µg/L            | 11:35:04         |

|   |                   |           |           |               |          |
|---|-------------------|-----------|-----------|---------------|----------|
| 2 | Zn 213.857†       | 4870.5    | 4387.7    | [100] µg/L    | 11:35:24 |
| 3 | Sc RADIAL         | 88651.9   | 88651.9   | 96.6 %        | 11:34:15 |
| 3 | K 766.490 Radial† | 2427.0    | 2107.4    | [1000] µg/L   | 11:34:15 |
| 3 | Sr 421.552†       | 16234.3   | 16671.2   | [100] µg/L    | 11:34:15 |
| 3 | Sc 361.383        | 1886984.7 | 1886984.7 | 96.762 %      | 11:35:30 |
| 3 | Y 371.029         | 1290984.6 | 1290984.6 | 96.825 %      | 11:35:30 |
| 3 | Ag 328.068†       | 11456.5   | 12363.4   | [100] µg/L    | 11:35:36 |
| 3 | As 188.979†       | 68.7      | 74.4      | [100] µg/L    | 11:35:56 |
| 3 | B 249.677†        | 2344.5    | 2145.6    | [100] µg/L    | 11:35:36 |
| 3 | Ba 233.527†       | 4368.8    | 4542.1    | [100] µg/L    | 11:35:56 |
| 3 | Be 313.107†       | 162323.2  | 169313.1  | [100] µg/L    | 11:35:30 |
| 3 | Cd 226.502†       | 3862.2    | 4156.7    | [100] µg/L    | 11:35:56 |
| 3 | Co 228.616†       | 2304.0    | 2346.7    | [100] µg/L    | 11:35:56 |
| 3 | Cr 267.716†       | 4510.7    | 4569.3    | [100] µg/L    | 11:35:56 |
| 3 | Cu 324.752†       | 19332.4   | 15755.3   | [100] µg/L    | 11:35:36 |
| 3 | Mn 257.610†       | 31344.0   | 33132.2   | [100] µg/L    | 11:35:36 |
| 3 | Mo 202.031†       | 1036.9    | 1059.3    | [100] µg/L    | 11:35:56 |
| 3 | Ni 231.604†       | 2099.9    | 1812.7    | [100] µg/L    | 11:35:56 |
| 3 | P 214.914†        | 591.5     | 323.3     | [500] µg/L    | 11:35:56 |
| 3 | Pb 220.353†       | 426.7     | 401.3     | [100] µg/L    | 11:35:56 |
| 3 | S 181.975 Axial†  | 85.0      | 64.9      | [200] µg/L    | 11:35:56 |
| 3 | Sb 206.836†       | 134.9     | 111.6     | [100] µg/L    | 11:35:56 |
| 3 | Se 196.026†       | 117.3     | 99.4      | [100] µg/L    | 11:35:56 |
| 3 | SiO2†             | 8330.9    | 5867.9    | [1069.5] µg/L | 11:35:36 |
| 3 | Si 251.611†       | 7509.6    | 7339.2    | [500] µg/L    | 11:35:36 |
| 3 | Sn 189.927†       | 251.2     | 264.8     | [100] µg/L    | 11:35:56 |
| 3 | Ti 334.940†       | 40126.7   | 42160.6   | [100] µg/L    | 11:35:36 |
| 3 | Tl 190.801†       | 67.7      | 104.3     | [100] µg/L    | 11:35:56 |
| 3 | U 409.014†        | 1113.1    | 1190.2    | [100] µg/L    | 11:35:36 |
| 3 | V 292.402†        | 8228.1    | 8404.2    | [100] µg/L    | 11:35:36 |
| 3 | Zn 213.857†       | 4887.1    | 4392.3    | [100] µg/L    | 11:35:56 |

## Mean Data: S0.1

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD   | Conc.         | Calib Units |
|-------------------|--------------------------|----------|-------|---------------|-------------|
| Sc 361.383        | 1882864.3                | 3868.28  | 0.21% | 96.551 %      |             |
| Sc RADIAL         | 89189.3                  | 468.34   | 0.53% | 97.2 %        |             |
| Y 371.029         | 1287266.5                | 3235.16  | 0.25% | 96.546 %      |             |
| Ag 328.068†       | 12396.6                  | 91.32    | 0.74% | [100] µg/L    |             |
| As 188.979†       | 73.7                     | 0.60     | 0.81% | [100] µg/L    |             |
| B 249.677†        | 2123.9                   | 29.58    | 1.39% | [100] µg/L    |             |
| Ba 233.527†       | 4534.8                   | 18.74    | 0.41% | [100] µg/L    |             |
| Be 313.107†       | 168815.1                 | 434.52   | 0.26% | [100] µg/L    |             |
| Cd 226.502†       | 4150.4                   | 10.24    | 0.25% | [100] µg/L    |             |
| Co 228.616†       | 2343.0                   | 6.60     | 0.28% | [100] µg/L    |             |
| Cr 267.716†       | 4574.1                   | 15.68    | 0.34% | [100] µg/L    |             |
| Cu 324.752†       | 15769.1                  | 40.39    | 0.26% | [100] µg/L    |             |
| K 766.490 Radial† | 2096.6                   | 13.14    | 0.63% | [1000] µg/L   |             |
| Mn 257.610†       | 33060.5                  | 131.60   | 0.40% | [100] µg/L    |             |
| Mo 202.031†       | 1055.7                   | 3.93     | 0.37% | [100] µg/L    |             |
| Ni 231.604†       | 1824.7                   | 11.22    | 0.62% | [100] µg/L    |             |
| P 214.914†        | 322.5                    | 4.67     | 1.45% | [500] µg/L    |             |
| Pb 220.353†       | 402.9                    | 3.89     | 0.97% | [100] µg/L    |             |
| S 181.975 Axial†  | 65.7                     | 0.82     | 1.25% | [200] µg/L    |             |
| Sb 206.836†       | 110.8                    | 1.12     | 1.01% | [100] µg/L    |             |
| Se 196.026†       | 100.7                    | 6.37     | 6.32% | [100] µg/L    |             |
| SiO2†             | 5879.1                   | 49.91    | 0.85% | [1069.5] µg/L |             |
| Si 251.611†       | 7309.8                   | 25.42    | 0.35% | [500] µg/L    |             |
| Sn 189.927†       | 266.9                    | 3.65     | 1.37% | [100] µg/L    |             |
| Sr 421.552†       | 16618.6                  | 47.03    | 0.28% | [100] µg/L    |             |
| Ti 334.940†       | 42104.8                  | 207.87   | 0.49% | [100] µg/L    |             |
| Tl 190.801†       | 106.2                    | 2.15     | 2.03% | [100] µg/L    |             |
| U 409.014†        | 1156.6                   | 49.62    | 4.29% | [100] µg/L    |             |
| V 292.402†        | 8382.8                   | 42.20    | 0.50% | [100] µg/L    |             |
| Zn 213.857†       | 4397.5                   | 13.30    | 0.30% | [100] µg/L    |             |

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 3/15/2010 11:36:05  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

| Repl# | Analyte           | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib. | Analysis<br>Time |
|-------|-------------------|------------------|------------------------|----------------|--------|------------------|
| 1     | Sc RADIAL         | 89510.2          | 89510.2                | 97.5           | %      | 11:36:36         |
| 1     | Al 396.153Radial† | 10022.5          | 10438.6                | [5000]         | µg/L   | 11:36:36         |
| 1     | Ca 317.933Radial† | 13615.1          | 13618.9                | [5000]         | µg/L   | 11:36:36         |
| 1     | K 766.490 Radial† | 10741.3          | 10608.0                | [5000]         | µg/L   | 11:36:36         |
| 1     | Mg 279.077 IEC†   | 380.4            | 381.0                  | [5000]         | µg/L   | 11:36:56         |
| 1     | Sr 421.552†       | 81568.3          | 83498.0                | [500]          | µg/L   | 11:36:36         |
| 1     | Sc 361.383        | 1897841.8        | 1897841.8              | 97.319         | %      | 11:38:00         |
| 1     | Y 371.029         | 1293037.2        | 1293037.2              | 96.979         | %      | 11:38:00         |
| 1     | Ag 328.068†       | 59258.2          | 61414.1                | [500]          | µg/L   | 11:38:05         |
| 1     | As 188.979†       | 338.2            | 350.9                  | [500]          | µg/L   | 11:38:26         |
| 1     | B 249.677†        | 10766.0          | 10785.3                | [500]          | µg/L   | 11:38:05         |
| 1     | Ba 233.527†       | 22222.4          | 22861.7                | [500]          | µg/L   | 11:38:05         |
| 1     | Be 313.107†       | 821778.5         | 845974.2               | [500]          | µg/L   | 11:38:00         |
| 1     | Cd 226.502†       | 19942.6          | 20657.2                | [500]          | µg/L   | 11:38:05         |
| 1     | Co 228.616†       | 11435.0          | 11715.5                | [500]          | µg/L   | 11:38:05         |
| 1     | Cr 267.716†       | 22375.5          | 22899.5                | [500]          | µg/L   | 11:38:05         |
| 1     | Cu 324.752†       | 79317.8          | 77278.8                | [500]          | µg/L   | 11:38:05         |
| 1     | Mn 257.610†       | 159576.3         | 164711.4               | [500]          | µg/L   | 11:38:00         |
| 1     | Mo 202.031†       | 5124.7           | 5253.5                 | [500]          | µg/L   | 11:38:26         |
| 1     | Ni 231.604†       | 9110.9           | 9004.5                 | [500]          | µg/L   | 11:38:05         |
| 1     | P 214.914†        | 1785.8           | 1547.0                 | [2500]         | µg/L   | 11:38:26         |
| 1     | Pb 220.353†       | 1938.2           | 1952.0                 | [500]          | µg/L   | 11:38:26         |
| 1     | S 181.975 Axial†  | 336.7            | 323.0                  | [1000]         | µg/L   | 11:38:26         |
| 1     | Sb 206.836†       | 583.4            | 571.6                  | [500]          | µg/L   | 11:38:26         |
| 1     | Se 196.026†       | 542.2            | 535.3                  | [500]          | µg/L   | 11:38:26         |
| 1     | SiO2†             | 31266.0          | 29385.5                | [5347.5]       | µg/L   | 11:38:05         |
| 1     | Si 251.611†       | 35967.8          | 36536.9                | [2500]         | µg/L   | 11:38:05         |
| 1     | Sn 189.927†       | 1281.7           | 1322.3                 | [500]          | µg/L   | 11:38:26         |
| 1     | Ti 334.940†       | 207749.7         | 214163.8               | [500]          | µg/L   | 11:38:00         |
| 1     | Tl 190.801†       | 468.9            | 516.1                  | [500]          | µg/L   | 11:38:26         |
| 1     | U 409.014†        | 5480.0           | 5670.8                 | [500]          | µg/L   | 11:38:05         |
| 1     | V 292.402†        | 40847.8          | 41873.8                | [500]          | µg/L   | 11:38:05         |
| 1     | Zn 213.857†       | 22032.6          | 21981.2                | [500]          | µg/L   | 11:38:05         |
| 2     | Sc RADIAL         | 89291.8          | 89291.8                | 97.3           | %      | 11:37:02         |
| 2     | Al 396.153Radial† | 10044.2          | 10486.1                | [5000]         | µg/L   | 11:37:02         |
| 2     | Ca 317.933Radial† | 13583.0          | 13620.0                | [5000]         | µg/L   | 11:37:02         |
| 2     | K 766.490 Radial† | 10806.1          | 10701.7                | [5000]         | µg/L   | 11:37:02         |
| 2     | Mg 279.077 IEC†   | 375.4            | 376.8                  | [5000]         | µg/L   | 11:37:22         |
| 2     | Sr 421.552†       | 81771.8          | 83911.7                | [500]          | µg/L   | 11:37:02         |
| 2     | Sc 361.383        | 1890449.6        | 1890449.6              | 96.940         | %      | 11:38:33         |
| 2     | Y 371.029         | 1288760.5        | 1288760.5              | 96.658         | %      | 11:38:33         |
| 2     | Ag 328.068†       | 59154.1          | 61544.8                | [500]          | µg/L   | 11:38:39         |
| 2     | As 188.979†       | 327.0            | 340.7                  | [500]          | µg/L   | 11:38:59         |
| 2     | B 249.677†        | 10682.4          | 10742.3                | [500]          | µg/L   | 11:38:39         |
| 2     | Ba 233.527†       | 22077.9          | 22801.9                | [500]          | µg/L   | 11:38:39         |
| 2     | Be 313.107†       | 819353.0         | 846774.1               | [500]          | µg/L   | 11:38:33         |
| 2     | Cd 226.502†       | 19919.8          | 20713.9                | [500]          | µg/L   | 11:38:39         |
| 2     | Co 228.616†       | 11376.6          | 11701.2                | [500]          | µg/L   | 11:38:39         |
| 2     | Cr 267.716†       | 22365.8          | 22979.5                | [500]          | µg/L   | 11:38:39         |
| 2     | Cu 324.752†       | 78918.8          | 77185.9                | [500]          | µg/L   | 11:38:39         |
| 2     | Mn 257.610†       | 158797.4         | 164549.1               | [500]          | µg/L   | 11:38:33         |
| 2     | Mo 202.031†       | 4954.0           | 5098.0                 | [500]          | µg/L   | 11:38:59         |
| 2     | Ni 231.604†       | 9066.8           | 8995.6                 | [500]          | µg/L   | 11:38:39         |
| 2     | P 214.914†        | 1751.3           | 1518.6                 | [2500]         | µg/L   | 11:38:59         |
| 2     | Pb 220.353†       | 1887.7           | 1907.7                 | [500]          | µg/L   | 11:38:59         |
| 2     | S 181.975 Axial†  | 329.0            | 316.5                  | [1000]         | µg/L   | 11:38:59         |
| 2     | Sb 206.836†       | 566.3            | 556.3                  | [500]          | µg/L   | 11:38:59         |
| 2     | Se 196.026†       | 541.5            | 536.8                  | [500]          | µg/L   | 11:38:59         |
| 2     | SiO2†             | 31146.6          | 29388.0                | [5347.5]       | µg/L   | 11:38:39         |

|   |                   |           |           |               |          |
|---|-------------------|-----------|-----------|---------------|----------|
| 2 | Si 251.611†       | 35836.2   | 36545.6   | [2500] µg/L   | 11:38:39 |
| 2 | Sn 189.927†       | 1231.3    | 1275.4    | [500] µg/L    | 11:38:59 |
| 2 | Ti 334.940†       | 207272.2  | 214506.0  | [500] µg/L    | 11:38:33 |
| 2 | Tl 190.801†       | 456.2     | 505.0     | [500] µg/L    | 11:38:59 |
| 2 | U 409.014†        | 5428.8    | 5640.0    | [500] µg/L    | 11:38:39 |
| 2 | V 292.402†        | 40680.7   | 41865.5   | [500] µg/L    | 11:38:39 |
| 2 | Zn 213.857†       | 21901.3   | 21934.3   | [500] µg/L    | 11:38:39 |
| 3 | Sc RADIAL         | 89439.1   | 89439.1   | 97.5 %        | 11:37:28 |
| 3 | Al 396.153Radial† | 10053.9   | 10479.0   | [5000] µg/L   | 11:37:28 |
| 3 | Ca 317.933Radial† | 13637.8   | 13653.2   | [5000] µg/L   | 11:37:28 |
| 3 | K 766.490 Radial† | 10856.6   | 10735.2   | [5000] µg/L   | 11:37:28 |
| 3 | Mg 279.077 IEC†   | 374.1     | 374.8     | [5000] µg/L   | 11:37:48 |
| 3 | Sr 421.552†       | 81787.7   | 83789.6   | [500] µg/L    | 11:37:28 |
| 3 | Sc 361.383        | 1893335.5 | 1893335.5 | 97.088 %      | 11:39:06 |
| 3 | Y 371.029         | 1290896.1 | 1290896.1 | 96.818 %      | 11:39:06 |
| 3 | Ag 328.068†       | 54177.5   | 56325.9   | [500] µg/L    | 11:39:12 |
| 3 | As 188.979†       | 274.4     | 286.0     | [500] µg/L    | 11:39:32 |
| 3 | B 249.677†        | 9770.9    | 9786.6    | [500] µg/L    | 11:39:12 |
| 3 | Ba 233.527†       | 19477.8   | 20089.0   | [500] µg/L    | 11:39:12 |
| 3 | Be 313.107†       | 738978.9  | 762701.1  | [500] µg/L    | 11:39:06 |
| 3 | Cd 226.502†       | 17448.4   | 18137.1   | [500] µg/L    | 11:39:12 |
| 3 | Co 228.616†       | 9901.5    | 10164.1   | [500] µg/L    | 11:39:12 |
| 3 | Cr 267.716†       | 18777.3   | 19248.1   | [500] µg/L    | 11:39:12 |
| 3 | Cu 324.752†       | 69282.5   | 67136.5   | [500] µg/L    | 11:39:12 |
| 3 | Mn 257.610†       | 143847.1  | 148900.7  | [500] µg/L    | 11:39:06 |
| 3 | Mo 202.031†       | 4023.4    | 4131.7    | [500] µg/L    | 11:39:32 |
| 3 | Ni 231.604†       | 7905.5    | 7785.2    | [500] µg/L    | 11:39:12 |
| 3 | P 214.914†        | 1478.1    | 1234.4    | [2500] µg/L   | 11:39:32 |
| 3 | Pb 220.353†       | 1599.3    | 1607.7    | [500] µg/L    | 11:39:32 |
| 3 | S 181.975 Axial†  | 285.3     | 271.0     | [1000] µg/L   | 11:39:32 |
| 3 | Sb 206.836†       | 477.7     | 464.1     | [500] µg/L    | 11:39:32 |
| 3 | Se 196.026†       | 453.1     | 444.9     | [500] µg/L    | 11:39:32 |
| 3 | SiO2†             | 28242.6   | 26347.9   | [5347.5] µg/L | 11:39:12 |
| 3 | Si 251.611†       | 32295.4   | 32842.3   | [2500] µg/L   | 11:39:12 |
| 3 | Sn 189.927†       | 989.0     | 1023.9    | [500] µg/L    | 11:39:32 |
| 3 | Ti 334.940†       | 185280.4  | 191528.7  | [500] µg/L    | 11:39:06 |
| 3 | Tl 190.801†       | 399.2     | 445.5     | [500] µg/L    | 11:39:32 |
| 3 | U 409.014†        | 4650.5    | 4829.8    | [500] µg/L    | 11:39:12 |
| 3 | V 292.402†        | 35231.9   | 36189.3   | [500] µg/L    | 11:39:12 |
| 3 | Zn 213.857†       | 19231.4   | 19149.9   | [500] µg/L    | 11:39:12 |

## Mean Data: S0.5

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD    | Conc. Units   | Calib |
|-------------------|--------------------------|----------|--------|---------------|-------|
| Sc 361.383        | 1893875.6                | 3725.57  | 0.20%  | 97.116 %      |       |
| Sc RADIAL         | 89413.7                  | 111.41   | 0.12%  | 97.4 %        |       |
| Y 371.029         | 1290897.9                | 2138.35  | 0.17%  | 96.818 %      |       |
| Ag 328.068†       | 59761.6                  | 2976.14  | 4.98%  | [500] µg/L    |       |
| Al 396.153Radial† | 10467.9                  | 25.61    | 0.24%  | [5000] µg/L   |       |
| As 188.979†       | 325.9                    | 34.91    | 10.71% | [500] µg/L    |       |
| B 249.677†        | 10438.1                  | 564.57   | 5.41%  | [500] µg/L    |       |
| Ba 233.527†       | 21917.5                  | 1583.79  | 7.23%  | [500] µg/L    |       |
| Be 313.107†       | 818483.1                 | 48310.30 | 5.90%  | [500] µg/L    |       |
| Ca 317.933Radial† | 13630.7                  | 19.51    | 0.14%  | [5000] µg/L   |       |
| Cd 226.502†       | 19836.1                  | 1471.65  | 7.42%  | [500] µg/L    |       |
| Co 228.616†       | 11193.6                  | 891.63   | 7.97%  | [500] µg/L    |       |
| Cr 267.716†       | 21709.0                  | 2131.57  | 9.82%  | [500] µg/L    |       |
| Cu 324.752†       | 73867.0                  | 5829.02  | 7.89%  | [500] µg/L    |       |
| K 766.490 Radial† | 10681.6                  | 65.90    | 0.62%  | [5000] µg/L   |       |
| Mg 279.077 IEC†   | 377.5                    | 3.17     | 0.84%  | [5000] µg/L   |       |
| Mn 257.610†       | 159387.1                 | 9081.82  | 5.70%  | [500] µg/L    |       |
| Mo 202.031†       | 4827.7                   | 607.77   | 12.59% | [500] µg/L    |       |
| Ni 231.604†       | 8595.1                   | 701.40   | 8.16%  | [500] µg/L    |       |
| P 214.914†        | 1433.3                   | 172.83   | 12.06% | [2500] µg/L   |       |
| Pb 220.353†       | 1822.4                   | 187.31   | 10.28% | [500] µg/L    |       |
| S 181.975 Axial†  | 303.5                    | 28.36    | 9.34%  | [1000] µg/L   |       |
| Sb 206.836†       | 530.7                    | 58.16    | 10.96% | [500] µg/L    |       |
| Se 196.026†       | 505.7                    | 52.65    | 10.41% | [500] µg/L    |       |
| SiO2†             | 28373.8                  | 1754.49  | 6.18%  | [5347.5] µg/L |       |
| Si 251.611†       | 35308.3                  | 2135.59  | 6.05%  | [2500] µg/L   |       |



|             |          |          |        |            |
|-------------|----------|----------|--------|------------|
| Sn 189.927† | 1207.2   | 160.47   | 13.29% | [500] µg/L |
| Sr 421.552† | 83733.1  | 212.58   | 0.25%  | [500] µg/L |
| Ti 334.940† | 206732.8 | 13168.29 | 6.37%  | [500] µg/L |
| Tl 190.801† | 488.9    | 37.97    | 7.77%  | [500] µg/L |
| U 409.014†  | 5380.2   | 476.90   | 8.86%  | [500] µg/L |
| V 292.402†  | 39976.2  | 3279.56  | 8.20%  | [500] µg/L |
| Zn 213.857† | 21021.8  | 1621.26  | 7.71%  | [500] µg/L |

Sequence No.: 4  
 Sample ID: SCAL  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 3/15/2010 11:39:42  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: SCAL

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc. Units  | Calib. | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|--------------|--------|------------------|
| 1     | Sc RADIAL          | 90270.1          | 90270.1                | 98.4 %       |        | 11:40:12         |
| 1     | Al 396.153Radial†  | 19999.5          | 20495.6                | [10000] µg/L |        | 11:40:12         |
| 1     | Ca 317.933Radial†  | 26745.9          | 26851.2                | [10000] µg/L |        | 11:40:12         |
| 1     | Fe 238.204 Radial† | 803.6            | 803.9                  | [10000] µg/L |        | 11:40:33         |
| 1     | K 766.490 Radial†  | 21121.0          | 21068.3                | [10000] µg/L |        | 11:40:12         |
| 1     | Mg 279.077 IEC†    | 739.0            | 742.2                  | [10000] µg/L |        | 11:40:33         |
| 1     | Na 589.592 Radial† | 19525.5          | 19661.1                | [10000] µg/L |        | 11:40:12         |
| 1     | Sr 421.552†        | 161633.1         | 164194.6               | [1000] µg/L  |        | 11:40:12         |
| 1     | Sc 361.383         | 1898909.2        | 1898909.2              | 97.374 %     |        | 11:41:36         |
| 1     | Y 371.029          | 1293078.3        | 1293078.3              | 96.982 %     |        | 11:41:36         |
| 1     | Ag 328.068†        | 119195.9         | 122934.0               | [1000] µg/L  |        | 11:41:42         |
| 1     | As 188.979†        | 678.5            | 700.2                  | [1000] µg/L  |        | 11:42:03         |
| 1     | B 249.677†         | 21287.5          | 21584.2                | [1000] µg/L  |        | 11:41:42         |
| 1     | Ba 233.527†        | 43937.4          | 45149.4                | [1000] µg/L  |        | 11:41:42         |
| 1     | Be 313.107†        | 1613136.3        | 1658199.2              | [1000] µg/L  |        | 11:41:36         |
| 1     | Cd 226.502†        | 39624.2          | 40858.1                | [1000] µg/L  |        | 11:41:42         |
| 1     | Co 228.616†        | 22510.5          | 23083.1                | [1000] µg/L  |        | 11:41:42         |
| 1     | Cr 267.716†        | 44439.3          | 45545.5                | [1000] µg/L  |        | 11:41:42         |
| 1     | Cu 324.752†        | 154129.3         | 154062.0               | [1000] µg/L  |        | 11:41:42         |
| 1     | Mn 257.610†        | 313266.4         | 322454.2               | [1000] µg/L  |        | 11:41:42         |
| 1     | Mo 202.031†        | 10145.2          | 10406.5                | [1000] µg/L  |        | 11:42:03         |
| 1     | Ni 231.604†        | 17588.0          | 17704.8                | [1000] µg/L  |        | 11:41:42         |
| 1     | P 214.914†         | 3265.3           | 3065.3                 | [5000] µg/L  |        | 11:42:03         |
| 1     | Pb 220.353†        | 3809.2           | 3872.4                 | [1000] µg/L  |        | 11:42:03         |
| 1     | S 181.975 Axial†   | 645.9            | 640.4                  | [2000] µg/L  |        | 11:42:03         |
| 1     | Sb 206.836†        | 1132.9           | 1135.6                 | [1000] µg/L  |        | 11:42:03         |
| 1     | Se 196.026†        | 1065.3           | 1072.2                 | [1000] µg/L  |        | 11:42:03         |
| 1     | SiO2†              | 59914.9          | 58789.0                | [10695] µg/L |        | 11:41:42         |
| 1     | Si 251.611†        | 71564.0          | 73072.2                | [5000] µg/L  |        | 11:41:42         |
| 1     | Sn 189.927†        | 2553.1           | 2627.1                 | [1000] µg/L  |        | 11:42:03         |
| 1     | Ti 334.940†        | 409638.0         | 421376.7               | [1000] µg/L  |        | 11:41:36         |
| 1     | Tl 190.801†        | 955.6            | 1015.8                 | [1000] µg/L  |        | 11:42:03         |
| 1     | U 409.014†         | 11013.8          | 11350.7                | [1000] µg/L  |        | 11:41:42         |
| 1     | V 292.402†         | 81579.1          | 83680.0                | [1000] µg/L  |        | 11:41:42         |
| 1     | Zn 213.857†        | 42835.9          | 43332.8                | [1000] µg/L  |        | 11:41:42         |
| 2     | Sc RADIAL          | 90333.0          | 90333.0                | 98.4 %       |        | 11:40:38         |
| 2     | Al 396.153Radial†  | 20020.6          | 20502.9                | [10000] µg/L |        | 11:40:38         |
| 2     | Ca 317.933Radial†  | 26779.3          | 26866.1                | [10000] µg/L |        | 11:40:38         |
| 2     | Fe 238.204 Radial† | 802.0            | 801.7                  | [10000] µg/L |        | 11:40:59         |
| 2     | K 766.490 Radial†  | 21182.4          | 21115.6                | [10000] µg/L |        | 11:40:38         |
| 2     | Mg 279.077 IEC†    | 738.6            | 741.4                  | [10000] µg/L |        | 11:40:59         |
| 2     | Na 589.592 Radial† | 19632.7          | 19756.2                | [10000] µg/L |        | 11:40:38         |
| 2     | Sr 421.552†        | 162361.0         | 164819.6               | [1000] µg/L  |        | 11:40:38         |
| 2     | Sc 361.383         | 1912226.7        | 1912226.7              | 98.057 %     |        | 11:42:09         |
| 2     | Y 371.029          | 1300476.2        | 1300476.2              | 97.537 %     |        | 11:42:09         |
| 2     | Ag 328.068†        | 119105.2         | 121989.0               | [1000] µg/L  |        | 11:42:15         |
| 2     | As 188.979†        | 646.5            | 662.7                  | [1000] µg/L  |        | 11:42:36         |
| 2     | B 249.677†         | 21290.3          | 21434.9                | [1000] µg/L  |        | 11:42:15         |
| 2     | Ba 233.527†        | 43958.6          | 44856.8                | [1000] µg/L  |        | 11:42:15         |
| 2     | Be 313.107†        | 1626653.0        | 1660446.3              | [1000] µg/L  |        | 11:42:09         |
| 2     | Cd 226.502†        | 39679.1          | 40630.7                | [1000] µg/L  |        | 11:42:15         |
| 2     | Co 228.616†        | 22542.7          | 22955.0                | [1000] µg/L  |        | 11:42:15         |
| 2     | Cr 267.716†        | 44289.5          | 45074.9                | [1000] µg/L  |        | 11:42:15         |
| 2     | Cu 324.752†        | 153650.9         | 152471.7               | [1000] µg/L  |        | 11:42:15         |
| 2     | Mn 257.610†        | 312006.2         | 318928.4               | [1000] µg/L  |        | 11:42:15         |
| 2     | Mo 202.031†        | 9803.0           | 9984.9                 | [1000] µg/L  |        | 11:42:36         |
| 2     | Ni 231.604†        | 17613.3          | 17604.9                | [1000] µg/L  |        | 11:42:15         |
| 2     | P 214.914†         | 3173.5           | 2948.4                 | [5000] µg/L  |        | 11:42:36         |
| 2     | Pb 220.353†        | 3698.1           | 3731.8                 | [1000] µg/L  |        | 11:42:36         |

|   |                    |           |           |         |      |          |
|---|--------------------|-----------|-----------|---------|------|----------|
| 2 | S 181.975 Axial†   | 632.9     | 622.5     | [2000]  | µg/L | 11:42:36 |
| 2 | Sb 206.836†        | 1098.4    | 1092.3    | [1000]  | µg/L | 11:42:36 |
| 2 | Se 196.026†        | 1024.5    | 1023.0    | [1000]  | µg/L | 11:42:36 |
| 2 | SiO2†              | 59997.4   | 58444.7   | [10695] | µg/L | 11:42:15 |
| 2 | Si 251.611†        | 71681.0   | 72679.8   | [5000]  | µg/L | 11:42:15 |
| 2 | Sn 189.927†        | 2437.7    | 2491.2    | [1000]  | µg/L | 11:42:36 |
| 2 | Ti 334.940†        | 413113.2  | 421991.0  | [1000]  | µg/L | 11:42:09 |
| 2 | Tl 190.801†        | 937.3     | 990.3     | [1000]  | µg/L | 11:42:36 |
| 2 | U 409.014†         | 11006.6   | 11264.6   | [1000]  | µg/L | 11:42:15 |
| 2 | V 292.402†         | 81429.6   | 82944.1   | [1000]  | µg/L | 11:42:15 |
| 2 | Zn 213.857†        | 42860.0   | 43051.1   | [1000]  | µg/L | 11:42:15 |
| 3 | Sc RADIAL          | 90443.3   | 90443.3   | 98.5    | %    | 11:41:04 |
| 3 | Al 396.153Radial†  | 20022.6   | 20480.2   | [10000] | µg/L | 11:41:04 |
| 3 | Ca 317.933Radial†  | 26876.5   | 26931.7   | [10000] | µg/L | 11:41:04 |
| 3 | Fe 238.204 Radial† | 802.6     | 801.3     | [10000] | µg/L | 11:41:25 |
| 3 | K 766.490 Radial†  | 21151.3   | 21057.8   | [10000] | µg/L | 11:41:04 |
| 3 | Mg 279.077 IEC†    | 741.1     | 742.9     | [10000] | µg/L | 11:41:25 |
| 3 | Na 589.592 Radial† | 19574.2   | 19672.5   | [10000] | µg/L | 11:41:04 |
| 3 | Sr 421.552†        | 162285.8  | 164542.2  | [1000]  | µg/L | 11:41:04 |
| 3 | Sc 361.383         | 1920877.2 | 1920877.2 | 98.500  | %    | 11:42:42 |
| 3 | Y 371.029          | 1309166.1 | 1309166.1 | 98.188  | %    | 11:42:42 |
| 3 | Ag 328.068†        | 108682.6  | 110860.6  | [1000]  | µg/L | 11:42:48 |
| 3 | As 188.979†        | 534.2     | 545.7     | [1000]  | µg/L | 11:43:09 |
| 3 | B 249.677†         | 19257.0   | 19272.8   | [1000]  | µg/L | 11:42:48 |
| 3 | Ba 233.527†        | 38521.1   | 39134.6   | [1000]  | µg/L | 11:42:48 |
| 3 | Be 313.107†        | 1460784.6 | 1484582.1 | [1000]  | µg/L | 11:42:42 |
| 3 | Cd 226.502†        | 34616.6   | 35308.9   | [1000]  | µg/L | 11:42:48 |
| 3 | Co 228.616†        | 19455.1   | 19716.9   | [1000]  | µg/L | 11:42:48 |
| 3 | Cr 267.716†        | 36976.0   | 37446.5   | [1000]  | µg/L | 11:42:48 |
| 3 | Cu 324.752†        | 133912.8  | 131727.6  | [1000]  | µg/L | 11:42:48 |
| 3 | Mn 257.610†        | 269449.1  | 274290.6  | [1000]  | µg/L | 11:42:48 |
| 3 | Mo 202.031†        | 7955.6    | 8064.3    | [1000]  | µg/L | 11:43:09 |
| 3 | Ni 231.604†        | 15266.7   | 15141.7   | [1000]  | µg/L | 11:42:48 |
| 3 | P 214.914†         | 2686.6    | 2439.5    | [5000]  | µg/L | 11:43:09 |
| 3 | Pb 220.353†        | 3112.0    | 3119.8    | [1000]  | µg/L | 11:43:09 |
| 3 | S 181.975 Axial†   | 550.5     | 535.9     | [2000]  | µg/L | 11:43:09 |
| 3 | Sb 206.836†        | 928.5     | 914.8     | [1000]  | µg/L | 11:43:09 |
| 3 | Se 196.026†        | 891.1     | 882.9     | [1000]  | µg/L | 11:43:09 |
| 3 | SiO2†              | 53788.6   | 51865.8   | [10695] | µg/L | 11:42:48 |
| 3 | Si 251.611†        | 63861.3   | 64411.8   | [5000]  | µg/L | 11:42:48 |
| 3 | Sn 189.927†        | 1954.6    | 1989.6    | [1000]  | µg/L | 11:43:09 |
| 3 | Ti 334.940†        | 367405.9  | 373690.6  | [1000]  | µg/L | 11:42:42 |
| 3 | Tl 190.801†        | 809.6     | 856.3     | [1000]  | µg/L | 11:43:09 |
| 3 | U 409.014†         | 9309.9    | 9491.5    | [1000]  | µg/L | 11:42:48 |
| 3 | V 292.402†         | 70026.5   | 70993.4   | [1000]  | µg/L | 11:42:48 |
| 3 | Zn 213.857†        | 37138.4   | 37045.5   | [1000]  | µg/L | 11:42:48 |

## Mean Data: SCAL

| Analyte            | Mean Corrected<br>Intensity | Std.Dev.  | RSD    | Calib<br>Conc. Units |
|--------------------|-----------------------------|-----------|--------|----------------------|
| Sc 361.383         | 1910671.0                   | 11066.31  | 0.58%  | 97.977 %             |
| Sc RADIAL          | 90348.8                     | 87.66     | 0.10%  | 98.4 %               |
| Y 371.029          | 1300906.9                   | 8052.58   | 0.62%  | 97.569 %             |
| Ag 328.068†        | 118594.5                    | 6714.40   | 5.66%  | [1000] µg/L          |
| Al 396.153Radial†  | 20492.9                     | 11.63     | 0.06%  | [10000] µg/L         |
| As 188.979†        | 636.2                       | 80.56     | 12.66% | [1000] µg/L          |
| B 249.677†         | 20764.0                     | 1293.54   | 6.23%  | [1000] µg/L          |
| Ba 233.527†        | 43046.9                     | 3391.34   | 7.88%  | [1000] µg/L          |
| Be 313.107†        | 1601075.8                   | 100892.83 | 6.30%  | [1000] µg/L          |
| Ca 317.933Radial†  | 26883.0                     | 42.81     | 0.16%  | [10000] µg/L         |
| Cd 226.502†        | 38932.6                     | 3140.23   | 8.07%  | [1000] µg/L          |
| Co 228.616†        | 21918.3                     | 1907.59   | 8.70%  | [1000] µg/L          |
| Cr 267.716†        | 42689.0                     | 4546.16   | 10.65% | [1000] µg/L          |
| Cu 324.752†        | 146087.1                    | 12461.12  | 8.53%  | [1000] µg/L          |
| Fe 238.204 Radial† | 802.3                       | 1.41      | 0.18%  | [10000] µg/L         |
| K 766.490 Radial†  | 21080.6                     | 30.81     | 0.15%  | [10000] µg/L         |
| Mg 279.077 IEC†    | 742.2                       | 0.78      | 0.10%  | [10000] µg/L         |
| Mn 257.610†        | 305224.4                    | 26847.41  | 8.80%  | [1000] µg/L          |
| Mo 202.031†        | 9485.2                      | 1248.46   | 13.16% | [1000] µg/L          |
| Na 589.592 Radial† | 19696.6                     | 51.93     | 0.26%  | [10000] µg/L         |

|                  |          |          |        |         |      |
|------------------|----------|----------|--------|---------|------|
| Ni 231.604†      | 16817.1  | 1451.83  | 8.63%  | [1000]  | µg/L |
| P 214.914†       | 2817.7   | 332.73   | 11.81% | [5000]  | µg/L |
| Pb 220.353†      | 3574.7   | 400.13   | 11.19% | [1000]  | µg/L |
| S 181.975 Axial† | 599.6    | 55.88    | 9.32%  | [2000]  | µg/L |
| Sb 206.836†      | 1047.5   | 116.99   | 11.17% | [1000]  | µg/L |
| Se 196.026†      | 992.7    | 98.25    | 9.90%  | [1000]  | µg/L |
| SiO2†            | 56366.5  | 3901.52  | 6.92%  | [10695] | µg/L |
| Si 251.611†      | 70054.6  | 4890.76  | 6.98%  | [5000]  | µg/L |
| Sn 189.927†      | 2369.3   | 335.83   | 14.17% | [1000]  | µg/L |
| Sr 421.552†      | 164518.8 | 313.18   | 0.19%  | [1000]  | µg/L |
| Ti 334.940†      | 405686.1 | 27710.64 | 6.83%  | [1000]  | µg/L |
| Tl 190.801†      | 954.1    | 85.67    | 8.98%  | [1000]  | µg/L |
| U 409.014†       | 10702.2  | 1049.44  | 9.81%  | [1000]  | µg/L |
| V 292.402†       | 79205.8  | 7121.67  | 8.99%  | [1000]  | µg/L |
| Zn 213.857†      | 41143.1  | 3551.47  | 8.63%  | [1000]  | µg/L |

Sequence No.: 5  
 Sample ID: S10  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 3/15/2010 11:43:18  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S10

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 90416.5       | 90416.5             | 98.5 %             | 11:43:49      |
| 1     | Al 396.153Radial†  | 100299.0      | 101969.8            | [50000] µg/L       | 11:43:49      |
| 1     | Ca 317.933Radial†  | 130831.1      | 132457.8            | [50000] µg/L       | 11:43:49      |
| 1     | Fe 238.204 Radial† | 1599.7        | 1610.6              | [20000] µg/L       | 11:44:09      |
| 1     | Mg 279.077 IEC†    | 3644.4        | 3690.2              | [50000] µg/L       | 11:44:09      |
| 1     | Na 589.592 Radial† | 39060.9       | 39458.2             | [20000] µg/L       | 11:43:49      |
| 1     | Sc 361.383         | 1907153.6     | 1907153.6           | 97.797 %           | 11:45:13      |
| 1     | Y 371.029          | 1288608.6     | 1288608.6           | 96.647 %           | 11:45:13      |
| 2     | Sc RADIAL          | 90099.1       | 90099.1             | 98.2 %             | 11:44:15      |
| 2     | Al 396.153Radial†  | 100105.2      | 102131.1            | [50000] µg/L       | 11:44:15      |
| 2     | Ca 317.933Radial†  | 130787.2      | 132880.9            | [50000] µg/L       | 11:44:15      |
| 2     | Fe 238.204 Radial† | 1587.8        | 1604.3              | [20000] µg/L       | 11:44:35      |
| 2     | Mg 279.077 IEC†    | 3640.1        | 3698.8              | [50000] µg/L       | 11:44:35      |
| 2     | Na 589.592 Radial† | 39102.0       | 39639.7             | [20000] µg/L       | 11:44:15      |
| 2     | Sc 361.383         | 1915091.2     | 1915091.2           | 98.204 %           | 11:45:20      |
| 2     | Y 371.029          | 1296720.5     | 1296720.5           | 97.255 %           | 11:45:20      |
| 3     | Sc RADIAL          | 90441.6       | 90441.6             | 98.5 %             | 11:44:41      |
| 3     | Al 396.153Radial†  | 100506.5      | 102152.2            | [50000] µg/L       | 11:44:41      |
| 3     | Ca 317.933Radial†  | 131386.1      | 132984.0            | [50000] µg/L       | 11:44:41      |
| 3     | Fe 238.204 Radial† | 1592.8        | 1603.2              | [20000] µg/L       | 11:45:01      |
| 3     | Mg 279.077 IEC†    | 3650.2        | 3695.0              | [50000] µg/L       | 11:45:01      |
| 3     | Na 589.592 Radial† | 39253.3       | 39642.4             | [20000] µg/L       | 11:44:41      |
| 3     | Sc 361.383         | 1917926.5     | 1917926.5           | 98.349 %           | 11:45:28      |
| 3     | Y 371.029          | 1299619.5     | 1299619.5           | 97.472 %           | 11:45:28      |

## Mean Data: S10

| Analyte            | Mean Corrected Intensity | Std.Dev. | RSD   | Calib Conc. Units |
|--------------------|--------------------------|----------|-------|-------------------|
| Sc 361.383         | 1913390.4                | 5584.20  | 0.29% | 98.117 %          |
| Sc RADIAL          | 90319.1                  | 190.92   | 0.21% | 98.4 %            |
| Y 371.029          | 1294982.8                | 5707.40  | 0.44% | 97.125 %          |
| Al 396.153Radial†  | 102084.4                 | 99.75    | 0.10% | [50000] µg/L      |
| Ca 317.933Radial†  | 132774.2                 | 278.87   | 0.21% | [50000] µg/L      |
| Fe 238.204 Radial† | 1606.0                   | 4.02     | 0.25% | [20000] µg/L      |
| Mg 279.077 IEC†    | 3694.6                   | 4.32     | 0.12% | [50000] µg/L      |
| Na 589.592 Radial† | 39580.1                  | 105.58   | 0.27% | [20000] µg/L      |

## Calibration Summary

| Analyte          | Stds. | Equation   | Intercept | Slope  | Curvature | Corr. Coef. | Reslope |
|------------------|-------|------------|-----------|--------|-----------|-------------|---------|
| Ag 328.068       | 3     | Lin Thru 0 | 0.0       | 118.8  | 0.00000   | 0.999988    |         |
| Al 396.153Radial | 3     | Lin Thru 0 | 0.0       | 2.042  | 0.00000   | 0.999997    |         |
| As 188.979       | 3     | Lin Thru 0 | 0.0       | 0.6401 | 0.00000   | 0.999861    |         |
| B 249.677        | 3     | Lin Thru 0 | 0.0       | 20.79  | 0.00000   | 0.999996    |         |
| Ba 233.527       | 3     | Lin Thru 0 | 0.0       | 43.22  | 0.00000   | 0.999964    |         |
| Be 313.107       | 3     | Lin Thru 0 | 0.0       | 1609   | 0.00000   | 0.999951    |         |
| Ca 317.933Radial | 3     | Lin Thru 0 | 0.0       | 2.657  | 0.00000   | 0.999994    |         |
| Cd 226.502       | 3     | Lin Thru 0 | 0.0       | 39.10  | 0.00000   | 0.999956    |         |
| Co 228.616       | 3     | Lin Thru 0 | 0.0       | 22.02  | 0.00000   | 0.999948    |         |
| Cr 267.716       | 3     | Lin Thru 0 | 0.0       | 42.86  | 0.00000   | 0.999959    |         |
| Cu 324.752       | 3     | Lin Thru 0 | 0.0       | 146.5  | 0.00000   | 0.999967    |         |
| Fe 238.204 Radia | 2     | Lin Thru 0 | 0.0       | 0.0803 | 0.00000   | 1.000000    |         |
| K 766.490 Radial | 3     | Lin Thru 0 | 0.0       | 2.114  | 0.00000   | 0.999986    |         |
| Mg 279.077 IEC   | 3     | Lin Thru 0 | 0.0       | 0.0739 | 0.00000   | 0.999997    |         |
| Mn 257.610       | 3     | Lin Thru 0 | 0.0       | 308.1  | 0.00000   | 0.999825    |         |
| Mo 202.031       | 3     | Lin Thru 0 | 0.0       | 9.528  | 0.00000   | 0.999928    |         |
| Na 589.592 Radia | 2     | Lin Thru 0 | 0.0       | 1.977  | 0.00000   | 0.999998    |         |

|                 |   |            |     |        |         |          |
|-----------------|---|------------|-----|--------|---------|----------|
| Ni 231.604      | 3 | Lin Thru 0 | 0.0 | 16.90  | 0.00000 | 0.999936 |
| P 214.914       | 3 | Lin Thru 0 | 0.0 | 0.5661 | 0.00000 | 0.999899 |
| Pb 220.353      | 3 | Lin Thru 0 | 0.0 | 3.592  | 0.00000 | 0.999911 |
| S 181.975 Axial | 3 | Lin Thru 0 | 0.0 | 0.3008 | 0.00000 | 0.999955 |
| Sb 206.836      | 3 | Lin Thru 0 | 0.0 | 1.051  | 0.00000 | 0.999975 |
| Se 196.026      | 3 | Lin Thru 0 | 0.0 | 0.9965 | 0.00000 | 0.999972 |
| SiO2            | 3 | Lin Thru 0 | 0.0 | 5.279  | 0.00000 | 0.999990 |
| Si 251.611      | 3 | Lin Thru 0 | 0.0 | 14.04  | 0.00000 | 0.999988 |
| Sn 189.927      | 3 | Lin Thru 0 | 0.0 | 2.381  | 0.00000 | 0.999913 |
| Sr 421.552      | 3 | Lin Thru 0 | 0.0 | 165.1  | 0.00000 | 0.999975 |
| Ti 334.940      | 3 | Lin Thru 0 | 0.0 | 407.4  | 0.00000 | 0.999967 |
| Tl 190.801      | 3 | Lin Thru 0 | 0.0 | 0.9597 | 0.00000 | 0.999906 |
| U 409.014       | 3 | Lin Thru 0 | 0.0 | 10.72  | 0.00000 | 0.999973 |
| V 292.402       | 3 | Lin Thru 0 | 0.0 | 79.39  | 0.00000 | 0.999980 |
| Zn 213.857      | 3 | Lin Thru 0 | 0.0 | 41.34  | 0.00000 | 0.999946 |

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/15/2010 11:45:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 90599.3          | 90599.3                | 98.7 %                |                       | 11:46:09         |
| 1     | Al 396.153Radial†  | 10308.8          | 10605.1                | 5180.5 µg/L           | 5180.5 ppb            | 11:46:09         |
| 1     | Ca 317.933Radial†  | 13689.2          | 13526.1                | 5090.0 µg/L           | 5090.0 ppb            | 11:46:09         |
| 1     | Fe 238.204 Radial† | 409.8            | 402.0                  | 5018.6 µg/L           | 5018.6 ppb            | 11:46:29         |
| 1     | K 766.490 Radial†  | 5640.4           | 5308.5                 | 2511.6 µg/L           | 2511.6 ppb            | 11:46:09         |
| 1     | Mg 279.077 IEC†    | 383.0            | 378.9                  | 5129.5 µg/L           | 5129.5 ppb            | 11:46:29         |
| 1     | Na 589.592 Radial† | 4931.6           | 4805.5                 | 2430.6 µg/L           | 2430.6 ppb            | 11:46:09         |
| 1     | Sr 421.552†        | 85900.8          | 86881.4                | 526.18 µg/L           | 526.18 ppb            | 11:46:09         |
| 1     | Sc 361.383         | 1934695.1        | 1934695.1              | 99.209 %              |                       | 11:47:33         |
| 1     | Y 371.029          | 1318969.1        | 1318969.1              | 98.924 %              |                       | 11:47:33         |
| 1     | Ag 328.068†        | 30368.7          | 31134.3                | 265.93 µg/L           | 265.93 ppb            | 11:47:39         |
| 1     | As 188.979†        | 322.9            | 328.8                  | 511.36 µg/L           | 511.36 ppb            | 11:47:59         |
| 1     | B 249.677†         | 11455.2          | 11269.2                | 540.27 µg/L           | 540.27 ppb            | 11:47:39         |
| 1     | Ba 233.527†        | 22869.2          | 23078.6                | 534.92 µg/L           | 534.92 ppb            | 11:47:39         |
| 1     | Be 313.107†        | 431727.3         | 436728.2               | 271.25 µg/L           | 271.25 ppb            | 11:47:33         |
| 1     | Cd 226.502†        | 20338.4          | 20665.9                | 528.51 µg/L           | 528.51 ppb            | 11:47:39         |
| 1     | Co 228.616†        | 11845.6          | 11905.6                | 540.04 µg/L           | 540.04 ppb            | 11:47:39         |
| 1     | Cr 267.716†        | 22264.0          | 22349.2                | 521.81 µg/L           | 521.81 ppb            | 11:47:39         |
| 1     | Cu 324.752†        | 81459.3          | 77884.8                | 532.56 µg/L           | 532.56 ppb            | 11:47:39         |
| 1     | Mn 257.610†        | 163567.7         | 165611.2               | 537.45 µg/L           | 537.45 ppb            | 11:47:33         |
| 1     | Mo 202.031†        | 5445.9           | 5477.0                 | 575.05 µg/L           | 575.05 ppb            | 11:47:59         |
| 1     | Ni 231.604†        | 9215.6           | 8931.6                 | 527.84 µg/L           | 527.84 ppb            | 11:47:39         |
| 1     | P 214.914†         | 1808.2           | 1534.7                 | 2660.6 µg/L           | 2660.6 ppb            | 11:47:59         |
| 1     | Pb 220.353†        | 1950.0           | 1925.9                 | 536.84 µg/L           | 536.84 ppb            | 11:47:59         |
| 1     | S 181.975 Axial†   | 817.5            | 801.1                  | 2663.6 µg/L           | 2663.6 ppb            | 11:47:59         |
| 1     | Sb 206.836†        | 579.0            | 555.7                  | 532.30 µg/L           | 532.30 ppb            | 11:47:59         |
| 1     | Se 196.026†        | 2722.0           | 2721.9                 | 2743.1 µg/L           | 2743.1 ppb            | 11:47:59         |
| 1     | SiO2†              | 58697.0          | 56423.2                | 10688 µg/L            | 10688 ppb             | 11:47:39         |
| 1     | Si 251.611†        | 69891.4          | 70027.0                | 4988.4 µg/L           | 4988.4 ppb            | 11:47:39         |
| 1     | Sn 189.927†        | 1356.5           | 1372.6                 | 577.07 µg/L           | 577.07 ppb            | 11:47:59         |
| 1     | Ti 334.940†        | 206415.1         | 208752.2               | 512.14 µg/L           | 512.14 ppb            | 11:47:33         |
| 1     | Tl 190.801†        | 495.8            | 534.2                  | 561.79 µg/L           | 561.79 ppb            | 11:47:59         |
| 1     | U 409.014†         | 5433.2           | 5516.4                 | 513.55 µg/L           | 513.55 ppb            | 11:47:39         |
| 1     | V 292.402†         | 42132.7          | 42369.4                | 539.12 µg/L           | 539.12 ppb            | 11:47:39         |
| 1     | Zn 213.857†        | 22635.9          | 22158.1                | 532.22 µg/L           | 532.22 ppb            | 11:47:39         |
| 2     | Sc RADIAL          | 90282.4          | 90282.4                | 98.4 %                |                       | 11:46:35         |
| 2     | Al 396.153Radial†  | 10189.0          | 10520.0                | 5139.0 µg/L           | 5139.0 ppb            | 11:46:35         |
| 2     | Ca 317.933Radial†  | 13606.6          | 13490.8                | 5076.7 µg/L           | 5076.7 ppb            | 11:46:35         |
| 2     | Fe 238.204 Radial† | 412.8            | 406.5                  | 5074.8 µg/L           | 5074.8 ppb            | 11:46:56         |
| 2     | K 766.490 Radial†  | 5651.6           | 5339.9                 | 2526.5 µg/L           | 2526.5 ppb            | 11:46:35         |
| 2     | Mg 279.077 IEC†    | 380.6            | 377.8                  | 5115.2 µg/L           | 5115.2 ppb            | 11:46:56         |
| 2     | Na 589.592 Radial† | 4914.1           | 4805.2                 | 2430.4 µg/L           | 2430.4 ppb            | 11:46:35         |
| 2     | Sr 421.552†        | 85531.7          | 86811.6                | 525.76 µg/L           | 525.76 ppb            | 11:46:35         |
| 2     | Sc 361.383         | 1924341.2        | 1924341.2              | 98.678 %              |                       | 11:48:06         |
| 2     | Y 371.029          | 1312706.0        | 1312706.0              | 98.454 %              |                       | 11:48:06         |
| 2     | Ag 328.068†        | 30011.9          | 30937.5                | 264.26 µg/L           | 264.26 ppb            | 11:48:12         |
| 2     | As 188.979†        | 319.9            | 327.6                  | 509.40 µg/L           | 509.40 ppb            | 11:48:32         |
| 2     | B 249.677†         | 11319.7          | 11194.0                | 536.62 µg/L           | 536.62 ppb            | 11:48:12         |
| 2     | Ba 233.527†        | 22675.4          | 23006.3                | 533.25 µg/L           | 533.25 ppb            | 11:48:12         |
| 2     | Be 313.107†        | 428245.9         | 435541.6               | 270.51 µg/L           | 270.51 ppb            | 11:48:06         |
| 2     | Cd 226.502†        | 20127.8          | 20562.7                | 525.86 µg/L           | 525.86 ppb            | 11:48:12         |
| 2     | Co 228.616†        | 11698.2          | 11820.4                | 536.17 µg/L           | 536.17 ppb            | 11:48:12         |
| 2     | Cr 267.716†        | 22115.4          | 22319.3                | 521.11 µg/L           | 521.11 ppb            | 11:48:12         |
| 2     | Cu 324.752†        | 80647.0          | 77503.4                | 529.96 µg/L           | 529.96 ppb            | 11:48:12         |
| 2     | Mn 257.610†        | 162245.0         | 165157.9               | 535.98 µg/L           | 535.98 ppb            | 11:48:06         |
| 2     | Mo 202.031†        | 5353.0           | 5412.4                 | 568.27 µg/L           | 568.27 ppb            | 11:48:32         |
| 2     | Ni 231.604†        | 9129.4           | 8894.2                 | 525.64 µg/L           | 525.64 ppb            | 11:48:12         |
| 2     | P 214.914†         | 1783.3           | 1519.2                 | 2633.4 µg/L           | 2633.4 ppb            | 11:48:32         |
| 2     | Pb 220.353†        | 1919.8           | 1906.0                 | 531.26 µg/L           | 531.26 ppb            | 11:48:32         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 801.9     | 789.7     | 2625.6 µg/L | 2625.6 ppb | 11:48:32 |
| 2 | Sb 206.836†        | 579.5     | 559.4     | 535.71 µg/L | 535.71 ppb | 11:48:32 |
| 2 | Se 196.026†        | 2666.0    | 2680.0    | 2701.2 µg/L | 2701.2 ppb | 11:48:32 |
| 2 | SiO2†              | 58234.2   | 56272.6   | 10659 µg/L  | 10659 ppb  | 11:48:12 |
| 2 | Si 251.611†        | 69463.1   | 69972.0   | 4984.5 µg/L | 4984.5 ppb | 11:48:12 |
| 2 | Sn 189.927†        | 1339.1    | 1362.3    | 572.74 µg/L | 572.74 ppb | 11:48:32 |
| 2 | Ti 334.940†        | 205026.7  | 208464.7  | 511.43 µg/L | 511.43 ppb | 11:48:06 |
| 2 | Tl 190.801†        | 485.7     | 526.6     | 553.92 µg/L | 553.92 ppb | 11:48:32 |
| 2 | U 409.014†         | 5370.6    | 5482.4    | 510.37 µg/L | 510.37 ppb | 11:48:12 |
| 2 | V 292.402†         | 41702.4   | 42161.9   | 536.44 µg/L | 536.44 ppb | 11:48:12 |
| 2 | Zn 213.857†        | 22471.6   | 22114.3   | 531.18 µg/L | 531.18 ppb | 11:48:12 |
| 3 | Sc RADIAL          | 90208.9   | 90208.9   | 98.3 %      |            | 11:47:01 |
| 3 | Al 396.153Radial†  | 10203.8   | 10543.6   | 5152.7 µg/L | 5152.7 ppb | 11:47:01 |
| 3 | Ca 317.933Radial†  | 13672.8   | 13569.4   | 5106.3 µg/L | 5106.3 ppb | 11:47:01 |
| 3 | Fe 238.204 Radial† | 412.6     | 406.7     | 5075.3 µg/L | 5075.3 ppb | 11:47:21 |
| 3 | K 766.490 Radial†  | 5622.1    | 5314.6    | 2514.5 µg/L | 2514.5 ppb | 11:47:01 |
| 3 | Mg 279.077 IEC†    | 385.0     | 382.6     | 5178.5 µg/L | 5178.5 ppb | 11:47:21 |
| 3 | Na 589.592 Radial† | 4884.9    | 4779.6    | 2417.4 µg/L | 2417.4 ppb | 11:47:01 |
| 3 | Sr 421.552†        | 85548.4   | 86899.5   | 526.29 µg/L | 526.29 ppb | 11:47:01 |
| 3 | Sc 361.383         | 1933839.6 | 1933839.6 | 99.165 %    |            | 11:48:40 |
| 3 | Y 371.029          | 1318227.3 | 1318227.3 | 98.868 %    |            | 11:48:40 |
| 3 | Ag 328.068†        | 27782.2   | 28539.6   | 243.63 µg/L | 243.63 ppb | 11:48:45 |
| 3 | As 188.979†        | 261.1     | 266.7     | 414.47 µg/L | 414.47 ppb | 11:49:06 |
| 3 | B 249.677†         | 10413.7   | 10224.1   | 489.84 µg/L | 489.84 ppb | 11:48:45 |
| 3 | Ba 233.527†        | 20363.5   | 20562.1   | 476.57 µg/L | 476.57 ppb | 11:48:45 |
| 3 | Be 313.107†        | 392633.2  | 397497.5  | 246.89 µg/L | 246.89 ppb | 11:48:40 |
| 3 | Cd 226.502†        | 17941.8   | 18258.1   | 466.85 µg/L | 466.85 ppb | 11:48:45 |
| 3 | Co 228.616†        | 10356.4   | 10409.2   | 472.09 µg/L | 472.09 ppb | 11:48:45 |
| 3 | Cr 267.716†        | 18846.0   | 18912.3   | 441.57 µg/L | 441.57 ppb | 11:48:45 |
| 3 | Cu 324.752†        | 71926.1   | 68307.7   | 467.20 µg/L | 467.20 ppb | 11:48:45 |
| 3 | Mn 257.610†        | 149498.4  | 151496.4  | 491.64 µg/L | 491.64 ppb | 11:48:40 |
| 3 | Mo 202.031†        | 4370.9    | 4395.3    | 461.52 µg/L | 461.52 ppb | 11:49:06 |
| 3 | Ni 231.604†        | 8132.4    | 7843.4    | 463.54 µg/L | 463.54 ppb | 11:48:45 |
| 3 | P 214.914†         | 1549.6    | 1274.6    | 2206.3 µg/L | 2206.3 ppb | 11:49:06 |
| 3 | Pb 220.353†        | 1627.3    | 1601.5    | 446.37 µg/L | 446.37 ppb | 11:49:06 |
| 3 | S 181.975 Axial†   | 685.8     | 668.6     | 2223.0 µg/L | 2223.0 ppb | 11:49:06 |
| 3 | Sb 206.836†        | 484.6     | 460.8     | 441.03 µg/L | 441.03 ppb | 11:49:06 |
| 3 | Se 196.026†        | 2302.9    | 2300.4    | 2320.3 µg/L | 2320.3 ppb | 11:49:06 |
| 3 | SiO2†              | 53296.6   | 51003.6   | 9661.2 µg/L | 9661.2 ppb | 11:48:45 |
| 3 | Si 251.611†        | 63215.0   | 63325.5   | 4511.0 µg/L | 4511.0 ppb | 11:48:45 |
| 3 | Sn 189.927†        | 1072.2    | 1086.5    | 456.90 µg/L | 456.90 ppb | 11:49:06 |
| 3 | Ti 334.940†        | 186655.4  | 188918.2  | 463.44 µg/L | 463.44 ppb | 11:48:40 |
| 3 | Tl 190.801†        | 429.7     | 467.6     | 492.01 µg/L | 492.01 ppb | 11:49:06 |
| 3 | U 409.014†         | 4690.4    | 4769.8    | 443.90 µg/L | 443.90 ppb | 11:48:45 |
| 3 | V 292.402†         | 36545.8   | 36754.3   | 467.27 µg/L | 467.27 ppb | 11:48:45 |
| 3 | Zn 213.857†        | 19971.8   | 19481.6   | 467.87 µg/L | 467.87 ppb | 11:48:45 |

## Mean Data: ICV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1930958.6                | 99.017 %           | 0.2947   |                    |          | 0.30%  |
| Sc RADIAL  | 90363.5                  | 98.5 %             | 0.23     |                    |          | 0.23%  |
| Y 371.029  | 1316634.1                | 98.748 %           | 0.2567   |                    |          | 0.26%  |
| Ag 328.068†  | 30203.8                  | 257.94 µg/L        | 12.421   | 257.94 ppb         | 12.421   | 4.82%  |
| QC value within limits for Ag 328.068 Recovery = 103.18%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 10556.2                  | 5157.4 µg/L        | 21.16    | 5157.4 ppb         | 21.16    | 0.41%  |
| QC value within limits for Al 396.153Radial Recovery = 103.15% |                          |                    |          |                    |          |        |
| As 188.979†  | 307.7                    | 478.41 µg/L        | 55.383   | 478.41 ppb         | 55.383   | 11.58% |
| QC value within limits for As 188.979 Recovery = 95.68%        |                          |                    |          |                    |          |        |
| B 249.677†   | 10895.8                  | 522.24 µg/L        | 28.121   | 522.24 ppb         | 28.121   | 5.38%  |
| QC value within limits for B 249.677 Recovery = 104.45%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 22215.6                  | 514.91 µg/L        | 33.215   | 514.91 ppb         | 33.215   | 6.45%  |
| QC value within limits for Ba 233.527 Recovery = 102.98%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 423255.8                 | 262.88 µg/L        | 13.859   | 262.88 ppb         | 13.859   | 5.27%  |
| QC value within limits for Be 313.107 Recovery = 105.15%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13528.8                  | 5091.0 µg/L        | 14.83    | 5091.0 ppb         | 14.83    | 0.29%  |
| QC value within limits for Ca 317.933Radial Recovery = 101.82% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19828.9                  | 507.07 µg/L        | 34.855   | 507.07 ppb         | 34.855   | 6.87%  |
| QC value within limits for Cd 226.502 Recovery = 101.41%       |                          |                    |          |                    |          |        |
| Co 228.616†  | 11378.4                  | 516.10 µg/L        | 38.162   | 516.10 ppb         | 38.162   | 7.39%  |



|   |          |             |        |            |        |        |
|---|----------|-------------|--------|------------|--------|--------|
| Cr 267.716†   | 21193.6  | 494.83 µg/L | 46.125 | 494.83 ppb | 46.125 | 9.32%  |
| QC value within limits for Cr 267.716 Recovery = 98.97%         |          |             |        |            |        |        |
| Cu 324.752†   | 74565.3  | 509.91 µg/L | 37.009 | 509.91 ppb | 37.009 | 7.26%  |
| QC value within limits for Cu 324.752 Recovery = 101.98%        |          |             |        |            |        |        |
| Fe 238.204 Radial†  | 405.1    | 5056.2 µg/L | 32.60  | 5056.2 ppb | 32.60  | 0.64%  |
| QC value within limits for Fe 238.204 Radial Recovery = 101.12% |          |             |        |            |        |        |
| K 766.490 Radial†   | 5321.0   | 2517.5 µg/L | 7.88   | 2517.5 ppb | 7.88   | 0.31%  |
| QC value within limits for K 766.490 Radial Recovery = 100.70%  |          |             |        |            |        |        |
| Mg 279.077 IEC†   | 379.8    | 5141.1 µg/L | 33.22  | 5141.1 ppb | 33.22  | 0.65%  |
| QC value within limits for Mg 279.077 IEC Recovery = 102.82%    |          |             |        |            |        |        |
| Mn 257.610†   | 160755.2 | 521.69 µg/L | 26.035 | 521.69 ppb | 26.035 | 4.99%  |
| QC value within limits for Mn 257.610 Recovery = 104.34%        |          |             |        |            |        |        |
| Mo 202.031†   | 5094.9   | 534.95 µg/L | 63.680 | 534.95 ppb | 63.680 | 11.90% |
| QC value within limits for Mo 202.031 Recovery = 106.99%        |          |             |        |            |        |        |
| Na 589.592 Radial†  | 4796.8   | 2426.1 µg/L | 7.53   | 2426.1 ppb | 7.53   | 0.31%  |
| QC value within limits for Na 589.592 Radial Recovery = 97.05%  |          |             |        |            |        |        |
| Ni 231.604†   | 8556.4   | 505.67 µg/L | 36.503 | 505.67 ppb | 36.503 | 7.22%  |
| QC value within limits for Ni 231.604 Recovery = 101.13%        |          |             |        |            |        |        |
| P 214.914†  | 1442.8   | 2500.1 µg/L | 254.79 | 2500.1 ppb | 254.79 | 10.19% |
| QC value within limits for P 214.914 Recovery = 100.01%         |          |             |        |            |        |        |
| Pb 220.353†   | 1811.1   | 504.82 µg/L | 50.702 | 504.82 ppb | 50.702 | 10.04% |
| QC value within limits for Pb 220.353 Recovery = 100.96%        |          |             |        |            |        |        |
| S 181.975 Axial†  | 753.1    | 2504.0 µg/L | 244.16 | 2504.0 ppb | 244.16 | 9.75%  |
| QC value within limits for S 181.975 Axial Recovery = 100.16%   |          |             |        |            |        |        |
| Sb 206.836†   | 525.3    | 503.02 µg/L | 53.709 | 503.02 ppb | 53.709 | 10.68% |
| QC value within limits for Sb 206.836 Recovery = 100.60%        |          |             |        |            |        |        |
| Se 196.026†   | 2567.4   | 2588.2 µg/L | 232.94 | 2588.2 ppb | 232.94 | 9.00%  |
| QC value within limits for Se 196.026 Recovery = 103.53%        |          |             |        |            |        |        |
| SiO2†   | 54566.5  | 10336 µg/L  | 584.6  | 10336 ppb  | 584.6  | 5.66%  |
| QC value within limits for SiO2 Recovery = 96.64%               |          |             |        |            |        |        |
| Si 251.611†   | 67774.8  | 4827.9 µg/L | 274.49 | 4827.9 ppb | 274.49 | 5.69%  |
| QC value within limits for Si 251.611 Recovery = 96.56%         |          |             |        |            |        |        |
| Sn 189.927†   | 1273.8   | 535.57 µg/L | 68.166 | 535.57 ppb | 68.166 | 12.73% |
| QC value within limits for Sn 189.927 Recovery = 107.11%        |          |             |        |            |        |        |
| Sr 421.552†   | 86864.2  | 526.08 µg/L | 0.281  | 526.08 ppb | 0.281  | 0.05%  |
| QC value within limits for Sr 421.552 Recovery = 105.22%        |          |             |        |            |        |        |
| Ti 334.940†   | 202045.0 | 495.67 µg/L | 27.912 | 495.67 ppb | 27.912 | 5.63%  |
| QC value within limits for Ti 334.940 Recovery = 99.13%         |          |             |        |            |        |        |
| Tl 190.801†   | 509.5    | 535.91 µg/L | 38.221 | 535.91 ppb | 38.221 | 7.13%  |
| QC value within limits for Tl 190.801 Recovery = 107.18%        |          |             |        |            |        |        |
| U 409.014†  | 5256.2   | 489.27 µg/L | 39.327 | 489.27 ppb | 39.327 | 8.04%  |
| QC value within limits for U 409.014 Recovery = 97.85%          |          |             |        |            |        |        |
| V 292.402†  | 40428.5  | 514.28 µg/L | 40.733 | 514.28 ppb | 40.733 | 7.92%  |
| QC value within limits for V 292.402 Recovery = 102.86%         |          |             |        |            |        |        |
| Zn 213.857†   | 21251.3  | 510.42 µg/L | 36.856 | 510.42 ppb | 36.856 | 7.22%  |
| QC value within limits for Zn 213.857 Recovery = 102.08%        |          |             |        |            |        |        |

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/15/2010 11:49:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 89480.7          | 89480.7                | 97.5 %                |                       | 11:49:46         |
| 1     | Al 396.153Radial†  | -136.8           | 22.1                   | 10.785 µg/L           | 10.785 ppb            | 11:49:46         |
| 1     | Ca 317.933Radial†  | 326.4            | -6.2                   | -2.3252 µg/L          | -2.3252 ppb           | 11:50:06         |
| 1     | Fe 238.204 Radial† | 13.6             | 0.9                    | 10.969 µg/L           | 10.969 ppb            | 11:50:06         |
| 1     | K 766.490 Radial†  | 403.3            | 8.5                    | 3.9996 µg/L           | 3.9996 ppb            | 11:49:46         |
| 1     | Mg 279.077 IEC†    | 8.8              | -0.0                   | -0.0920 µg/L          | -0.0920 ppb           | 11:50:06         |
| 1     | Na 589.592 Radial† | 186.4            | 1.0                    | 0.5291 µg/L           | 0.5291 ppb            | 11:49:46         |
| 1     | Sr 421.552†        | 94.0             | -39.0                  | -0.2359 µg/L          | -0.2359 ppb           | 11:49:46         |
| 1     | Sc 361.383         | 1933191.8        | 1933191.8              | 99.132 %              |                       | 11:51:08         |
| 1     | Y 371.029          | 1321547.6        | 1321547.6              | 99.117 %              |                       | 11:51:08         |
| 1     | Ag 328.068†        | -613.8           | -95.7                  | -0.8046 µg/L          | -0.8046 ppb           | 11:51:14         |
| 1     | As 188.979†        | -1.9             | 1.4                    | 2.2522 µg/L           | 2.2522 ppb            | 11:51:34         |
| 1     | B 249.677†         | 310.6            | 36.0                   | 1.7258 µg/L           | 1.7258 ppb            | 11:51:14         |
| 1     | Ba 233.527†        | -19.3            | 7.6                    | 0.1755 µg/L           | 0.1755 ppb            | 11:51:34         |
| 1     | Be 313.107†        | -1523.0          | 22.5                   | 0.0139 µg/L           | 0.0139 ppb            | 11:51:14         |
| 1     | Cd 226.502†        | -172.3           | -8.5                   | -0.2185 µg/L          | -0.2185 ppb           | 11:51:34         |
| 1     | Co 228.616†        | 33.7             | -0.4                   | -0.0189 µg/L          | -0.0189 ppb           | 11:51:34         |
| 1     | Cr 267.716†        | 108.8            | 17.5                   | 0.4075 µg/L           | 0.4075 ppb            | 11:51:14         |
| 1     | Cu 324.752†        | 4161.7           | -25.8                  | -0.1739 µg/L          | -0.1739 ppb           | 11:51:14         |
| 1     | Mn 257.610†        | -711.3           | 21.9                   | 0.0717 µg/L           | 0.0717 ppb            | 11:51:34         |
| 1     | Mo 202.031†        | 27.6             | 15.5                   | 1.6298 µg/L           | 1.6298 ppb            | 11:51:34         |
| 1     | Ni 231.604†        | 343.6            | -10.8                  | -0.6401 µg/L          | -0.6401 ppb           | 11:51:34         |
| 1     | P 214.914†         | 291.7            | 6.3                    | 11.095 µg/L           | 11.095 ppb            | 11:51:34         |
| 1     | Pb 220.353†        | 39.4             | 0.2                    | 0.0592 µg/L           | 0.0592 ppb            | 11:51:34         |
| 1     | S 181.975 Axial†   | 20.9             | -1.9                   | -6.2023 µg/L          | -6.2023 ppb           | 11:51:34         |
| 1     | Sb 206.836†        | 24.9             | -2.7                   | -2.5908 µg/L          | -2.5908 ppb           | 11:51:34         |
| 1     | Se 196.026†        | 21.5             | -0.2                   | -0.1276 µg/L          | -0.1276 ppb           | 11:51:34         |
| 1     | SiO2†              | 2672.3           | -46.0                  | -8.7101 µg/L          | -8.7101 ppb           | 11:51:14         |
| 1     | Si 251.611†        | 385.7            | -32.7                  | -2.3277 µg/L          | -2.3277 ppb           | 11:51:34         |
| 1     | Sn 189.927†        | -0.3             | 4.9                    | 2.0625 µg/L           | 2.0625 ppb            | 11:51:34         |
| 1     | Ti 334.940†        | -583.8           | 102.5                  | 0.2515 µg/L           | 0.2515 ppb            | 11:51:14         |
| 1     | Tl 190.801†        | -36.2            | -2.2                   | -2.2485 µg/L          | -2.2485 ppb           | 11:51:34         |
| 1     | U 409.014†         | -22.8            | 16.9                   | 1.5724 µg/L           | 1.5724 ppb            | 11:51:14         |
| 1     | V 292.402†         | 96.6             | -1.7                   | -0.0084 µg/L          | -0.0084 ppb           | 11:51:14         |
| 1     | Zn 213.857†        | 619.7            | -33.2                  | -0.8001 µg/L          | -0.8001 ppb           | 11:51:34         |
| 2     | Sc RADIAL          | 89289.4          | 89289.4                | 97.3 %                |                       | 11:50:12         |
| 2     | Al 396.153Radial†  | -161.3           | -3.3                   | -1.6618 µg/L          | -1.6618 ppb           | 11:50:12         |
| 2     | Ca 317.933Radial†  | 332.2            | 0.5                    | 0.1908 µg/L           | 0.1908 ppb            | 11:50:32         |
| 2     | Fe 238.204 Radial† | 14.3             | 1.6                    | 19.980 µg/L           | 19.980 ppb            | 11:50:32         |
| 2     | K 766.490 Radial†  | 431.0            | 37.9                   | 17.919 µg/L           | 17.919 ppb            | 11:50:12         |
| 2     | Mg 279.077 IEC†    | 9.9              | 1.1                    | 14.968 µg/L           | 14.968 ppb            | 11:50:32         |
| 2     | Na 589.592 Radial† | 159.1            | -26.6                  | -13.475 µg/L          | -13.475 ppb           | 11:50:12         |
| 2     | Sr 421.552†        | 164.5            | 33.8                   | 0.2046 µg/L           | 0.2046 ppb            | 11:50:12         |
| 2     | Sc 361.383         | 1925354.4        | 1925354.4              | 98.730 %              |                       | 11:51:40         |
| 2     | Y 371.029          | 1316011.7        | 1316011.7              | 98.702 %              |                       | 11:51:40         |
| 2     | Ag 328.068†        | -537.4           | -20.8                  | -0.1691 µg/L          | -0.1691 ppb           | 11:51:46         |
| 2     | As 188.979†        | -4.1             | -0.8                   | -1.1912 µg/L          | -1.1912 ppb           | 11:52:06         |
| 2     | B 249.677†         | 320.1            | 46.9                   | 2.2474 µg/L           | 2.2474 ppb            | 11:51:46         |
| 2     | Ba 233.527†        | -4.8             | 22.3                   | 0.5163 µg/L           | 0.5163 ppb            | 11:52:06         |
| 2     | Be 313.107†        | -1443.6          | 96.6                   | 0.0600 µg/L           | 0.0600 ppb            | 11:51:46         |
| 2     | Cd 226.502†        | -173.3           | -10.2                  | -0.2629 µg/L          | -0.2629 ppb           | 11:52:06         |
| 2     | Co 228.616†        | 38.1             | 4.2                    | 0.1895 µg/L           | 0.1895 ppb            | 11:52:06         |
| 2     | Cr 267.716†        | 103.5            | 12.5                   | 0.2930 µg/L           | 0.2930 ppb            | 11:51:46         |
| 2     | Cu 324.752†        | 4196.9           | 27.0                   | 0.1880 µg/L           | 0.1880 ppb            | 11:51:46         |
| 2     | Mn 257.610†        | -704.2           | 26.2                   | 0.0851 µg/L           | 0.0851 ppb            | 11:52:06         |
| 2     | Mo 202.031†        | 23.7             | 11.6                   | 1.2221 µg/L           | 1.2221 ppb            | 11:52:06         |
| 2     | Ni 231.604†        | 349.8            | -3.2                   | -0.1882 µg/L          | -0.1882 ppb           | 11:52:06         |
| 2     | P 214.914†         | 289.1            | 4.9                    | 8.6347 µg/L           | 8.6347 ppb            | 11:52:06         |
| 2     | Pb 220.353†        | 36.3             | -2.8                   | -0.7973 µg/L          | -0.7973 ppb           | 11:52:06         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.2      | -1.4      | -4.8092 µg/L | -4.8092 ppb | 11:52:06 |
| 2 | Sb 206.836†        | 32.4      | 4.9       | 4.7090 µg/L  | 4.7090 ppb  | 11:52:06 |
| 2 | Se 196.026†        | 15.7      | -5.9      | -5.8720 µg/L | -5.8720 ppb | 11:52:06 |
| 2 | SiO2†              | 2648.5    | -59.1     | -11.196 µg/L | -11.196 ppb | 11:51:46 |
| 2 | Si 251.611†        | 416.8     | 0.5       | 0.0346 µg/L  | 0.0346 ppb  | 11:52:06 |
| 2 | Sn 189.927†        | -0.8      | 4.5       | 1.8804 µg/L  | 1.8804 ppb  | 11:52:06 |
| 2 | Ti 334.940†        | -649.3    | 33.7      | 0.0815 µg/L  | 0.0815 ppb  | 11:51:46 |
| 2 | Tl 190.801†        | -31.5     | 2.4       | 2.5406 µg/L  | 2.5406 ppb  | 11:52:06 |
| 2 | U 409.014†         | 41.7      | 82.1      | 7.6561 µg/L  | 7.6561 ppb  | 11:51:46 |
| 2 | V 292.402†         | 145.6     | 48.3      | 0.6240 µg/L  | 0.6240 ppb  | 11:51:46 |
| 2 | Zn 213.857†        | 619.7     | -30.6     | -0.7417 µg/L | -0.7417 ppb | 11:52:06 |
| 3 | Sc RADIAL          | 89535.6   | 89535.6   | 97.6 %       |             | 11:50:38 |
| 3 | Al 396.153Radial†  | -121.6    | 37.8      | 18.489 µg/L  | 18.489 ppb  | 11:50:38 |
| 3 | Ca 317.933Radial†  | 332.0     | -0.6      | -0.2352 µg/L | -0.2352 ppb | 11:50:58 |
| 3 | Fe 238.204 Radial† | 15.5      | 2.8       | 34.656 µg/L  | 34.656 ppb  | 11:50:58 |
| 3 | K 766.490 Radial†  | 448.7     | 54.8      | 25.939 µg/L  | 25.939 ppb  | 11:50:38 |
| 3 | Mg 279.077 IEC†    | 7.9       | -1.0      | -13.371 µg/L | -13.371 ppb | 11:50:58 |
| 3 | Na 589.592 Radial† | 176.2     | -9.6      | -4.8481 µg/L | -4.8481 ppb | 11:50:38 |
| 3 | Sr 421.552†        | 122.4     | -9.9      | -0.0598 µg/L | -0.0598 ppb | 11:50:38 |
| 3 | Sc 361.383         | 1937352.4 | 1937352.4 | 99.345 %     |             | 11:52:13 |
| 3 | Y 371.029          | 1325913.5 | 1325913.5 | 99.444 %     |             | 11:52:13 |
| 3 | Ag 328.068†        | -550.0    | -30.1     | -0.2507 µg/L | -0.2507 ppb | 11:52:18 |
| 3 | As 188.979†        | 0.1       | 3.5       | 5.4441 µg/L  | 5.4441 ppb  | 11:52:39 |
| 3 | B 249.677†         | 326.0     | 50.8      | 2.4246 µg/L  | 2.4246 ppb  | 11:52:18 |
| 3 | Ba 233.527†        | -25.6     | 1.3       | 0.0301 µg/L  | 0.0301 ppb  | 11:52:39 |
| 3 | Be 313.107†        | -1417.6   | 131.9     | 0.0819 µg/L  | 0.0819 ppb  | 11:52:18 |
| 3 | Cd 226.502†        | -173.4    | -9.3      | -0.2400 µg/L | -0.2400 ppb | 11:52:39 |
| 3 | Co 228.616†        | 25.3      | -9.0      | -0.4066 µg/L | -0.4066 ppb | 11:52:39 |
| 3 | Cr 267.716†        | 71.2      | -20.7     | -0.4827 µg/L | -0.4827 ppb | 11:52:18 |
| 3 | Cu 324.752†        | 4175.0    | -21.5     | -0.1399 µg/L | -0.1399 ppb | 11:52:18 |
| 3 | Mn 257.610†        | -697.5    | 37.3      | 0.1241 µg/L  | 0.1241 ppb  | 11:52:39 |
| 3 | Mo 202.031†        | 22.0      | 9.7       | 1.0239 µg/L  | 1.0239 ppb  | 11:52:39 |
| 3 | Ni 231.604†        | 368.0     | 13.0      | 0.7680 µg/L  | 0.7680 ppb  | 11:52:39 |
| 3 | P 214.914†         | 283.2     | -2.9      | -5.0418 µg/L | -5.0418 ppb | 11:52:39 |
| 3 | Pb 220.353†        | 46.3      | 7.0       | 1.9568 µg/L  | 1.9568 ppb  | 11:52:39 |
| 3 | S 181.975 Axial†   | 18.0      | -4.8      | -15.970 µg/L | -15.970 ppb | 11:52:39 |
| 3 | Sb 206.836†        | 30.9      | 3.2       | 3.0720 µg/L  | 3.0720 ppb  | 11:52:39 |
| 3 | Se 196.026†        | 20.5      | -1.2      | -1.0441 µg/L | -1.0441 ppb | 11:52:39 |
| 3 | SiO2†              | 2662.5    | -61.6     | -11.676 µg/L | -11.676 ppb | 11:52:18 |
| 3 | Si 251.611†        | 393.0     | -26.1     | -1.8624 µg/L | -1.8624 ppb | 11:52:39 |
| 3 | Sn 189.927†        | 3.8       | 9.0       | 3.7972 µg/L  | 3.7972 ppb  | 11:52:39 |
| 3 | Ti 334.940†        | -605.1    | 82.2      | 0.2029 µg/L  | 0.2029 ppb  | 11:52:18 |
| 3 | Tl 190.801†        | -32.8     | 1.4       | 1.4369 µg/L  | 1.4369 ppb  | 11:52:39 |
| 3 | U 409.014†         | -68.8     | -29.4     | -2.7466 µg/L | -2.7466 ppb | 11:52:18 |
| 3 | V 292.402†         | 96.7      | -1.9      | -0.0239 µg/L | -0.0239 ppb | 11:52:18 |
| 3 | Zn 213.857†        | 636.5     | -17.6     | -0.4309 µg/L | -0.4309 ppb | 11:52:39 |

## Mean Data: ICB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1931966.2                | 99.069 %           | 0.3124   |                    |          | 0.32%   |
| Sc RADIAL   | 89435.2                  | 97.4 %             | 0.14     |                    |          | 0.14%   |
| Y 371.029   | 1321157.6                | 99.088 %           | 0.3722   |                    |          | 0.38%   |
| Ag 328.068†   | -48.8                    | -0.4081 µg/L       | 0.34579  | -0.4081 ppb        | 0.34579  | 84.73%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 18.9                     | 9.2042 µg/L        | 10.16808 | 9.2042 ppb         | 10.16808 | 110.47% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 1.4                      | 2.1684 µg/L        | 3.31842  | 2.1684 ppb         | 3.31842  | 153.04% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 44.6                     | 2.1326 µg/L        | 0.36330  | 2.1326 ppb         | 0.36330  | 17.04%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 10.4                     | 0.2406 µg/L        | 0.24955  | 0.2406 ppb         | 0.24955  | 103.70% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 83.7                     | 0.0519 µg/L        | 0.03473  | 0.0519 ppb         | 0.03473  | 66.86%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | -2.1                     | -0.7899 µg/L       | 1.34660  | -0.7899 ppb        | 1.34660  | 170.48% |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -9.3                     | -0.2405 µg/L       | 0.02220  | -0.2405 ppb        | 0.02220  | 9.23%   |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -1.8                     | -0.0787 µg/L       | 0.30252  | -0.0787 ppb        | 0.30252  | 384.46% |

|  |       |              |          |             |          |         |
|--|-------|--------------|----------|-------------|----------|---------|
| Cr 267.716†  | 3.1   | 0.0726 µg/L  | 0.48426  | 0.0726 ppb  | 0.48426  | 667.20% |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |       |              |          |             |          |         |
| Cu 324.752†  | -6.7  | -0.0419 µg/L | 0.19986  | -0.0419 ppb | 0.19986  | 476.57% |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |       |              |          |             |          |         |
| Fe 238.204 Radial†   | 1.8   | 21.868 µg/L  | 11.9555  | 21.868 ppb  | 11.9555  | 54.67%  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |       |              |          |             |          |         |
| K 766.490 Radial†  | 33.7  | 15.952 µg/L  | 11.1010  | 15.952 ppb  | 11.1010  | 69.59%  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |       |              |          |             |          |         |
| Mg 279.077 IEC†  | 0.0   | 0.5019 µg/L  | 14.17878 | 0.5019 ppb  | 14.17878 | >999.9% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |       |              |          |             |          |         |
| Mn 257.610†  | 28.5  | 0.0937 µg/L  | 0.02722  | 0.0937 ppb  | 0.02722  | 29.06%  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |       |              |          |             |          |         |
| Mo 202.031†  | 12.3  | 1.2919 µg/L  | 0.30893  | 1.2919 ppb  | 0.30893  | 23.91%  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |       |              |          |             |          |         |
| Na 589.592 Radial†   | -11.7 | -5.9315 µg/L | 7.06482  | -5.9315 ppb | 7.06482  | 119.11% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |       |              |          |             |          |         |
| Ni 231.604†  | -0.3  | -0.0201 µg/L | 0.71896  | -0.0201 ppb | 0.71896  | >999.9% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |       |              |          |             |          |         |
| P 214.914†   | 2.8   | 4.8961 µg/L  | 8.69400  | 4.8961 ppb  | 8.69400  | 177.57% |
| QC value within limits for P 214.914 Recovery = Not calculated         |       |              |          |             |          |         |
| Pb 220.353†  | 1.4   | 0.4062 µg/L  | 1.40946  | 0.4062 ppb  | 1.40946  | 346.96% |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |       |              |          |             |          |         |
| S 181.975 Axial†   | -2.7  | -8.9938 µg/L | 6.08151  | -8.9938 ppb | 6.08151  | 67.62%  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |       |              |          |             |          |         |
| Sb 206.836†  | 1.8   | 1.7301 µg/L  | 3.83047  | 1.7301 ppb  | 3.83047  | 221.41% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |       |              |          |             |          |         |
| Se 196.026†  | -2.4  | -2.3479 µg/L | 3.08617  | -2.3479 ppb | 3.08617  | 131.44% |
| QC value within limits for Se 196.026 Recovery = Not calculated        |       |              |          |             |          |         |
| SiO2†  | -55.6 | -10.528 µg/L | 1.5921   | -10.528 ppb | 1.5921   | 15.12%  |
| QC value within limits for SiO2 Recovery = Not calculated              |       |              |          |             |          |         |
| Si 251.611†  | -19.4 | -1.3852 µg/L | 1.25141  | -1.3852 ppb | 1.25141  | 90.34%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |       |              |          |             |          |         |
| Sn 189.927†  | 6.1   | 2.5800 µg/L  | 1.05804  | 2.5800 ppb  | 1.05804  | 41.01%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |       |              |          |             |          |         |
| Sr 421.552†  | -5.0  | -0.0304 µg/L | 0.22169  | -0.0304 ppb | 0.22169  | 729.72% |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |       |              |          |             |          |         |
| Ti 334.940†  | 72.8  | 0.1786 µg/L  | 0.08755  | 0.1786 ppb  | 0.08755  | 49.01%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |       |              |          |             |          |         |
| Tl 190.801†  | 0.5   | 0.5764 µg/L  | 2.50783  | 0.5764 ppb  | 2.50783  | 435.12% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |       |              |          |             |          |         |
| U 409.014†   | 23.2  | 2.1606 µg/L  | 5.22619  | 2.1606 ppb  | 5.22619  | 241.88% |
| QC value within limits for U 409.014 Recovery = Not calculated         |       |              |          |             |          |         |
| V 292.402†   | 14.9  | 0.1972 µg/L  | 0.36965  | 0.1972 ppb  | 0.36965  | 187.42% |
| QC value within limits for V 292.402 Recovery = Not calculated         |       |              |          |             |          |         |
| Zn 213.857†  | -27.1 | -0.6575 µg/L | 0.19847  | -0.6575 ppb | 0.19847  | 30.18%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |       |              |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/15/2010 11:52:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 89060.1          | 89060.1                | 97.0 %                |                       | 11:53:19         |
| 1     | Al 396.153Radial†  | 259.6            | 430.0                  | 210.30 µg/L           | 210.30 ppb            | 11:53:19         |
| 1     | Ca 317.933Radial†  | 857.7            | 542.9                  | 204.31 µg/L           | 204.31 ppb            | 11:53:39         |
| 1     | Fe 238.204 Radial† | 19.7             | 7.2                    | 89.848 µg/L           | 89.848 ppb            | 11:53:39         |
| 1     | K 766.490 Radial†  | 808.8            | 428.3                  | 202.64 µg/L           | 202.64 ppb            | 11:53:19         |
| 1     | Mg 279.077 IEC†    | 30.4             | 22.3                   | 301.75 µg/L           | 301.75 ppb            | 11:53:39         |
| 1     | Na 589.592 Radial† | 754.5            | 587.3                  | 297.06 µg/L           | 297.06 ppb            | 11:53:19         |
| 1     | Sr 421.552†        | 915.8            | 808.4                  | 4.8957 µg/L           | 4.8957 ppb            | 11:53:19         |
| 1     | Sc 361.383         | 1946662.7        | 1946662.7              | 99.823 %              |                       | 11:54:41         |
| 1     | Y 371.029          | 1331681.4        | 1331681.4              | 99.877 %              |                       | 11:54:41         |
| 1     | Ag 328.068†        | 17.4             | 540.9                  | 4.5938 µg/L           | 4.5938 ppb            | 11:54:47         |
| 1     | As 188.979†        | 14.7             | 18.1                   | 28.271 µg/L           | 28.271 ppb            | 11:55:07         |
| 1     | B 249.677†         | 1293.1           | 1018.1                 | 48.931 µg/L           | 48.931 ppb            | 11:55:07         |
| 1     | Ba 233.527†        | 199.3            | 226.8                  | 5.2557 µg/L           | 5.2557 ppb            | 11:55:07         |
| 1     | Be 313.107†        | 6622.0           | 8192.5                 | 5.0901 µg/L           | 5.0901 ppb            | 11:54:47         |
| 1     | Cd 226.502†        | 22.4             | 187.8                  | 4.7986 µg/L           | 4.7986 ppb            | 11:55:07         |
| 1     | Co 228.616†        | 141.9            | 107.8                  | 4.8917 µg/L           | 4.8917 ppb            | 11:55:07         |
| 1     | Cr 267.716†        | 286.3            | 194.4                  | 4.5400 µg/L           | 4.5400 ppb            | 11:55:07         |
| 1     | Cu 324.752†        | 5746.8           | 1533.1                 | 10.481 µg/L           | 10.481 ppb            | 11:54:47         |
| 1     | Mn 257.610†        | 2500.7           | 3244.6                 | 10.515 µg/L           | 10.515 ppb            | 11:55:07         |
| 1     | Mo 202.031†        | 106.0            | 93.8                   | 9.8491 µg/L           | 9.8491 ppb            | 11:55:07         |
| 1     | Ni 231.604†        | 451.7            | 95.1                   | 5.6222 µg/L           | 5.6222 ppb            | 11:55:07         |
| 1     | P 214.914†         | 384.1            | 96.8                   | 170.05 µg/L           | 170.05 ppb            | 11:55:07         |
| 1     | Pb 220.353†        | 82.1             | 42.7                   | 11.844 µg/L           | 11.844 ppb            | 11:55:07         |
| 1     | S 181.975 Axial†   | 53.7             | 30.8                   | 102.51 µg/L           | 102.51 ppb            | 11:55:07         |
| 1     | Sb 206.836†        | 38.5             | 10.7                   | 10.276 µg/L           | 10.276 ppb            | 11:55:07         |
| 1     | Se 196.026†        | 56.7             | 35.0                   | 35.200 µg/L           | 35.200 ppb            | 11:55:07         |
| 1     | SiO2†              | 3800.4           | 1065.5                 | 201.82 µg/L           | 201.82 ppb            | 11:54:47         |
| 1     | Si 251.611†        | 1787.7           | 1369.2                 | 97.532 µg/L           | 97.532 ppb            | 11:55:07         |
| 1     | Sn 189.927†        | 26.3             | 31.6                   | 13.280 µg/L           | 13.280 ppb            | 11:55:07         |
| 1     | Ti 334.940†        | 1368.3           | 2062.1                 | 5.0415 µg/L           | 5.0415 ppb            | 11:54:47         |
| 1     | Tl 190.801†        | -17.2            | 17.1                   | 17.923 µg/L           | 17.923 ppb            | 11:55:07         |
| 1     | U 409.014†         | 566.3            | 607.2                  | 56.614 µg/L           | 56.614 ppb            | 11:54:47         |
| 1     | V 292.402†         | 512.9            | 414.6                  | 5.3548 µg/L           | 5.3548 ppb            | 11:54:47         |
| 1     | Zn 213.857†        | 1088.5           | 432.1                  | 10.389 µg/L           | 10.389 ppb            | 11:55:07         |
| 2     | Sc RADIAL          | 89866.3          | 89866.3                | 97.9 %                |                       | 11:53:45         |
| 2     | Al 396.153Radial†  | 264.1            | 432.1                  | 211.35 µg/L           | 211.35 ppb            | 11:53:45         |
| 2     | Ca 317.933Radial†  | 859.0            | 536.3                  | 201.81 µg/L           | 201.81 ppb            | 11:54:05         |
| 2     | Fe 238.204 Radial† | 22.2             | 9.6                    | 119.23 µg/L           | 119.23 ppb            | 11:54:05         |
| 2     | K 766.490 Radial†  | 646.6            | 255.2                  | 120.76 µg/L           | 120.76 ppb            | 11:53:45         |
| 2     | Mg 279.077 IEC†    | 30.7             | 22.3                   | 301.84 µg/L           | 301.84 ppb            | 11:54:05         |
| 2     | Na 589.592 Radial† | 736.5            | 562.0                  | 284.25 µg/L           | 284.25 ppb            | 11:53:45         |
| 2     | Sr 421.552†        | 935.0            | 819.5                  | 4.9632 µg/L           | 4.9632 ppb            | 11:53:45         |
| 2     | Sc 361.383         | 1939680.7        | 1939680.7              | 99.465 %              |                       | 11:55:13         |
| 2     | Y 371.029          | 1325025.3        | 1325025.3              | 99.378 %              |                       | 11:55:13         |
| 2     | Ag 328.068†        | 88.1             | 612.1                  | 5.1907 µg/L           | 5.1907 ppb            | 11:55:19         |
| 2     | As 188.979†        | 19.1             | 22.6                   | 35.219 µg/L           | 35.219 ppb            | 11:55:39         |
| 2     | B 249.677†         | 1290.3           | 1020.0                 | 49.007 µg/L           | 49.007 ppb            | 11:55:39         |
| 2     | Ba 233.527†        | 205.9            | 234.1                  | 5.4240 µg/L           | 5.4240 ppb            | 11:55:39         |
| 2     | Be 313.107†        | 6547.2           | 8141.2                 | 5.0582 µg/L           | 5.0582 ppb            | 11:55:19         |
| 2     | Cd 226.502†        | 38.5             | 204.0                  | 5.2087 µg/L           | 5.2087 ppb            | 11:55:39         |
| 2     | Co 228.616†        | 138.7            | 105.0                  | 4.7667 µg/L           | 4.7667 ppb            | 11:55:39         |
| 2     | Cr 267.716†        | 305.2            | 214.5                  | 5.0088 µg/L           | 5.0088 ppb            | 11:55:39         |
| 2     | Cu 324.752†        | 5704.5           | 1511.3                 | 10.338 µg/L           | 10.338 ppb            | 11:55:19         |
| 2     | Mn 257.610†        | 2433.5           | 3186.0                 | 10.327 µg/L           | 10.327 ppb            | 11:55:39         |
| 2     | Mo 202.031†        | 112.9            | 101.1                  | 10.620 µg/L           | 10.620 ppb            | 11:55:39         |
| 2     | Ni 231.604†        | 440.5            | 85.4                   | 5.0476 µg/L           | 5.0476 ppb            | 11:55:39         |
| 2     | P 214.914†         | 374.6            | 88.6                   | 155.65 µg/L           | 155.65 ppb            | 11:55:39         |
| 2     | Pb 220.353†        | 84.4             | 45.3                   | 12.592 µg/L           | 12.592 ppb            | 11:55:39         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 57.0      | 34.4      | 114.41 µg/L | 114.41 ppb | 11:55:39 |
| 2 | Sb 206.836†        | 37.1      | 9.4       | 9.0666 µg/L | 9.0666 ppb | 11:55:39 |
| 2 | Se 196.026†        | 55.4      | 33.8      | 34.102 µg/L | 34.102 ppb | 11:55:39 |
| 2 | SiO2†              | 3847.2    | 1126.2    | 213.32 µg/L | 213.32 ppb | 11:55:19 |
| 2 | Si 251.611†        | 1779.8    | 1367.7    | 97.425 µg/L | 97.425 ppb | 11:55:39 |
| 2 | Sn 189.927†        | 26.7      | 32.1      | 13.512 µg/L | 13.512 ppb | 11:55:39 |
| 2 | Ti 334.940†        | 1370.6    | 2069.3    | 5.0593 µg/L | 5.0593 ppb | 11:55:19 |
| 2 | Tl 190.801†        | -14.3     | 20.0      | 20.955 µg/L | 20.955 ppb | 11:55:39 |
| 2 | U 409.014†         | 517.4     | 560.1     | 52.217 µg/L | 52.217 ppb | 11:55:19 |
| 2 | V 292.402†         | 459.2     | 362.5     | 4.6972 µg/L | 4.6972 ppb | 11:55:19 |
| 2 | Zn 213.857†        | 1056.2    | 403.6     | 9.7009 µg/L | 9.7009 ppb | 11:55:39 |
| 3 | Sc RADIAL          | 89196.3   | 89196.3   | 97.2 %      |            | 11:54:10 |
| 3 | Al 396.153Radial†  | 249.8     | 419.4     | 205.16 µg/L | 205.16 ppb | 11:54:10 |
| 3 | Ca 317.933Radial†  | 861.9     | 545.8     | 205.40 µg/L | 205.40 ppb | 11:54:31 |
| 3 | Fe 238.204 Radial† | 19.7      | 7.2       | 89.853 µg/L | 89.853 ppb | 11:54:31 |
| 3 | K 766.490 Radial†  | 698.3     | 313.3     | 148.24 µg/L | 148.24 ppb | 11:54:10 |
| 3 | Mg 279.077 IEC†    | 28.5      | 20.2      | 273.98 µg/L | 273.98 ppb | 11:54:31 |
| 3 | Na 589.592 Radial† | 712.7     | 543.1     | 274.71 µg/L | 274.71 ppb | 11:54:10 |
| 3 | Sr 421.552†        | 932.4     | 824.0     | 4.9906 µg/L | 4.9906 ppb | 11:54:10 |
| 3 | Sc 361.383         | 1952151.6 | 1952151.6 | 100.10 %    |            | 11:55:45 |
| 3 | Y 371.029          | 1333582.3 | 1333582.3 | 100.02 %    |            | 11:55:45 |
| 3 | Ag 328.068†        | 53.5      | 577.0     | 4.8900 µg/L | 4.8900 ppb | 11:55:51 |
| 3 | As 188.979†        | 11.2      | 14.6      | 22.751 µg/L | 22.751 ppb | 11:56:12 |
| 3 | B 249.677†         | 1153.8    | 875.2     | 42.058 µg/L | 42.058 ppb | 11:56:12 |
| 3 | Ba 233.527†        | 179.1     | 206.0     | 4.7725 µg/L | 4.7725 ppb | 11:56:12 |
| 3 | Be 313.107†        | 5724.3    | 7277.1    | 4.5213 µg/L | 4.5213 ppb | 11:55:51 |
| 3 | Cd 226.502†        | -0.4      | 164.9     | 4.2105 µg/L | 4.2105 ppb | 11:56:12 |
| 3 | Co 228.616†        | 114.0     | 79.5      | 3.6066 µg/L | 3.6066 ppb | 11:56:12 |
| 3 | Cr 267.716†        | 255.9     | 163.3     | 3.8133 µg/L | 3.8133 ppb | 11:56:12 |
| 3 | Cu 324.752†        | 5573.7    | 1344.0    | 9.1907 µg/L | 9.1907 ppb | 11:55:51 |
| 3 | Mn 257.610†        | 1921.2    | 2658.6    | 8.6154 µg/L | 8.6154 ppb | 11:56:12 |
| 3 | Mo 202.031†        | 99.7      | 87.3      | 9.1622 µg/L | 9.1622 ppb | 11:56:12 |
| 3 | Ni 231.604†        | 423.8     | 65.9      | 3.8966 µg/L | 3.8966 ppb | 11:56:12 |
| 3 | P 214.914†         | 362.5     | 74.2      | 130.17 µg/L | 130.17 ppb | 11:56:12 |
| 3 | Pb 220.353†        | 80.1      | 40.4      | 11.225 µg/L | 11.225 ppb | 11:56:12 |
| 3 | S 181.975 Axial†   | 48.2      | 25.2      | 83.750 µg/L | 83.750 ppb | 11:56:12 |
| 3 | Sb 206.836†        | 38.5      | 10.6      | 10.189 µg/L | 10.189 ppb | 11:56:12 |
| 3 | Se 196.026†        | 41.3      | 19.4      | 19.550 µg/L | 19.550 ppb | 11:56:12 |
| 3 | SiO2†              | 3718.2    | 972.6     | 184.24 µg/L | 184.24 ppb | 11:55:51 |
| 3 | Si 251.611†        | 1577.3    | 1153.9    | 82.201 µg/L | 82.201 ppb | 11:56:12 |
| 3 | Sn 189.927†        | 20.9      | 26.1      | 11.002 µg/L | 11.002 ppb | 11:56:12 |
| 3 | Ti 334.940†        | 1189.3    | 1879.4    | 4.5953 µg/L | 4.5953 ppb | 11:55:51 |
| 3 | Tl 190.801†        | -9.4      | 25.0      | 26.129 µg/L | 26.129 ppb | 11:56:12 |
| 3 | U 409.014†         | 479.4     | 518.8     | 48.363 µg/L | 48.363 ppb | 11:55:51 |
| 3 | V 292.402†         | 428.0     | 328.4     | 4.2535 µg/L | 4.2535 ppb | 11:55:51 |
| 3 | Zn 213.857†        | 1000.1    | 340.7     | 8.1891 µg/L | 8.1891 ppb | 11:56:12 |

## Mean Data: PQL

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1946165.0                | 99.797 %           | 0.3205   |                    |          | 0.32%  |
| Sc RADIAL  | 89374.3                  | 97.4 %             | 0.47     |                    |          | 0.48%  |
| Y 371.029  | 1330096.3                | 99.758 %           | 0.3370   |                    |          | 0.34%  |
| Ag 328.068†  | 576.7                    | 4.8915 µg/L        | 0.29841  | 4.8915 ppb         | 0.29841  | 6.10%  |
| QC value within limits for Ag 328.068 Recovery = 97.83%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 427.2                    | 208.94 µg/L        | 3.312    | 208.94 ppb         | 3.312    | 1.59%  |
| QC value within limits for Al 396.153Radial Recovery = 104.47% |                          |                    |          |                    |          |        |
| As 188.979†  | 18.4                     | 28.747 µg/L        | 6.2474   | 28.747 ppb         | 6.2474   | 21.73% |
| QC value within limits for As 188.979 Recovery = 95.82%        |                          |                    |          |                    |          |        |
| B 249.677†   | 971.1                    | 46.665 µg/L        | 3.9900   | 46.665 ppb         | 3.9900   | 8.55%  |
| QC value within limits for B 249.677 Recovery = 93.33%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 222.3                    | 5.1507 µg/L        | 0.33821  | 5.1507 ppb         | 0.33821  | 6.57%  |
| QC value within limits for Ba 233.527 Recovery = 103.01%       |                          |                    |          |                    |          |        |
| Be 313.107†  | 7870.3                   | 4.8899 µg/L        | 0.31958  | 4.8899 ppb         | 0.31958  | 6.54%  |
| QC value within limits for Be 313.107 Recovery = 97.80%        |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 541.7                    | 203.84 µg/L        | 1.843    | 203.84 ppb         | 1.843    | 0.90%  |
| QC value within limits for Ca 317.933Radial Recovery = 101.92% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 185.6                    | 4.7393 µg/L        | 0.50175  | 4.7393 ppb         | 0.50175  | 10.59% |
| QC value within limits for Cd 226.502 Recovery = 94.79%        |                          |                    |          |                    |          |        |
| Co 228.616†  | 97.4                     | 4.4217 µg/L        | 0.70863  | 4.4217 ppb         | 0.70863  | 16.03% |

|  |        |             |         |            |         |        |  |
|--|--------|-------------|---------|------------|---------|--------|--|
| QC value within limits for Co 228.616 Recovery = 88.43%        |        |             |         |            |         |        |  |
| Cr 267.716†  | 190.8  | 4.4540 µg/L | 0.60233 | 4.4540 ppb | 0.60233 | 13.52% |  |
| QC value within limits for Cr 267.716 Recovery = 89.08%        |        |             |         |            |         |        |  |
| Cu 324.752†  | 1462.8 | 10.003 µg/L | 0.7074  | 10.003 ppb | 0.7074  | 7.07%  |  |
| QC value within limits for Cu 324.752 Recovery = 100.03%       |        |             |         |            |         |        |  |
| Fe 238.204 Radial†   | 8.0    | 99.645 µg/L | 16.9646 | 99.645 ppb | 16.9646 | 17.03% |  |
| QC value within limits for Fe 238.204 Radial Recovery = 99.64% |        |             |         |            |         |        |  |
| K 766.490 Radial†  | 332.3  | 157.21 µg/L | 41.668  | 157.21 ppb | 41.668  | 26.50% |  |
| QC value within limits for K 766.490 Radial Recovery = 104.81% |        |             |         |            |         |        |  |
| Mg 279.077 IEC†  | 21.6   | 292.52 µg/L | 16.057  | 292.52 ppb | 16.057  | 5.49%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 97.51%    |        |             |         |            |         |        |  |
| Mn 257.610†  | 3029.7 | 9.8192 µg/L | 1.04677 | 9.8192 ppb | 1.04677 | 10.66% |  |
| QC value within limits for Mn 257.610 Recovery = 98.19%        |        |             |         |            |         |        |  |
| Mo 202.031†  | 94.1   | 9.8771 µg/L | 0.72930 | 9.8771 ppb | 0.72930 | 7.38%  |  |
| QC value within limits for Mo 202.031 Recovery = 98.77%        |        |             |         |            |         |        |  |
| Na 589.592 Radial†   | 564.2  | 285.34 µg/L | 11.214  | 285.34 ppb | 11.214  | 3.93%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 95.11% |        |             |         |            |         |        |  |
| Ni 231.604†  | 82.1   | 4.8555 µg/L | 0.87870 | 4.8555 ppb | 0.87870 | 18.10% |  |
| QC value within limits for Ni 231.604 Recovery = 97.11%        |        |             |         |            |         |        |  |
| P 214.914†   | 86.5   | 151.96 µg/L | 20.195  | 151.96 ppb | 20.195  | 13.29% |  |
| QC value within limits for P 214.914 Recovery = 101.30%        |        |             |         |            |         |        |  |
| Pb 220.353†  | 42.8   | 11.887 µg/L | 0.6846  | 11.887 ppb | 0.6846  | 5.76%  |  |
| QC value within limits for Pb 220.353 Recovery = 118.87%       |        |             |         |            |         |        |  |
| S 181.975 Axial†   | 30.1   | 100.22 µg/L | 15.456  | 100.22 ppb | 15.456  | 15.42% |  |
| QC value within limits for S 181.975 Axial Recovery = 100.22%  |        |             |         |            |         |        |  |
| Sb 206.836†  | 10.2   | 9.8438 µg/L | 0.67451 | 9.8438 ppb | 0.67451 | 6.85%  |  |
| QC value within limits for Sb 206.836 Recovery = 98.44%        |        |             |         |            |         |        |  |
| Se 196.026†  | 29.4   | 29.617 µg/L | 8.7358  | 29.617 ppb | 8.7358  | 29.50% |  |
| QC value within limits for Se 196.026 Recovery = 98.72%        |        |             |         |            |         |        |  |
| SiO2†  | 1054.7 | 199.79 µg/L | 14.646  | 199.79 ppb | 14.646  | 7.33%  |  |
| QC value within limits for SiO2 Recovery = 93.80%              |        |             |         |            |         |        |  |
| Si 251.611†  | 1296.9 | 92.386 µg/L | 8.8206  | 92.386 ppb | 8.8206  | 9.55%  |  |
| QC value within limits for Si 251.611 Recovery = 92.39%        |        |             |         |            |         |        |  |
| Sn 189.927†  | 29.9   | 12.598 µg/L | 1.3873  | 12.598 ppb | 1.3873  | 11.01% |  |
| QC value within limits for Sn 189.927 Recovery = 125.98%       |        |             |         |            |         |        |  |
| Sr 421.552†  | 817.3  | 4.9498 µg/L | 0.04887 | 4.9498 ppb | 0.04887 | 0.99%  |  |
| QC value within limits for Sr 421.552 Recovery = 99.00%        |        |             |         |            |         |        |  |
| Ti 334.940†  | 2003.6 | 4.8987 µg/L | 0.26293 | 4.8987 ppb | 0.26293 | 5.37%  |  |
| QC value within limits for Ti 334.940 Recovery = 97.97%        |        |             |         |            |         |        |  |
| Tl 190.801†  | 20.7   | 21.669 µg/L | 4.1492  | 21.669 ppb | 4.1492  | 19.15% |  |
| QC value within limits for Tl 190.801 Recovery = 108.34%       |        |             |         |            |         |        |  |
| U 409.014†   | 562.0  | 52.398 µg/L | 4.1282  | 52.398 ppb | 4.1282  | 7.88%  |  |
| QC value within limits for U 409.014 Recovery = 104.80%        |        |             |         |            |         |        |  |
| V 292.402†   | 368.5  | 4.7685 µg/L | 0.55410 | 4.7685 ppb | 0.55410 | 11.62% |  |
| QC value within limits for V 292.402 Recovery = 95.37%         |        |             |         |            |         |        |  |
| Zn 213.857†  | 392.2  | 9.4262 µg/L | 1.12520 | 9.4262 ppb | 1.12520 | 11.94% |  |
| QC value within limits for Zn 213.857 Recovery = 94.26%        |        |             |         |            |         |        |  |

All analyte(s) passed QC.

Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 103  
 Date Collected: 3/15/2010 11:56:22  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSA

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88273.2       | 88273.2             | 96.2 %             |                    | 11:57:00      |
| 1     | Al 396.153Radial†  | 1021584.2     | 1062288.1           | 520100 µg/L        | 520100 ppb         | 11:56:55      |
| 1     | Ca 317.933Radial†  | 1243997.1     | 1293023.9           | 486570 µg/L        | 486570 ppb         | 11:56:55      |
| 1     | Fe 238.204 Radial† | 14394.8       | 14953.0             | 186240 µg/L        | 186240 ppb         | 11:57:00      |
| 1     | K 766.490 Radial†  | 213.8         | -182.9              | -86.527 µg/L       | -86.527 ppb        | 11:57:00      |
| 1     | Mg 279.077 IEC†    | 35146.9       | 36532.6             | 494010 µg/L        | 494010 ppb         | 11:57:00      |
| 1     | Na 589.592 Radial† | 175.5         | -7.7                | -3.8711 µg/L       | -3.8711 ppb        | 11:57:00      |
| 1     | Sr 421.552†        | 742.3         | 636.4               | 3.8543 µg/L        | 3.8543 ppb         | 11:57:00      |
| 1     | Sc 361.383         | 1819924.8     | 1819924.8           | 93.324 %           |                    | 11:57:36      |
| 1     | Y 371.029          | 1232317.1     | 1232317.1           | 92.425 %           |                    | 11:57:36      |
| 1     | Ag 328.068†        | -2239.7       | -1876.4             | -1.2848 µg/L       | -1.2848 ppb        | 11:57:56      |
| 1     | As 188.979†        | 25.4          | 30.6                | -34.399 µg/L       | -34.399 ppb        | 11:57:56      |
| 1     | B 249.677†         | 1414.6        | 1238.5              | -37.614 µg/L       | -37.614 ppb        | 11:57:36      |
| 1     | Ba 233.527†        | 293.1         | 341.2               | 7.9443 µg/L        | 7.9443 ppb         | 11:57:56      |
| 1     | Be 313.107†        | -1968.1       | -550.1              | -0.3535 µg/L       | -0.3535 ppb        | 11:57:36      |
| 1     | Cd 226.502†        | 780.6         | 1001.7              | 4.5707 µg/L        | 4.5707 ppb         | 11:57:56      |
| 1     | Co 228.616†        | 85.8          | 57.5                | 2.5398 µg/L        | 2.5398 ppb         | 11:57:56      |
| 1     | Cr 267.716†        | 12.9          | -78.5               | -1.8151 µg/L       | -1.8151 ppb        | 11:57:56      |
| 1     | Cu 324.752†        | -1208.8       | -5519.2             | -2.6586 µg/L       | -2.6586 ppb        | 11:57:56      |
| 1     | Mn 257.610†        | 5866.1        | 7025.2              | 0.5161 µg/L        | 0.5161 ppb         | 11:57:36      |
| 1     | Mo 202.031†        | -63.3         | -80.1               | -1.3346 µg/L       | -1.3346 ppb        | 11:57:56      |
| 1     | Ni 231.604†        | 277.4         | -60.1               | -1.1399 µg/L       | -1.1399 ppb        | 11:57:56      |
| 1     | P 214.914†         | 289.9         | 22.6                | 41.873 µg/L        | 41.873 ppb         | 11:57:56      |
| 1     | Pb 220.353†        | -88.1         | -134.0              | 4.8313 µg/L        | 4.8313 ppb         | 11:57:56      |
| 1     | S 181.975 Axial†   | -27.7         | -52.7               | -175.08 µg/L       | -175.08 ppb        | 11:57:56      |
| 1     | Sb 206.836†        | 25.4          | -0.6                | -7.9897 µg/L       | -7.9897 ppb        | 11:57:56      |
| 1     | Se 196.026†        | -150.1        | -182.7              | -1.5016 µg/L       | -1.5016 ppb        | 11:57:56      |
| 1     | SiO2†              | 2392.2        | -178.4              | -33.788 µg/L       | -33.788 ppb        | 11:57:56      |
| 1     | Si 251.611†        | 448.1         | 58.5                | 4.1674 µg/L        | 4.1674 ppb         | 11:57:56      |
| 1     | Sn 189.927†        | -97.8         | -99.5               | 8.0736 µg/L        | 8.0736 ppb         | 11:57:56      |
| 1     | Ti 334.940†        | 10973.1       | 12449.4             | -0.7931 µg/L       | -0.7931 ppb        | 11:57:36      |
| 1     | Tl 190.801†        | -3.8          | 30.3                | -36.214 µg/L       | -36.214 ppb        | 11:57:56      |
| 1     | U 409.014†         | -75.5         | -41.0               | -59.390 µg/L       | -59.390 ppb        | 11:57:36      |
| 1     | V 292.402†         | 2168.8        | 2224.8              | 4.3136 µg/L        | 4.3136 ppb         | 11:57:56      |
| 1     | Zn 213.857†        | 2114.1        | 1607.1              | 2.0785 µg/L        | 2.0785 ppb         | 11:57:56      |
| 2     | Sc RADIAL          | 88155.2       | 88155.2             | 96.1 %             |                    | 11:57:12      |
| 2     | Al 396.153Radial†  | 1019241.1     | 1061269.8           | 519600 µg/L        | 519600 ppb         | 11:57:06      |
| 2     | Ca 317.933Radial†  | 1245464.8     | 1296282.4           | 487800 µg/L        | 487800 ppb         | 11:57:06      |
| 2     | Fe 238.204 Radial† | 14451.7       | 15032.2             | 187230 µg/L        | 187230 ppb         | 11:57:12      |
| 2     | K 766.490 Radial†  | 280.5         | -113.2              | -53.541 µg/L       | -53.541 ppb        | 11:57:12      |
| 2     | Mg 279.077 IEC†    | 35235.4       | 36673.7             | 495920 µg/L        | 495920 ppb         | 11:57:12      |
| 2     | Na 589.592 Radial† | 200.2         | 18.2                | 9.2237 µg/L        | 9.2237 ppb         | 11:57:12      |
| 2     | Sr 421.552†        | 702.8         | 596.3               | 3.6116 µg/L        | 3.6116 ppb         | 11:57:12      |
| 2     | Sc 361.383         | 1823854.3     | 1823854.3           | 93.525 %           |                    | 11:58:05      |
| 2     | Y 371.029          | 1235018.6     | 1235018.6           | 92.627 %           |                    | 11:58:05      |
| 2     | Ag 328.068†        | -2252.9       | -1885.4             | -1.2907 µg/L       | -1.2907 ppb        | 11:58:25      |
| 2     | As 188.979†        | 20.7          | 25.5                | -42.737 µg/L       | -42.737 ppb        | 11:58:25      |
| 2     | B 249.677†         | 1381.6        | 1199.9              | -39.981 µg/L       | -39.981 ppb        | 11:58:05      |
| 2     | Ba 233.527†        | 279.4         | 325.8               | 7.5869 µg/L        | 7.5869 ppb         | 11:58:25      |
| 2     | Be 313.107†        | -2028.8       | -610.5              | -0.3911 µg/L       | -0.3911 ppb        | 11:58:05      |
| 2     | Cd 226.502†        | 764.2         | 982.5               | 3.9682 µg/L        | 3.9682 ppb         | 11:58:25      |
| 2     | Co 228.616†        | 80.1          | 51.2                | 2.2554 µg/L        | 2.2554 ppb         | 11:58:25      |
| 2     | Cr 267.716†        | 25.2          | -65.4               | -1.5080 µg/L       | -1.5080 ppb        | 11:58:25      |
| 2     | Cu 324.752†        | -1131.3       | -5433.5             | -1.8885 µg/L       | -1.8885 ppb        | 11:58:25      |
| 2     | Mn 257.610†        | 5895.1        | 7042.6              | 0.5024 µg/L        | 0.5024 ppb         | 11:58:05      |
| 2     | Mo 202.031†        | -63.6         | -80.4               | -1.3248 µg/L       | -1.3248 ppb        | 11:58:25      |
| 2     | Ni 231.604†        | 297.7         | -39.2               | 0.1143 µg/L        | 0.1143 ppb         | 11:58:25      |
| 2     | P 214.914†         | 295.2         | 27.7                | 49.788 µg/L        | 49.788 ppb         | 11:58:25      |
| 2     | Pb 220.353†        | -100.8        | -147.4              | 1.0779 µg/L        | 1.0779 ppb         | 11:58:25      |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | -24.0     | -48.6     | -161.63 µg/L | -161.63 ppb | 11:58:25 |
| 2 | Sb 206.836†        | 29.6      | 3.8       | -3.8124 µg/L | -3.8124 ppb | 11:58:25 |
| 2 | Se 196.026†        | -149.3    | -181.4    | 1.3785 µg/L  | 1.3785 ppb  | 11:58:25 |
| 2 | SiO2†              | 2420.0    | -154.2    | -29.200 µg/L | -29.200 ppb | 11:58:25 |
| 2 | Si 251.611†        | 447.6     | 56.9      | 4.0555 µg/L  | 4.0555 ppb  | 11:58:25 |
| 2 | Sn 189.927†        | -94.5     | -95.9     | 9.7402 µg/L  | 9.7402 ppb  | 11:58:25 |
| 2 | Ti 334.940†        | 11018.6   | 12472.8   | -0.8672 µg/L | -0.8672 ppb | 11:58:05 |
| 2 | Tl 190.801†        | 0.5       | 34.9      | -31.532 µg/L | -31.532 ppb | 11:58:25 |
| 2 | U 409.014†         | -60.9     | -25.2     | -58.130 µg/L | -58.130 ppb | 11:58:05 |
| 2 | V 292.402†         | 2105.9    | 2152.5    | 3.2804 µg/L  | 3.2804 ppb  | 11:58:25 |
| 2 | Zn 213.857†        | 2112.4    | 1600.3    | 1.7544 µg/L  | 1.7544 ppb  | 11:58:25 |
| 3 | Sc RADIAL          | 87413.8   | 87413.8   | 95.2 %       |             | 11:57:23 |
| 3 | Al 396.153Radial†  | 1019243.0 | 1070272.1 | 524010 µg/L  | 524010 ppb  | 11:57:18 |
| 3 | Ca 317.933Radial†  | 1245816.5 | 1307649.6 | 492080 µg/L  | 492080 ppb  | 11:57:18 |
| 3 | Fe 238.204 Radial† | 14310.3   | 15011.4   | 186970 µg/L  | 186970 ppb  | 11:57:23 |
| 3 | K 766.490 Radial†  | 165.8     | -231.0    | -109.31 µg/L | -109.31 ppb | 11:57:23 |
| 3 | Mg 279.077 IEC†    | 34890.5   | 36622.7   | 495230 µg/L  | 495230 ppb  | 11:57:23 |
| 3 | Na 589.592 Radial† | 190.1     | 9.4       | 4.7643 µg/L  | 4.7643 ppb  | 11:57:23 |
| 3 | Sr 421.552†        | 709.7     | 609.8     | 3.6930 µg/L  | 3.6930 ppb  | 11:57:23 |
| 3 | Sc 361.383         | 1827958.2 | 1827958.2 | 93.736 %     |             | 11:58:34 |
| 3 | Y 371.029          | 1237561.7 | 1237561.7 | 92.818 %     |             | 11:58:34 |
| 3 | Ag 328.068†        | -2264.8   | -1892.7   | -1.3723 µg/L | -1.3723 ppb | 11:58:54 |
| 3 | As 188.979†        | 20.7      | 25.4      | -43.263 µg/L | -43.263 ppb | 11:58:54 |
| 3 | B 249.677†         | 1390.6    | 1206.2    | -39.543 µg/L | -39.543 ppb | 11:58:34 |
| 3 | Ba 233.527†        | 287.7     | 334.0     | 7.7770 µg/L  | 7.7770 ppb  | 11:58:54 |
| 3 | Be 313.107†        | -1996.5   | -571.1    | -0.3666 µg/L | -0.3666 ppb | 11:58:34 |
| 3 | Cd 226.502†        | 784.3     | 1002.1    | 4.4987 µg/L  | 4.4987 ppb  | 11:58:54 |
| 3 | Co 228.616†        | 94.3      | 66.2      | 2.9347 µg/L  | 2.9347 ppb  | 11:58:54 |
| 3 | Cr 267.716†        | 52.1      | -36.7     | -0.8402 µg/L | -0.8402 ppb | 11:58:54 |
| 3 | Cu 324.752†        | -1187.3   | -5490.6   | -2.3270 µg/L | -2.3270 ppb | 11:58:54 |
| 3 | Mn 257.610†        | 5887.3    | 7020.2    | 0.4606 µg/L  | 0.4606 ppb  | 11:58:34 |
| 3 | Mo 202.031†        | -60.1     | -76.5     | -0.9242 µg/L | -0.9242 ppb | 11:58:54 |
| 3 | Ni 231.604†        | 295.1     | -42.7     | -0.0969 µg/L | -0.0969 ppb | 11:58:54 |
| 3 | P 214.914†         | 298.6     | 30.6      | 56.445 µg/L  | 56.445 ppb  | 11:58:54 |
| 3 | Pb 220.353†        | -94.0     | -139.9    | 3.5075 µg/L  | 3.5075 ppb  | 11:58:54 |
| 3 | S 181.975 Axial†   | -22.7     | -47.2     | -156.80 µg/L | -156.80 ppb | 11:58:54 |
| 3 | Sb 206.836†        | 29.8      | 3.9       | -3.7817 µg/L | -3.7817 ppb | 11:58:54 |
| 3 | Se 196.026†        | -159.9    | -192.3    | -10.363 µg/L | -10.363 ppb | 11:58:54 |
| 3 | SiO2†              | 2405.8    | -175.1    | -33.176 µg/L | -33.176 ppb | 11:58:54 |
| 3 | Si 251.611†        | 438.9     | 46.5      | 3.3124 µg/L  | 3.3124 ppb  | 11:58:54 |
| 3 | Sn 189.927†        | -101.1    | -102.6    | 7.3021 µg/L  | 7.3021 ppb  | 11:58:54 |
| 3 | Ti 334.940†        | 10973.9   | 12398.6   | -0.9272 µg/L | -0.9272 ppb | 11:58:34 |
| 3 | Tl 190.801†        | 9.4       | 44.4      | -22.539 µg/L | -22.539 ppb | 11:58:54 |
| 3 | U 409.014†         | -153.3    | -123.6    | -67.536 µg/L | -67.536 ppb | 11:58:34 |
| 3 | V 292.402†         | 2106.9    | 2148.5    | 3.2576 µg/L  | 3.2576 ppb  | 11:58:54 |
| 3 | Zn 213.857†        | 2089.3    | 1570.6    | 1.0883 µg/L  | 1.0883 ppb  | 11:58:54 |

## Mean Data: ICSA

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1823912.4                | 93.528 %           | 0.2060   |                    |          | 0.22%  |
| Sc RADIAL   | 87947.4                  | 95.8 %             | 0.51     |                    |          | 0.53%  |
| Y 371.029   | 1234965.8                | 92.623 %           | 0.1967   |                    |          | 0.21%  |
| Ag 328.068†   | -1884.8                  | -1.3159 µg/L       | 0.04894  | -1.3159 ppb        | 0.04894  | 3.72%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 1064610.0                | 521240 µg/L        | 2413.7   | 521240 ppb         | 2413.7   | 0.46%  |
| QC value within limits for Al 396.153Radial Recovery = 104.25%  |                          |                    |          |                    |          |        |
| As 188.979†   | 27.2                     | -40.133 µg/L       | 4.9728   | -40.133 ppb        | 4.9728   | 12.39% |
| QC value within limits for As 188.979 Recovery = Not calculated |                          |                    |          |                    |          |        |
| B 249.677†  | 1214.9                   | -39.046 µg/L       | 1.2595   | -39.046 ppb        | 1.2595   | 3.23%  |
| QC value within limits for B 249.677 Recovery = Not calculated  |                          |                    |          |                    |          |        |
| Ba 233.527†   | 333.7                    | 7.7694 µg/L        | 0.17884  | 7.7694 ppb         | 0.17884  | 2.30%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Be 313.107†   | -577.2                   | -0.3704 µg/L       | 0.01907  | -0.3704 ppb        | 0.01907  | 5.15%  |
| QC value within limits for Be 313.107 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 1298985.3                | 488820 µg/L        | 2889.4   | 488820 ppb         | 2889.4   | 0.59%  |
| QC value within limits for Ca 317.933Radial Recovery = 97.76%   |                          |                    |          |                    |          |        |
| Cd 226.502†   | 995.4                    | 4.3459 µg/L        | 0.32903  | 4.3459 ppb         | 0.32903  | 7.57%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated |                          |                    |          |                    |          |        |
| Co 228.616†   | 58.3                     | 2.5766 µg/L        | 0.34118  | 2.5766 ppb         | 0.34118  | 13.24% |

|  |         |              |         |             |         |         |  |
|--|---------|--------------|---------|-------------|---------|---------|--|
| QC value within limits for Co 228.616 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Cr 267.716†  | -60.2   | -1.3877 µg/L | 0.49847 | -1.3877 ppb | 0.49847 | 35.92%  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Cu 324.752†  | -5481.1 | -2.2914 µg/L | 0.38628 | -2.2914 ppb | 0.38628 | 16.86%  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Fe 238.204 Radial†   | 14998.9 | 186810 µg/L  | 511.5   | 186810 ppb  | 511.5   | 0.27%   |  |
| QC value within limits for Fe 238.204 Radial Recovery = 93.41%         |         |              |         |             |         |         |  |
| K 766.490 Radial†  | -175.7  | -83.125 µg/L | 28.0391 | -83.125 ppb | 28.0391 | 33.73%  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |         |              |         |             |         |         |  |
| Mg 279.077 IEC†  | 36609.6 | 495060 µg/L  | 965.7   | 495060 ppb  | 965.7   | 0.20%   |  |
| QC value within limits for Mg 279.077 IEC Recovery = 99.01%            |         |              |         |             |         |         |  |
| Mn 257.610†  | 7029.3  | 0.4930 µg/L  | 0.02889 | 0.4930 ppb  | 0.02889 | 5.86%   |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Mo 202.031†  | -79.0   | -1.1946 µg/L | 0.23418 | -1.1946 ppb | 0.23418 | 19.60%  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Na 589.592 Radial†   | 6.7     | 3.3723 µg/L  | 6.65744 | 3.3723 ppb  | 6.65744 | 197.42% |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |         |              |         |             |         |         |  |
| Ni 231.604†  | -47.3   | -0.3742 µg/L | 0.67152 | -0.3742 ppb | 0.67152 | 179.47% |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |         |              |         |             |         |         |  |
| P 214.914†   | 27.0    | 49.369 µg/L  | 7.2954  | 49.369 ppb  | 7.2954  | 14.78%  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |         |              |         |             |         |         |  |
| Pb 220.353†  | -140.4  | 3.1389 µg/L  | 1.90368 | 3.1389 ppb  | 1.90368 | 60.65%  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |         |              |         |             |         |         |  |
| S 181.975 Axial†   | -49.5   | -164.50 µg/L | 9.476   | -164.50 ppb | 9.476   | 5.76%   |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |         |              |         |             |         |         |  |
| Sb 206.836†  | 2.4     | -5.1946 µg/L | 2.42071 | -5.1946 ppb | 2.42071 | 46.60%  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Se 196.026†  | -185.5  | -3.4953 µg/L | 6.11925 | -3.4953 ppb | 6.11925 | 175.07% |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |         |              |         |             |         |         |  |
| SiO2†  | -169.2  | -32.055 µg/L | 2.4913  | -32.055 ppb | 2.4913  | 7.77%   |  |
| QC value within limits for SiO2 Recovery = Not calculated              |         |              |         |             |         |         |  |
| Si 251.611†  | 54.0    | 3.8451 µg/L  | 0.46474 | 3.8451 ppb  | 0.46474 | 12.09%  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Sn 189.927†  | -99.3   | 8.3719 µg/L  | 1.24611 | 8.3719 ppb  | 1.24611 | 14.88%  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Sr 421.552†  | 614.2   | 3.7196 µg/L  | 0.12350 | 3.7196 ppb  | 0.12350 | 3.32%   |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Ti 334.940†  | 12440.3 | -0.8625 µg/L | 0.06714 | -0.8625 ppb | 0.06714 | 7.78%   |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |         |              |         |             |         |         |  |
| Tl 190.801†  | 36.5    | -30.095 µg/L | 6.9497  | -30.095 ppb | 6.9497  | 23.09%  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |         |              |         |             |         |         |  |
| U 409.014†   | -63.3   | -61.686 µg/L | 5.1055  | -61.686 ppb | 5.1055  | 8.28%   |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |         |              |         |             |         |         |  |
| V 292.402†   | 2175.2  | 3.6172 µg/L  | 0.60318 | 3.6172 ppb  | 0.60318 | 16.68%  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |         |              |         |             |         |         |  |
| Zn 213.857†  | 1592.7  | 1.6404 µg/L  | 0.50483 | 1.6404 ppb  | 0.50483 | 30.77%  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |         |              |         |             |         |         |  |

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: ICSAB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 104  
 Date Collected: 3/15/2010 11:59:04  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSAB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87640.7          | 87640.7                | 95.5 %                |                       | 11:59:41         |
| 1     | Al 396.153Radial†  | 1020621.1        | 1068944.6              | 523350 µg/L           | 523350 ppb            | 11:59:36         |
| 1     | Ca 317.933Radial†  | 1247859.8        | 1306402.9              | 491610 µg/L           | 491610 ppb            | 11:59:36         |
| 1     | Fe 238.204 Radial† | 14327.3          | 14990.3                | 186720 µg/L           | 186720 ppb            | 11:59:41         |
| 1     | K 766.490 Radial†  | 10908.7          | 11018.3                | 5213.1 µg/L           | 5213.1 ppb            | 11:59:41         |
| 1     | Mg 279.077 IEC†    | 35072.9          | 36718.9                | 496540 µg/L           | 496540 ppb            | 11:59:41         |
| 1     | Na 589.592 Radial† | 9903.0           | 10180.1                | 5148.9 µg/L           | 5148.9 ppb            | 11:59:41         |
| 1     | Sr 421.552†        | 80346.2          | 84002.2                | 508.74 µg/L           | 508.74 ppb            | 11:59:36         |
| 1     | Sc 361.383         | 1825807.7        | 1825807.7              | 93.625 %              |                       | 12:00:18         |
| 1     | Y 371.029          | 1237445.1        | 1237445.1              | 92.809 %              |                       | 12:00:18         |
| 1     | Ag 328.068†        | 26604.5          | 28939.4                | 261.51 µg/L           | 261.51 ppb            | 12:00:18         |
| 1     | As 188.979†        | 335.3            | 361.6                  | 480.92 µg/L           | 480.92 ppb            | 12:00:39         |
| 1     | B 249.677†         | 11564.2          | 12074.2                | 484.12 µg/L           | 484.12 ppb            | 12:00:18         |
| 1     | Ba 233.527†        | 20306.0          | 21715.7                | 503.41 µg/L           | 503.41 ppb            | 12:00:39         |
| 1     | Be 313.107†        | 368049.6         | 394667.5               | 245.10 µg/L           | 245.10 ppb            | 12:00:18         |
| 1     | Cd 226.502†        | 17795.8          | 19172.8                | 469.71 µg/L           | 469.71 ppb            | 12:00:39         |
| 1     | Co 228.616†        | 9336.2           | 9937.4                 | 450.55 µg/L           | 450.55 ppb            | 12:00:39         |
| 1     | Cr 267.716†        | 19600.1          | 20842.3                | 486.66 µg/L           | 486.66 ppb            | 12:00:39         |
| 1     | Cu 324.752†        | 75383.3          | 76291.9                | 555.84 µg/L           | 555.84 ppb            | 12:00:18         |
| 1     | Mn 257.610†        | 147367.0         | 158140.1               | 490.82 µg/L           | 490.82 ppb            | 12:00:18         |
| 1     | Mo 202.031†        | 4571.9           | 4870.9                 | 518.34 µg/L           | 518.34 ppb            | 12:00:39         |
| 1     | Ni 231.604†        | 7418.7           | 7566.3                 | 449.54 µg/L           | 449.54 ppb            | 12:00:39         |
| 1     | P 214.914†         | 1708.6           | 1537.0                 | 2666.1 µg/L           | 2666.1 ppb            | 12:00:39         |
| 1     | Pb 220.353†        | 1562.9           | 1629.8                 | 496.12 µg/L           | 496.12 ppb            | 12:00:39         |
| 1     | S 181.975 Axial†   | 759.1            | 787.9                  | 2619.5 µg/L           | 2619.5 ppb            | 12:00:39         |
| 1     | Sb 206.836†        | 556.0            | 566.0                  | 534.08 µg/L           | 534.08 ppb            | 12:00:39         |
| 1     | Se 196.026†        | 2177.5           | 2303.9                 | 2493.0 µg/L           | 2493.0 ppb            | 12:00:39         |
| 1     | SiO2†              | 57136.5          | 58285.0                | 11040 µg/L            | 11040 ppb             | 12:00:18         |
| 1     | Si 251.611†        | 68591.0          | 72839.4                | 5188.7 µg/L           | 5188.7 ppb            | 12:00:18         |
| 1     | Sn 189.927†        | 1073.6           | 1151.9                 | 534.26 µg/L           | 534.26 ppb            | 12:00:39         |
| 1     | Ti 334.940†        | 206417.3         | 221162.8               | 511.45 µg/L           | 511.45 ppb            | 12:00:18         |
| 1     | Tl 190.801†        | 429.5            | 493.1                  | 450.64 µg/L           | 450.64 ppb            | 12:00:39         |
| 1     | U 409.014†         | 4846.7           | 5216.5                 | 430.65 µg/L           | 430.65 ppb            | 12:00:18         |
| 1     | V 292.402†         | 40624.6          | 43291.4                | 527.08 µg/L           | 527.08 ppb            | 12:00:18         |
| 1     | Zn 213.857†        | 20663.7          | 21412.3                | 478.05 µg/L           | 478.05 ppb            | 12:00:39         |
| 2     | Sc RADIAL          | 87764.5          | 87764.5                | 95.6 %                |                       | 11:59:53         |
| 2     | Al 396.153Radial†  | 1013773.3        | 1060276.3              | 519100 µg/L           | 519100 ppb            | 11:59:47         |
| 2     | Ca 317.933Radial†  | 1239069.0        | 1295367.1              | 487460 µg/L           | 487460 ppb            | 11:59:47         |
| 2     | Fe 238.204 Radial† | 14409.0          | 15054.6                | 187520 µg/L           | 187520 ppb            | 11:59:53         |
| 2     | K 766.490 Radial†  | 10995.6          | 11093.0                | 5248.5 µg/L           | 5248.5 ppb            | 11:59:53         |
| 2     | Mg 279.077 IEC†    | 35140.4          | 36737.7                | 496800 µg/L           | 496800 ppb            | 11:59:53         |
| 2     | Na 589.592 Radial† | 9927.0           | 10190.6                | 5154.2 µg/L           | 5154.2 ppb            | 11:59:53         |
| 2     | Sr 421.552†        | 79723.8          | 83232.7                | 504.08 µg/L           | 504.08 ppb            | 11:59:47         |
| 2     | Sc 361.383         | 1817770.0        | 1817770.0              | 93.213 %              |                       | 12:00:48         |
| 2     | Y 371.029          | 1231522.8        | 1231522.8              | 92.365 %              |                       | 12:00:48         |
| 2     | Ag 328.068†        | 26591.2          | 29050.8                | 262.52 µg/L           | 262.52 ppb            | 12:00:48         |
| 2     | As 188.979†        | 340.4            | 368.6                  | 492.31 µg/L           | 492.31 ppb            | 12:01:09         |
| 2     | B 249.677†         | 11622.5          | 12191.4                | 489.35 µg/L           | 489.35 ppb            | 12:00:48         |
| 2     | Ba 233.527†        | 20327.2          | 21834.3                | 506.16 µg/L           | 506.16 ppb            | 12:01:09         |
| 2     | Be 313.107†        | 366725.4         | 394985.1               | 245.29 µg/L           | 245.29 ppb            | 12:00:48         |
| 2     | Cd 226.502†        | 17825.2          | 19288.3                | 472.57 µg/L           | 472.57 ppb            | 12:01:09         |
| 2     | Co 228.616†        | 9351.3           | 9997.7                 | 453.29 µg/L           | 453.29 ppb            | 12:01:09         |
| 2     | Cr 267.716†        | 19621.0          | 20957.2                | 489.34 µg/L           | 489.34 ppb            | 12:01:09         |
| 2     | Cu 324.752†        | 74888.9          | 76117.6                | 554.80 µg/L           | 554.80 ppb            | 12:00:48         |
| 2     | Mn 257.610†        | 146794.8         | 158222.2               | 491.12 µg/L           | 491.12 ppb            | 12:00:48         |
| 2     | Mo 202.031†        | 4554.9           | 4874.2                 | 518.72 µg/L           | 518.72 ppb            | 12:01:09         |
| 2     | Ni 231.604†        | 7403.9           | 7585.6                 | 450.68 µg/L           | 450.68 ppb            | 12:01:09         |
| 2     | P 214.914†         | 1708.4           | 1544.8                 | 2678.2 µg/L           | 2678.2 ppb            | 12:01:09         |
| 2     | Pb 220.353†        | 1557.1           | 1630.8                 | 496.11 µg/L           | 496.11 ppb            | 12:01:09         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 751.2     | 783.0     | 2603.4 µg/L | 2603.4 ppb | 12:01:09 |
| 2 | Sb 206.836†        | 559.7     | 572.6     | 540.40 µg/L | 540.40 ppb | 12:01:09 |
| 2 | Se 196.026†        | 2174.1    | 2310.6    | 2502.4 µg/L | 2502.4 ppb | 12:01:09 |
| 2 | SiO2†              | 57029.4   | 58440.0   | 11070 µg/L  | 11070 ppb  | 12:00:48 |
| 2 | Si 251.611†        | 68403.2   | 72961.8   | 5197.4 µg/L | 5197.4 ppb | 12:00:48 |
| 2 | Sn 189.927†        | 1074.3    | 1157.8    | 536.31 µg/L | 536.31 ppb | 12:01:09 |
| 2 | Ti 334.940†        | 205631.0  | 221294.2  | 511.69 µg/L | 511.69 ppb | 12:00:48 |
| 2 | Tl 190.801†        | 428.3     | 493.9     | 452.34 µg/L | 452.34 ppb | 12:01:09 |
| 2 | U 409.014†         | 4893.5    | 5289.7    | 437.61 µg/L | 437.61 ppb | 12:00:48 |
| 2 | V 292.402†         | 40573.3   | 43428.2   | 528.72 µg/L | 528.72 ppb | 12:00:48 |
| 2 | Zn 213.857†        | 20696.6   | 21545.2   | 481.21 µg/L | 481.21 ppb | 12:01:09 |
| 3 | Sc RADIAL          | 87883.5   | 87883.5   | 95.8 %      |            | 12:00:05 |
| 3 | Al 396.153Radial†  | 1022312.3 | 1067757.2 | 522770 µg/L | 522770 ppb | 11:59:59 |
| 3 | Ca 317.933Radial†  | 1249549.6 | 1304556.3 | 490910 µg/L | 490910 ppb | 11:59:59 |
| 3 | Fe 238.204 Radial† | 14364.5   | 14987.7   | 186680 µg/L | 186680 ppb | 12:00:05 |
| 3 | K 766.490 Radial†  | 11022.4   | 11105.5   | 5254.4 µg/L | 5254.4 ppb | 12:00:05 |
| 3 | Mg 279.077 IEC†    | 35125.0   | 36671.7   | 495900 µg/L | 495900 ppb | 12:00:05 |
| 3 | Na 589.592 Radial† | 9903.0    | 10151.5   | 5134.4 µg/L | 5134.4 ppb | 12:00:05 |
| 3 | Sr 421.552†        | 80559.4   | 83992.4   | 508.68 µg/L | 508.68 ppb | 11:59:59 |
| 3 | Sc 361.383         | 1827608.5 | 1827608.5 | 93.718 %    |            | 12:01:18 |
| 3 | Y 371.029          | 1240214.1 | 1240214.1 | 93.017 %    |            | 12:01:18 |
| 3 | Ag 328.068†        | 26793.5   | 29113.0   | 262.97 µg/L | 262.97 ppb | 12:01:18 |
| 3 | As 188.979†        | 343.4     | 369.8     | 493.86 µg/L | 493.86 ppb | 12:01:39 |
| 3 | B 249.677†         | 11586.1   | 12085.4   | 484.68 µg/L | 484.68 ppb | 12:01:18 |
| 3 | Ba 233.527†        | 20273.9   | 21660.0   | 502.12 µg/L | 502.12 ppb | 12:01:39 |
| 3 | Be 313.107†        | 368647.0  | 394917.7  | 245.25 µg/L | 245.25 ppb | 12:01:18 |
| 3 | Cd 226.502†        | 17744.0   | 19098.7   | 467.81 µg/L | 467.81 ppb | 12:01:39 |
| 3 | Co 228.616†        | 9306.3    | 9895.7    | 448.65 µg/L | 448.65 ppb | 12:01:39 |
| 3 | Cr 267.716†        | 19547.9   | 20766.0   | 484.88 µg/L | 484.88 ppb | 12:01:39 |
| 3 | Cu 324.752†        | 75337.2   | 76163.4   | 554.96 µg/L | 554.96 ppb | 12:01:18 |
| 3 | Mn 257.610†        | 147679.2  | 158318.2  | 491.44 µg/L | 491.44 ppb | 12:01:18 |
| 3 | Mo 202.031†        | 4550.9    | 4843.6    | 515.48 µg/L | 515.48 ppb | 12:01:39 |
| 3 | Ni 231.604†        | 7382.8    | 7520.2    | 446.81 µg/L | 446.81 ppb | 12:01:39 |
| 3 | P 214.914†         | 1687.1    | 1512.2    | 2622.2 µg/L | 2622.2 ppb | 12:01:39 |
| 3 | Pb 220.353†        | 1563.5    | 1628.8    | 495.79 µg/L | 495.79 ppb | 12:01:39 |
| 3 | S 181.975 Axial†   | 739.4     | 766.1     | 2547.0 µg/L | 2547.0 ppb | 12:01:39 |
| 3 | Sb 206.836†        | 543.9     | 552.5     | 521.26 µg/L | 521.26 ppb | 12:01:39 |
| 3 | Se 196.026†        | 2146.9    | 2269.1    | 2458.4 µg/L | 2458.4 ppb | 12:01:39 |
| 3 | SiO2†              | 57233.6   | 58328.5   | 11049 µg/L  | 11049 ppb  | 12:01:18 |
| 3 | Si 251.611†        | 68743.4   | 72929.8   | 5195.2 µg/L | 5195.2 ppb | 12:01:18 |
| 3 | Sn 189.927†        | 1049.8    | 1125.4    | 523.05 µg/L | 523.05 ppb | 12:01:39 |
| 3 | Ti 334.940†        | 206743.7  | 221293.9  | 511.82 µg/L | 511.82 ppb | 12:01:18 |
| 3 | Tl 190.801†        | 424.2     | 487.0     | 444.39 µg/L | 444.39 ppb | 12:01:39 |
| 3 | U 409.014†         | 4898.0    | 5266.2    | 435.33 µg/L | 435.33 ppb | 12:01:18 |
| 3 | V 292.402†         | 40713.5   | 43343.5   | 527.72 µg/L | 527.72 ppb | 12:01:18 |
| 3 | Zn 213.857†        | 20619.6   | 21343.5   | 476.44 µg/L | 476.44 ppb | 12:01:39 |

## Mean Data: ICSAB

| Analyte  | Mean Corrected Intensity | Conc. Units | Calib. Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--|--------------------------|-------------|-----------------|--------------------|----------|-------|
| Sc 361.383   | 1823728.7                | 93.519 %    | 0.2686          |                    |          | 0.29% |
| Sc RADIAL  | 87762.9                  | 95.6 %      | 0.13            |                    |          | 0.14% |
| Y 371.029  | 1236394.0                | 92.730 %    | 0.3330          |                    |          | 0.36% |
| Ag 328.068†  | 29034.4                  | 262.33 µg/L | 0.749           | 262.33 ppb         | 0.749    | 0.29% |
| QC value within limits for Ag 328.068 Recovery = 104.93%       |                          |             |                 |                    |          |       |
| Al 396.153Radial†  | 1065659.4                | 521740 µg/L | 2300.9          | 521740 ppb         | 2300.9   | 0.44% |
| QC value within limits for Al 396.153Radial Recovery = 104.35% |                          |             |                 |                    |          |       |
| As 188.979†  | 366.6                    | 489.03 µg/L | 7.063           | 489.03 ppb         | 7.063    | 1.44% |
| QC value within limits for As 188.979 Recovery = 97.81%        |                          |             |                 |                    |          |       |
| B 249.677†   | 12117.0                  | 486.05 µg/L | 2.869           | 486.05 ppb         | 2.869    | 0.59% |
| QC value within limits for B 249.677 Recovery = 97.21%         |                          |             |                 |                    |          |       |
| Ba 233.527†  | 21736.6                  | 503.90 µg/L | 2.060           | 503.90 ppb         | 2.060    | 0.41% |
| QC value within limits for Ba 233.527 Recovery = 100.78%       |                          |             |                 |                    |          |       |
| Be 313.107†  | 394856.8                 | 245.22 µg/L | 0.104           | 245.22 ppb         | 0.104    | 0.04% |
| QC value within limits for Be 313.107 Recovery = 98.09%        |                          |             |                 |                    |          |       |
| Ca 317.933Radial†  | 1302108.7                | 489990 µg/L | 2224.4          | 489990 ppb         | 2224.4   | 0.45% |
| QC value within limits for Ca 317.933Radial Recovery = 98.00%  |                          |             |                 |                    |          |       |
| Cd 226.502†  | 19186.6                  | 470.03 µg/L | 2.396           | 470.03 ppb         | 2.396    | 0.51% |
| QC value within limits for Cd 226.502 Recovery = 94.01%        |                          |             |                 |                    |          |       |
| Co 228.616†  | 9943.6                   | 450.83 µg/L | 2.330           | 450.83 ppb         | 2.330    | 0.52% |

|       |                 |          |             |       |            |       |       |
|-------|-----------------|----------|-------------|-------|------------|-------|-------|
| Cr    | 267.716†        | 20855.2  | 486.96 µg/L | 2.247 | 486.96 ppb | 2.247 | 0.46% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Cu    | 324.752†        | 76190.9  | 555.20 µg/L | 0.561 | 555.20 ppb | 0.561 | 0.10% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Fe    | 238.204 Radial† | 15010.9  | 186970 µg/L | 471.9 | 186970 ppb | 471.9 | 0.25% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| K     | 766.490 Radial† | 11072.3  | 5238.6 µg/L | 22.32 | 5238.6 ppb | 22.32 | 0.43% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Mg    | 279.077 IEC†    | 36709.4  | 496410 µg/L | 459.2 | 496410 ppb | 459.2 | 0.09% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Mn    | 257.610†        | 158226.8 | 491.13 µg/L | 0.310 | 491.13 ppb | 0.310 | 0.06% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Mo    | 202.031†        | 4862.9   | 517.51 µg/L | 1.772 | 517.51 ppb | 1.772 | 0.34% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Na    | 589.592 Radial† | 10174.1  | 5145.9 µg/L | 10.25 | 5145.9 ppb | 10.25 | 0.20% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Ni    | 231.604†        | 7557.4   | 449.01 µg/L | 1.989 | 449.01 ppb | 1.989 | 0.44% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| P     | 214.914†        | 1531.3   | 2655.5 µg/L | 29.46 | 2655.5 ppb | 29.46 | 1.11% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Pb    | 220.353†        | 1629.8   | 496.01 µg/L | 0.190 | 496.01 ppb | 0.190 | 0.04% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| S     | 181.975 Axial†  | 779.0    | 2590.0 µg/L | 38.09 | 2590.0 ppb | 38.09 | 1.47% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Sb    | 206.836†        | 563.7    | 531.91 µg/L | 9.751 | 531.91 ppb | 9.751 | 1.83% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Se    | 196.026†        | 2294.5   | 2484.6 µg/L | 23.17 | 2484.6 ppb | 23.17 | 0.93% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| SiO2† |                 | 58351.2  | 11053 µg/L  | 15.1  | 11053 ppb  | 15.1  | 0.14% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Si    | 251.611†        | 72910.3  | 5193.8 µg/L | 4.52  | 5193.8 ppb | 4.52  | 0.09% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Sn    | 189.927†        | 1145.1   | 531.21 µg/L | 7.136 | 531.21 ppb | 7.136 | 1.34% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Sr    | 421.552†        | 83742.5  | 507.17 µg/L | 2.674 | 507.17 ppb | 2.674 | 0.53% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Ti    | 334.940†        | 221250.3 | 511.65 µg/L | 0.183 | 511.65 ppb | 0.183 | 0.04% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Tl    | 190.801†        | 491.3    | 449.12 µg/L | 4.184 | 449.12 ppb | 4.184 | 0.93% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| U     | 409.014†        | 5257.5   | 434.53 µg/L | 3.551 | 434.53 ppb | 3.551 | 0.82% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| V     | 292.402†        | 43354.4  | 527.84 µg/L | 0.825 | 527.84 ppb | 0.825 | 0.16% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
| Zn    | 213.857†        | 21433.7  | 478.57 µg/L | 2.427 | 478.57 ppb | 2.427 | 0.51% |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |
|       |                 |          |             |       |            |       |       |

QC value within limits for Co 228.616 Recovery = 90.17%  
 QC value within limits for Cr 267.716 Recovery = 97.39%  
 QC value within limits for Cu 324.752 Recovery = 111.04%  
 QC value within limits for Fe 238.204 Radial Recovery = 93.49%  
 QC value within limits for K 766.490 Radial Recovery = 104.77%  
 QC value within limits for Mg 279.077 IEC Recovery = 99.28%  
 QC value within limits for Mn 257.610 Recovery = 98.23%  
 QC value within limits for Mo 202.031 Recovery = 103.50%  
 QC value within limits for Na 589.592 Radial Recovery = 102.92%  
 QC value within limits for Ni 231.604 Recovery = 89.80%  
 QC value within limits for P 214.914 Recovery = 106.22%  
 QC value within limits for Pb 220.353 Recovery = 99.20%  
 QC value within limits for S 181.975 Axial Recovery = 103.60%  
 QC value within limits for Sb 206.836 Recovery = 106.38%  
 QC value within limits for Se 196.026 Recovery = 99.38%  
 QC value within limits for SiO2 Recovery = 103.35%  
 QC value within limits for Si 251.611 Recovery = 103.88%  
 QC value within limits for Sn 189.927 Recovery = 106.24%  
 QC value within limits for Sr 421.552 Recovery = 101.43%  
 QC value within limits for Ti 334.940 Recovery = 102.33%  
 QC value within limits for Tl 190.801 Recovery = 89.82%  
 QC value within limits for U 409.014 Recovery = 86.91%  
 QC value within limits for V 292.402 Recovery = 105.57%  
 QC value within limits for Zn 213.857 Recovery = 95.71%

All analyte(s) passed QC.

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 105  
 Date Collected: 3/15/2010 12:01:48  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: LR1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87752.2          | 87752.2                | 95.6 %                |                       | 12:02:26         |
| 1     | Al 396.153Radial†  | 1024903.1        | 1072064.5              | 524890 µg/L           | 524890 ppb            | 12:02:21         |
| 1     | Ca 317.933Radial†  | 1250023.2        | 1307004.7              | 491830 µg/L           | 491830 ppb            | 12:02:21         |
| 1     | Fe 238.204 Radial† | 34413.7          | 35978.8                | 448120 µg/L           | 448120 ppb            | 12:02:26         |
| 1     | K 766.490 Radial†  | 149.6            | -248.7                 | -117.66 µg/L          | -117.66 ppb           | 12:02:26         |
| 1     | Mg 279.077 IEC†    | 35111.3          | 36712.3                | 496160 µg/L           | 496160 ppb            | 12:02:26         |
| 1     | Na 589.592 Radial† | 928192.0         | 970566.0               | 490890 µg/L           | 490890 ppb            | 12:02:21         |
| 1     | Sr 421.552†        | 2007.4           | 1964.2                 | 11.896 µg/L           | 11.896 ppb            | 12:02:26         |
| 1     | Sc 361.383         | 1804640.6        | 1804640.6              | 92.540 %              |                       | 12:03:03         |
| 1     | Y 371.029          | 1218054.6        | 1218054.6              | 91.355 %              |                       | 12:03:03         |
| 1     | Ag 328.068†        | -4521.2          | -4362.1                | -1.9078 µg/L          | -1.9078 ppb           | 12:03:03         |
| 1     | As 188.979†        | 15.0             | 19.6                   | -84.583 µg/L          | -84.583 ppb           | 12:03:24         |
| 1     | B 249.677†         | 2799.8           | 2748.2                 | -101.63 µg/L          | -101.63 ppb           | 12:03:03         |
| 1     | Ba 233.527†        | 644.4            | 723.5                  | 16.833 µg/L           | 16.833 ppb            | 12:03:24         |
| 1     | Be 313.107†        | -9306.5          | -8497.9                | -5.2962 µg/L          | -5.2962 ppb           | 12:03:03         |
| 1     | Cd 226.502†        | 2026.7           | 2355.4                 | 9.5970 µg/L           | 9.5970 ppb            | 12:03:24         |
| 1     | Co 228.616†        | 251.9            | 237.8                  | 10.699 µg/L           | 10.699 ppb            | 12:03:24         |
| 1     | Cr 267.716†        | 373.5            | 311.3                  | 7.2969 µg/L           | 7.2969 ppb            | 12:03:24         |
| 1     | Cu 324.752†        | -7294.2          | -12106.2               | 1.6137 µg/L           | 1.6137 ppb            | 12:03:24         |
| 1     | Mn 257.610†        | 6838.6           | 8129.3                 | 19.439 µg/L           | 19.439 ppb            | 12:03:03         |
| 1     | Mo 202.031†        | -161.9           | -187.3                 | -2.6263 µg/L          | -2.6263 ppb           | 12:03:24         |
| 1     | Ni 231.604†        | 232.7            | -106.0                 | -0.4577 µg/L          | -0.4577 ppb           | 12:03:24         |
| 1     | P 214.914†         | 469.8            | 219.7                  | 183.59 µg/L           | 183.59 ppb            | 12:03:24         |
| 1     | Pb 220.353†        | -27.9            | -69.7                  | 11.661 µg/L           | 11.661 ppb            | 12:03:24         |
| 1     | S 181.975 Axial†   | -41.4            | -67.7                  | -225.03 µg/L          | -225.03 ppb           | 12:03:24         |
| 1     | Sb 206.836†        | 21.7             | -4.4                   | -11.975 µg/L          | -11.975 ppb           | 12:03:24         |
| 1     | Se 196.026†        | -339.7           | -388.9                 | 622.00 µg/L           | 622.00 ppb            | 12:03:24         |
| 1     | SiO2†              | 2491.9           | -48.9                  | -9.2670 µg/L          | -9.2670 ppb           | 12:03:24         |
| 1     | Si 251.611†        | -191.1           | -628.2                 | -44.753 µg/L          | -44.753 ppb           | 12:03:24         |
| 1     | Sn 189.927†        | -80.1            | -81.3                  | 15.011 µg/L           | 15.011 ppb            | 12:03:24         |
| 1     | Ti 334.940†        | 13528.8          | 15310.8                | 6.1223 µg/L           | 6.1223 ppb            | 12:03:03         |
| 1     | Tl 190.801†        | -18.5            | 14.4                   | 1.8435 µg/L           | 1.8435 ppb            | 12:03:24         |
| 1     | U 409.014†         | 151252.7         | 163485.7               | 15157 µg/L            | 15157 ppb             | 12:03:03         |
| 1     | V 292.402†         | 3918.2           | 4134.8                 | 10.918 µg/L           | 10.918 ppb            | 12:03:24         |
| 1     | Zn 213.857†        | 3505.6           | 3129.9                 | 26.418 µg/L           | 26.418 ppb            | 12:03:24         |
| 2     | Sc RADIAL          | 87657.3          | 87657.3                | 95.5 %                |                       | 12:02:38         |
| 2     | Al 396.153Radial†  | 1029896.8        | 1078454.0              | 528010 µg/L           | 528010 ppb            | 12:02:32         |
| 2     | Ca 317.933Radial†  | 1255240.8        | 1313883.5              | 494420 µg/L           | 494420 ppb            | 12:02:32         |
| 2     | Fe 238.204 Radial† | 34482.8          | 36090.0                | 449500 µg/L           | 449500 ppb            | 12:02:38         |
| 2     | K 766.490 Radial†  | 296.0            | -95.3                  | -45.074 µg/L          | -45.074 ppb           | 12:02:38         |
| 2     | Mg 279.077 IEC†    | 35106.4          | 36746.9                | 496630 µg/L           | 496630 ppb            | 12:02:38         |
| 2     | Na 589.592 Radial† | 934302.9         | 978015.6               | 494660 µg/L           | 494660 ppb            | 12:02:32         |
| 2     | Sr 421.552†        | 1976.1           | 1933.6                 | 11.711 µg/L           | 11.711 ppb            | 12:02:38         |
| 2     | Sc 361.383         | 1789952.3        | 1789952.3              | 91.787 %              |                       | 12:03:32         |
| 2     | Y 371.029          | 1208081.9        | 1208081.9              | 90.607 %              |                       | 12:03:32         |
| 2     | Ag 328.068†        | -4331.7          | -4195.8                | -0.3928 µg/L          | -0.3928 ppb           | 12:03:32         |
| 2     | As 188.979†        | 11.6             | 16.0                   | -90.687 µg/L          | -90.687 ppb           | 12:03:53         |
| 2     | B 249.677†         | 2629.6           | 2587.5                 | -110.08 µg/L          | -110.08 ppb           | 12:03:32         |
| 2     | Ba 233.527†        | 657.0            | 742.9                  | 17.283 µg/L           | 17.283 ppb            | 12:03:53         |
| 2     | Be 313.107†        | -9161.1          | -8422.0                | -5.2490 µg/L          | -5.2490 ppb           | 12:03:32         |
| 2     | Cd 226.502†        | 2025.9           | 2372.5                 | 9.8786 µg/L           | 9.8786 ppb            | 12:03:53         |
| 2     | Co 228.616†        | 250.3            | 238.3                  | 10.725 µg/L           | 10.725 ppb            | 12:03:53         |
| 2     | Cr 267.716†        | 370.7            | 311.6                  | 7.3030 µg/L           | 7.3030 ppb            | 12:03:53         |
| 2     | Cu 324.752†        | -7289.5          | -12165.7               | 1.4679 µg/L           | 1.4679 ppb            | 12:03:53         |
| 2     | Mn 257.610†        | 6740.5           | 8083.0                 | 19.339 µg/L           | 19.339 ppb            | 12:03:32         |
| 2     | Mo 202.031†        | -166.8           | -194.0                 | -3.2850 µg/L          | -3.2850 ppb           | 12:03:53         |
| 2     | Ni 231.604†        | 235.2            | -101.2                 | -0.1567 µg/L          | -0.1567 ppb           | 12:03:53         |
| 2     | P 214.914†         | 444.9            | 196.7                  | 142.76 µg/L           | 142.76 ppb            | 12:03:53         |
| 2     | Pb 220.353†        | -17.6            | -58.7                  | 14.965 µg/L           | 14.965 ppb            | 12:03:53         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | -35.9     | -62.1     | -206.34 µg/L | -206.34 ppb | 12:03:53 |
| 2 | Sb 206.836†        | 37.2      | 12.6      | 4.1824 µg/L  | 4.1824 ppb  | 12:03:53 |
| 2 | Se 196.026†        | -359.6    | -413.6    | 600.96 µg/L  | 600.96 ppb  | 12:03:53 |
| 2 | SiO2†              | 2502.8    | -14.9     | -2.8298 µg/L | -2.8298 ppb | 12:03:53 |
| 2 | Si 251.611†        | -220.5    | -662.0    | -47.154 µg/L | -47.154 ppb | 12:03:53 |
| 2 | Sn 189.927†        | -86.8     | -89.3     | 11.888 µg/L  | 11.888 ppb  | 12:03:53 |
| 2 | Ti 334.940†        | 13403.3   | 15294.0   | 6.0850 µg/L  | 6.0850 ppb  | 12:03:32 |
| 2 | Tl 190.801†        | -10.9     | 22.5      | 10.030 µg/L  | 10.030 ppb  | 12:03:53 |
| 2 | U 409.014†         | 150056.9  | 163524.1  | 15161 µg/L   | 15161 ppb   | 12:03:32 |
| 2 | V 292.402†         | 3980.1    | 4237.1    | 12.028 µg/L  | 12.028 ppb  | 12:03:53 |
| 2 | Zn 213.857†        | 3469.4    | 3121.6    | 26.125 µg/L  | 26.125 ppb  | 12:03:53 |
| 3 | Sc RADIAL          | 87969.9   | 87969.9   | 95.9 %       |             | 12:02:50 |
| 3 | Al 396.153Radial†  | 1026918.2 | 1071514.5 | 524620 µg/L  | 524620 ppb  | 12:02:44 |
| 3 | Ca 317.933Radial†  | 1251973.1 | 1305804.0 | 491380 µg/L  | 491380 ppb  | 12:02:44 |
| 3 | Fe 238.204 Radial† | 34500.4   | 35980.1   | 448140 µg/L  | 448140 ppb  | 12:02:50 |
| 3 | K 766.490 Radial†  | 199.9     | -196.6    | -93.011 µg/L | -93.011 ppb | 12:02:50 |
| 3 | Mg 279.077 IEC†    | 35257.2   | 36773.7   | 496990 µg/L  | 496990 ppb  | 12:02:50 |
| 3 | Na 589.592 Radial† | 931066.3  | 971162.6  | 491200 µg/L  | 491200 ppb  | 12:02:44 |
| 3 | Sr 421.552†        | 2018.9    | 1970.9    | 11.936 µg/L  | 11.936 ppb  | 12:02:50 |
| 3 | Sc 361.383         | 1793897.9 | 1793897.9 | 91.989 %     |             | 12:04:01 |
| 3 | Y 371.029          | 1211199.0 | 1211199.0 | 90.841 %     |             | 12:04:01 |
| 3 | Ag 328.068†        | -4424.1   | -4285.8   | -1.2622 µg/L | -1.2622 ppb | 12:04:01 |
| 3 | As 188.979†        | 17.2      | 22.1      | -80.606 µg/L | -80.606 ppb | 12:04:22 |
| 3 | B 249.677†         | 2711.5    | 2670.3    | -105.38 µg/L | -105.38 ppb | 12:04:01 |
| 3 | Ba 233.527†        | 653.3     | 737.3     | 17.153 µg/L  | 17.153 ppb  | 12:04:22 |
| 3 | Be 313.107†        | -9156.7   | -8395.3   | -5.2329 µg/L | -5.2329 ppb | 12:04:01 |
| 3 | Cd 226.502†        | 2028.4    | 2370.3    | 9.9780 µg/L  | 9.9780 ppb  | 12:04:22 |
| 3 | Co 228.616†        | 260.4     | 248.6     | 11.189 µg/L  | 11.189 ppb  | 12:04:22 |
| 3 | Cr 267.716†        | 385.1     | 326.3     | 7.6474 µg/L  | 7.6474 ppb  | 12:04:22 |
| 3 | Cu 324.752†        | -7228.4   | -12081.8  | 1.7834 µg/L  | 1.7834 ppb  | 12:04:22 |
| 3 | Mn 257.610†        | 6757.4    | 8085.3    | 19.241 µg/L  | 19.241 ppb  | 12:04:01 |
| 3 | Mo 202.031†        | -174.2    | -201.7    | -4.1388 µg/L | -4.1388 ppb | 12:04:22 |
| 3 | Ni 231.604†        | 250.8     | -84.8     | 0.7928 µg/L  | 0.7928 ppb  | 12:04:22 |
| 3 | P 214.914†         | 446.8     | 197.8     | 144.63 µg/L  | 144.63 ppb  | 12:04:22 |
| 3 | Pb 220.353†        | -25.2     | -67.0     | 12.395 µg/L  | 12.395 ppb  | 12:04:22 |
| 3 | S 181.975 Axial†   | -47.5     | -74.6     | -248.09 µg/L | -248.09 ppb | 12:04:22 |
| 3 | Sb 206.836†        | 29.6      | 4.3       | -3.7481 µg/L | -3.7481 ppb | 12:04:22 |
| 3 | Se 196.026†        | -356.2    | -409.0    | 601.34 µg/L  | 601.34 ppb  | 12:04:22 |
| 3 | SiO2†              | 2483.2    | -42.3     | -8.0098 µg/L | -8.0098 ppb | 12:04:22 |
| 3 | Si 251.611†        | -182.3    | -619.8    | -44.154 µg/L | -44.154 ppb | 12:04:22 |
| 3 | Sn 189.927†        | -93.6     | -96.5     | 8.5680 µg/L  | 8.5680 ppb  | 12:04:22 |
| 3 | Ti 334.940†        | 13958.0   | 15864.9   | 7.4098 µg/L  | 7.4098 ppb  | 12:04:01 |
| 3 | Tl 190.801†        | -3.8      | 30.2      | 18.476 µg/L  | 18.476 ppb  | 12:04:22 |
| 3 | U 409.014†         | 150384.9  | 163521.1  | 15161 µg/L   | 15161 ppb   | 12:04:01 |
| 3 | V 292.402†         | 3917.4    | 4159.3    | 11.217 µg/L  | 11.217 ppb  | 12:04:22 |
| 3 | Zn 213.857†        | 3483.2    | 3128.2    | 26.324 µg/L  | 26.324 ppb  | 12:04:22 |

## Mean Data: LR1

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1796163.6                | 92.105 %           | 0.3898   |                    |          | 0.42%  |
| Sc RADIAL  | 87793.1                  | 95.7 %             | 0.17     |                    |          | 0.18%  |
| Y 371.029  | 1212445.1                | 90.934 %           | 0.3826   |                    |          | 0.42%  |
| Ag 328.068†  | -4281.3                  | -1.1876 µg/L       | 0.76028  | -1.1876 ppb        | 0.76028  | 64.02% |
| Al 396.153Radial†  | 1074011.0                | 525840 µg/L        | 1888.7   | 525840 ppb         | 1888.7   | 0.36%  |
| QC value within limits for Al 396.153Radial Recovery = 105.17%             |                          |                    |          |                    |          |        |
| As 188.979†  | 19.2                     | -85.292 µg/L       | 5.0775   | -85.292 ppb        | 5.0775   | 5.95%  |
| B 249.677†   | 2668.7                   | -105.70 µg/L       | 4.234    | -105.70 ppb        | 4.234    | 4.01%  |
| Ba 233.527†  | 734.5                    | 17.090 µg/L        | 0.2320   | 17.090 ppb         | 0.2320   | 1.36%  |
| Be 313.107†  | -8438.4                  | -5.2594 µg/L       | 0.03287  | -5.2594 ppb        | 0.03287  | 0.62%  |
| Ca 317.933Radial†  | 1308897.4                | 492550 µg/L        | 1640.6   | 492550 ppb         | 1640.6   | 0.33%  |
| QC value within limits for Ca 317.933Radial Recovery = 98.51%              |                          |                    |          |                    |          |        |
| Cd 226.502†  | 2366.1                   | 9.8179 µg/L        | 0.19763  | 9.8179 ppb         | 0.19763  | 2.01%  |
| Co 228.616†  | 241.6                    | 10.871 µg/L        | 0.2755   | 10.871 ppb         | 0.2755   | 2.53%  |
| Cr 267.716†  | 316.4                    | 7.4158 µg/L        | 0.20062  | 7.4158 ppb         | 0.20062  | 2.71%  |
| Cu 324.752†  | -12117.9                 | 1.6217 µg/L        | 0.15788  | 1.6217 ppb         | 0.15788  | 9.74%  |
| Fe 238.204 Radial†   | 36016.3                  | 448590 µg/L        | 795.3    | 448590 ppb         | 795.3    | 0.18%  |
| QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.72% |                          |                    |          |                    |          |        |
| K 766.490 Radial†  | -180.2                   | -85.247 µg/L       | 36.9092  | -85.247 ppb        | 36.9092  | 43.30% |
| Mg 279.077 IEC†  | 36744.3                  | 496600 µg/L        | 415.9    | 496600 ppb         | 415.9    | 0.08%  |

QC value within limits for Mg 279.077 IEC Recovery = 99.32%

|                    |          |              |         |             |         |        |
|--------------------|----------|--------------|---------|-------------|---------|--------|
| Mn 257.610†        | 8099.2   | 19.340 µg/L  | 0.0988  | 19.340 ppb  | 0.0988  | 0.51%  |
| Mo 202.031†        | -194.3   | -3.3501 µg/L | 0.75834 | -3.3501 ppb | 0.75834 | 22.64% |
| Na 589.592 Radial† | 973248.0 | 492250 µg/L  | 2093.7  | 492250 ppb  | 2093.7  | 0.43%  |

QC value within limits for Na 589.592 Radial Recovery = 98.45%

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | -97.3    | 0.0595 µg/L  | 0.65266 | 0.0595 ppb  | 0.65266 | >999.9% |
| P 214.914†       | 204.7    | 156.99 µg/L  | 23.056  | 156.99 ppb  | 23.056  | 14.69%  |
| Pb 220.353†      | -65.1    | 13.007 µg/L  | 1.7347  | 13.007 ppb  | 1.7347  | 13.34%  |
| S 181.975 Axial† | -68.1    | -226.49 µg/L | 20.915  | -226.49 ppb | 20.915  | 9.23%   |
| Sb 206.836†      | 4.2      | -3.8468 µg/L | 8.07907 | -3.8468 ppb | 8.07907 | 210.02% |
| Se 196.026†      | -403.8   | 608.10 µg/L  | 12.042  | 608.10 ppb  | 12.042  | 1.98%   |
| SiO2†            | -35.4    | -6.7022 µg/L | 3.41203 | -6.7022 ppb | 3.41203 | 50.91%  |
| Si 251.611†      | -636.7   | -45.354 µg/L | 1.5877  | -45.354 ppb | 1.5877  | 3.50%   |
| Sn 189.927†      | -89.0    | 11.823 µg/L  | 3.2222  | 11.823 ppb  | 3.2222  | 27.25%  |
| Sr 421.552†      | 1956.2   | 11.848 µg/L  | 0.1203  | 11.848 ppb  | 0.1203  | 1.02%   |
| Ti 334.940†      | 15489.9  | 6.5390 µg/L  | 0.75432 | 6.5390 ppb  | 0.75432 | 11.54%  |
| Tl 190.801†      | 22.4     | 10.117 µg/L  | 8.3167  | 10.117 ppb  | 8.3167  | 82.21%  |
| U 409.014†       | 163510.3 | 15159 µg/L   | 1.9     | 15159 ppb   | 1.9     | 0.01%   |

QC value within limits for U 409.014 Recovery = 101.06%

|             |        |             |        |            |        |       |
|-------------|--------|-------------|--------|------------|--------|-------|
| V 292.402†  | 4177.1 | 11.387 µg/L | 0.5745 | 11.387 ppb | 0.5745 | 5.05% |
| Zn 213.857† | 3126.6 | 26.289 µg/L | 0.1498 | 26.289 ppb | 0.1498 | 0.57% |

QC Failed. Continue with analysis.



Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 3/15/2010 12:04:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR2

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 91284.3       | 91284.3             | 99.5 %       |              |                    | 12:05:10      |
| 1     | Al 396.153Radial†  | 775.0         | 941.6               | 246.06 µg/L  |              | 246.06 ppb         | 12:05:10      |
| 1     | Ca 317.933Radial†  | 550.1         | 212.1               | 79.831 µg/L  |              | 79.831 ppb         | 12:05:31      |
| 1     | Fe 238.204 Radial† | 12.7          | -0.3                | 205.02 µg/L  |              | 205.02 ppb         | 12:05:31      |
| 1     | K 766.490 Radial†  | 640062.0      | 643106.4            | 304270 µg/L  |              | 304270 ppb         | 12:05:05      |
| 1     | Mg 279.077 IEC†    | 4.7           | -4.3                | 117.86 µg/L  |              | 117.86 ppb         | 12:05:31      |
| 1     | Na 589.592 Radial† | 1088.5        | 904.2               | 457.34 µg/L  |              | 457.34 ppb         | 12:05:10      |
| 1     | Sr 421.552†        | 1628663.7     | 1637306.0           | 9916.0 µg/L  |              | 9916.0 ppb         | 12:05:05      |
| 1     | Sc 361.383         | 1924615.0     | 1924615.0           | 98.692 %     |              |                    | 12:06:59      |
| 1     | Y 371.029          | 1300334.2     | 1300334.2           | 97.526 %     |              |                    | 12:06:59      |
| 1     | Ag 328.068†        | -6516.5       | -6079.3             | 16.949 µg/L  |              | 16.949 ppb         | 12:07:05      |
| 1     | As 188.979†        | 6445.4        | 6534.2              | 10188 µg/L   |              | 10188 ppb          | 12:07:05      |
| 1     | B 249.677†         | 104221.1      | 105324.9            | 5106.7 µg/L  |              | 5106.7 ppb         | 12:06:59      |
| 1     | Ba 233.527†        | 629919.9      | 638294.8            | 14787 µg/L   |              | 14787 ppb          | 12:06:59      |
| 1     | Be 313.107†        | 4649250.8     | 4712421.8           | 2925.2 µg/L  |              | 2925.2 ppb         | 12:06:59      |
| 1     | Cd 226.502†        | 385161.6      | 390431.1            | 9995.6 µg/L  |              | 9995.6 ppb         | 12:06:59      |
| 1     | Co 228.616†        | 213859.4      | 216659.0            | 9826.5 µg/L  |              | 9826.5 ppb         | 12:06:59      |
| 1     | Cr 267.716†        | 1073418.3     | 1087551.0           | 25382 µg/L   |              | 25382 ppb          | 12:06:59      |
| 1     | Cu 324.752†        | 3032948.1     | 3068917.0           | 20947 µg/L   |              | 20947 ppb          | 12:06:59      |
| 1     | Mn 257.610†        | 2988470.5     | 3028813.3           | 9830.2 µg/L  |              | 9830.2 ppb         | 12:06:59      |
| 1     | Mo 202.031†        | 98401.3       | 99693.0             | 10464 µg/L   |              | 10464 ppb          | 12:06:59      |
| 1     | Ni 231.604†        | 168977.6      | 170859.5            | 10097 µg/L   |              | 10097 ppb          | 12:06:59      |
| 1     | P 214.914†         | 11721.9       | 11589.2             | 18420 µg/L   |              | 18420 ppb          | 12:07:05      |
| 1     | Pb 220.353†        | 91635.3       | 92810.1             | 25832 µg/L   |              | 25832 ppb          | 12:06:59      |
| 1     | S 181.975 Axial†   | 16044.1       | 16233.8             | 53975 µg/L   |              | 53975 ppb          | 12:07:05      |
| 1     | Sb 206.836†        | 11083.7       | 11202.8             | 10545 µg/L   |              | 10545 ppb          | 12:07:05      |
| 1     | Se 196.026†        | 10120.3       | 10232.6             | 10269 µg/L   |              | 10269 ppb          | 12:07:05      |
| 1     | SiO2†              | 524568.6      | 528778.5            | 100160 µg/L  |              | 100160 ppb         | 12:06:59      |
| 1     | Si 251.611†        | 648052.7      | 656219.1            | 46746 µg/L   |              | 46746 ppb          | 12:06:59      |
| 1     | Sn 189.927†        | 25491.3       | 25834.4             | 10852 µg/L   |              | 10852 ppb          | 12:07:05      |
| 1     | Ti 334.940†        | 3977374.5     | 4030774.3           | 9895.1 µg/L  |              | 9895.1 ppb         | 12:06:59      |
| 1     | Tl 190.801†        | 9577.3        | 9738.6              | 10241 µg/L   |              | 10241 ppb          | 12:07:05      |
| 1     | U 409.014†         | -2057.3       | -2044.7             | -190.73 µg/L |              | -190.73 ppb        | 12:06:59      |
| 1     | V 292.402†         | 808954.2      | 819575.3            | 10458 µg/L   |              | 10458 ppb          | 12:06:59      |
| 1     | Zn 213.857†        | 615298.9      | 622794.6            | 14985 µg/L   |              | 14985 ppb          | 12:06:59      |
| 2     | Sc RADIAL          | 90334.9       | 90334.9             | 98.4 %       |              |                    | 12:05:42      |
| 2     | Al 396.153Radial†  | 787.3         | 962.3               | 259.18 µg/L  |              | 259.18 ppb         | 12:05:42      |
| 2     | Ca 317.933Radial†  | 520.3         | 187.7               | 70.618 µg/L  |              | 70.618 ppb         | 12:06:03      |
| 2     | Fe 238.204 Radial† | 9.5           | -3.4                | 162.65 µg/L  |              | 162.65 ppb         | 12:06:03      |
| 2     | K 766.490 Radial†  | 638913.2      | 648702.0            | 306920 µg/L  |              | 306920 ppb         | 12:05:37      |
| 2     | Mg 279.077 IEC†    | 4.5           | -4.5                | 112.05 µg/L  |              | 112.05 ppb         | 12:06:03      |
| 2     | Na 589.592 Radial† | 903.2         | 727.4               | 367.92 µg/L  |              | 367.92 ppb         | 12:05:42      |
| 2     | Sr 421.552†        | 1626288.9     | 1652101.4           | 10006 µg/L   |              | 10006 ppb          | 12:05:37      |
| 2     | Sc 361.383         | 1933956.1     | 1933956.1           | 99.171 %     |              |                    | 12:07:21      |
| 2     | Y 371.029          | 1305816.5     | 1305816.5           | 97.937 %     |              |                    | 12:07:21      |
| 2     | Ag 328.068†        | -6144.1       | -5672.0             | 19.252 µg/L  |              | 19.252 ppb         | 12:07:27      |
| 2     | As 188.979†        | 6226.5        | 6281.9              | 9794.1 µg/L  |              | 9794.1 ppb         | 12:07:27      |
| 2     | B 249.677†         | 103474.2      | 104061.8            | 5045.1 µg/L  |              | 5045.1 ppb         | 12:07:21      |
| 2     | Ba 233.527†        | 623501.2      | 628739.5            | 14565 µg/L   |              | 14565 ppb          | 12:07:21      |
| 2     | Be 313.107†        | 4599318.0     | 4639318.1           | 2879.8 µg/L  |              | 2879.8 ppb         | 12:07:21      |
| 2     | Cd 226.502†        | 381115.5      | 384466.2            | 9842.9 µg/L  |              | 9842.9 ppb         | 12:07:21      |
| 2     | Co 228.616†        | 211479.3      | 213212.5            | 9670.2 µg/L  |              | 9670.2 ppb         | 12:07:21      |
| 2     | Cr 267.716†        | 1056479.9     | 1065217.7           | 24861 µg/L   |              | 24861 ppb          | 12:07:21      |
| 2     | Cu 324.752†        | 3003906.4     | 3024789.2           | 20646 µg/L   |              | 20646 ppb          | 12:07:21      |
| 2     | Mn 257.610†        | 2956237.9     | 2981685.7           | 9677.2 µg/L  |              | 9677.2 ppb         | 12:07:21      |
| 2     | Mo 202.031†        | 97502.5       | 98305.0             | 10318 µg/L   |              | 10318 ppb          | 12:07:21      |
| 2     | Ni 231.604†        | 167349.0      | 168390.3            | 9950.9 µg/L  |              | 9950.9 ppb         | 12:07:21      |
| 2     | P 214.914†         | 11257.9       | 11064.0             | 17515 µg/L   |              | 17515 ppb          | 12:07:27      |
| 2     | Pb 220.353†        | 90975.5       | 91696.3             | 25522 µg/L   |              | 25522 ppb          | 12:07:21      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 15558.7   | 15665.8   | 52086 µg/L   | 52086 ppb   | 12:07:27 |
| 2 | Sb 206.836†        | 10625.4   | 10686.4   | 10057 µg/L   | 10057 ppb   | 12:07:27 |
| 2 | Se 196.026†        | 9760.1    | 9819.8    | 9854.3 µg/L  | 9854.3 ppb  | 12:07:27 |
| 2 | SiO2†              | 522457.3  | 524082.4  | 99273 µg/L   | 99273 ppb   | 12:07:21 |
| 2 | Si 251.611†        | 645559.6  | 650533.5  | 46341 µg/L   | 46341 ppb   | 12:07:21 |
| 2 | Sn 189.927†        | 24187.4   | 24394.8   | 10247 µg/L   | 10247 ppb   | 12:07:27 |
| 2 | Ti 334.940†        | 3938099.1 | 3971705.3 | 9750.1 µg/L  | 9750.1 ppb  | 12:07:21 |
| 2 | Tl 190.801†        | 9349.7    | 9462.3    | 9951.7 µg/L  | 9951.7 ppb  | 12:07:27 |
| 2 | U 409.014†         | -1973.2   | -1949.9   | -181.88 µg/L | -181.88 ppb | 12:07:21 |
| 2 | V 292.402†         | 799485.2  | 806068.1  | 10285 µg/L   | 10285 ppb   | 12:07:21 |
| 2 | Zn 213.857†        | 609207.8  | 613641.3  | 14765 µg/L   | 14765 ppb   | 12:07:21 |
| 3 | Sc RADIAL          | 90032.2   | 90032.2   | 98.1 %       |             | 12:06:14 |
| 3 | Al 396.153Radial†  | 769.9     | 947.3     | 269.78 µg/L  | 269.78 ppb  | 12:06:14 |
| 3 | Ca 317.933Radial†  | 518.3     | 187.4     | 70.501 µg/L  | 70.501 ppb  | 12:06:35 |
| 3 | Fe 238.204 Radial† | 9.9       | -3.0      | 149.87 µg/L  | 149.87 ppb  | 12:06:35 |
| 3 | K 766.490 Radial†  | 638118.6  | 650075.1  | 307570 µg/L  | 307570 ppb  | 12:06:09 |
| 3 | Mg 279.077 IEC†    | 4.9       | -4.0      | 104.05 µg/L  | 104.05 ppb  | 12:06:35 |
| 3 | Na 589.592 Radial† | 758.8     | 583.4     | 295.07 µg/L  | 295.07 ppb  | 12:06:14 |
| 3 | Sr 421.552†        | 1625149.5 | 1656496.6 | 10032 µg/L   | 10032 ppb   | 12:06:09 |
| 3 | Sc 361.383         | 1887547.7 | 1887547.7 | 96.791 %     |             | 12:07:43 |
| 3 | Y 371.029          | 1276328.7 | 1276328.7 | 95.726 %     |             | 12:07:43 |
| 3 | Ag 328.068†        | -5381.0   | -5035.9   | 18.870 µg/L  | 18.870 ppb  | 12:07:49 |
| 3 | As 188.979†        | 5562.1    | 5749.8    | 8964.6 µg/L  | 8964.6 ppb  | 12:07:49 |
| 3 | B 249.677†         | 95838.7   | 98738.4   | 4785.0 µg/L  | 4785.0 ppb  | 12:07:43 |
| 3 | Ba 233.527†        | 562280.8  | 580947.6  | 13458 µg/L   | 13458 ppb   | 12:07:43 |
| 3 | Be 313.107†        | 4114177.3 | 4252121.6 | 2639.5 µg/L  | 2639.5 ppb  | 12:07:43 |
| 3 | Cd 226.502†        | 342175.8  | 353684.3  | 9054.8 µg/L  | 9054.8 ppb  | 12:07:43 |
| 3 | Co 228.616†        | 188511.5  | 194726.2  | 8831.7 µg/L  | 8831.7 ppb  | 12:07:43 |
| 3 | Cr 267.716†        | 925965.1  | 956568.7  | 22325 µg/L   | 22325 ppb   | 12:07:43 |
| 3 | Cu 324.752†        | 2695841.6 | 2780985.1 | 18982 µg/L   | 18982 ppb   | 12:07:43 |
| 3 | Mn 257.610†        | 2646486.4 | 2734957.1 | 8876.4 µg/L  | 8876.4 ppb  | 12:07:43 |
| 3 | Mo 202.031†        | 87102.8   | 89977.9   | 9444.0 µg/L  | 9444.0 ppb  | 12:07:43 |
| 3 | Ni 231.604†        | 148723.8  | 153296.6  | 9058.9 µg/L  | 9058.9 ppb  | 12:07:43 |
| 3 | P 214.914†         | 9770.5    | 9806.4    | 15452 µg/L   | 15452 ppb   | 12:07:49 |
| 3 | Pb 220.353†        | 82576.3   | 85274.2   | 23734 µg/L   | 23734 ppb   | 12:07:43 |
| 3 | S 181.975 Axial†   | 13920.9   | 14359.4   | 47743 µg/L   | 47743 ppb   | 12:07:49 |
| 3 | Sb 206.836†        | 9449.1    | 9734.4    | 9165.6 µg/L  | 9165.6 ppb  | 12:07:49 |
| 3 | Se 196.026†        | 8757.8    | 9026.3    | 9058.0 µg/L  | 9058.0 ppb  | 12:07:49 |
| 3 | SiO2†              | 479639.7  | 492798.2  | 93347 µg/L   | 93347 ppb   | 12:07:43 |
| 3 | Si 251.611†        | 591978.1  | 611180.5  | 43537 µg/L   | 43537 ppb   | 12:07:43 |
| 3 | Sn 189.927†        | 20893.7   | 21591.6   | 9069.7 µg/L  | 9069.7 ppb  | 12:07:49 |
| 3 | Ti 334.940†        | 3526723.5 | 3644326.1 | 8946.4 µg/L  | 8946.4 ppb  | 12:07:43 |
| 3 | Tl 190.801†        | 8639.9    | 8960.7    | 9421.6 µg/L  | 9421.6 ppb  | 12:07:49 |
| 3 | U 409.014†         | -1778.2   | -1797.3   | -167.65 µg/L | -167.65 ppb | 12:07:43 |
| 3 | V 292.402†         | 713500.8  | 737054.2  | 9403.9 µg/L  | 9403.9 ppb  | 12:07:43 |
| 3 | Zn 213.857†        | 546770.6  | 564237.8  | 13577 µg/L   | 13577 ppb   | 12:07:43 |

## Mean Data: LR2

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383  | 1915372.9                | 98.218 %           | 1.2587   |                    |          | 1.28% |
| Sc RADIAL   | 90550.5                  | 98.7 %             | 0.71     |                    |          | 0.72% |
| Y 371.029   | 1294159.8                | 97.063 %           | 1.1763   |                    |          | 1.21% |
| Ag 328.068†   | -5595.7                  | 18.357 µg/L        | 1.2341   | 18.357 ppb         | 1.2341   | 6.72% |
| Al 396.153Radial†                                       | 950.4                    | 258.34 µg/L        | 11.879   | 258.34 ppb         | 11.879   | 4.60% |
| As 188.979†   | 6188.6                   | 9648.9 µg/L        | 624.54   | 9648.9 ppb         | 624.54   | 6.47% |
| QC value within limits for As 188.979 Recovery = 96.49% |                          |                    |          |                    |          |       |
| B 249.677†  | 102708.4                 | 4979.0 µg/L        | 170.75   | 4979.0 ppb         | 170.75   | 3.43% |
| QC value within limits for B 249.677 Recovery = 99.58%  |                          |                    |          |                    |          |       |
| Ba 233.527†   | 615993.9                 | 14270 µg/L         | 711.9    | 14270 ppb          | 711.9    | 4.99% |
| QC value within limits for Ba 233.527 Recovery = 95.13% |                          |                    |          |                    |          |       |
| Be 313.107†   | 4534620.5                | 2814.8 µg/L        | 153.56   | 2814.8 ppb         | 153.56   | 5.46% |
| QC value within limits for Be 313.107 Recovery = 93.83% |                          |                    |          |                    |          |       |
| Ca 317.933Radial†                                       | 195.7                    | 73.650 µg/L        | 5.3528   | 73.650 ppb         | 5.3528   | 7.27% |
| Cd 226.502†   | 376193.8                 | 9631.1 µg/L        | 504.93   | 9631.1 ppb         | 504.93   | 5.24% |
| QC value within limits for Cd 226.502 Recovery = 96.31% |                          |                    |          |                    |          |       |
| Co 228.616†   | 208199.2                 | 9442.8 µg/L        | 534.98   | 9442.8 ppb         | 534.98   | 5.67% |
| QC value within limits for Co 228.616 Recovery = 94.43% |                          |                    |          |                    |          |       |
| Cr 267.716†   | 1036445.8                | 24190 µg/L         | 1635.3   | 24190 ppb          | 1635.3   | 6.76% |
| QC value within limits for Cr 267.716 Recovery = 96.76% |                          |                    |          |                    |          |       |

|  |           |              |        |             |        |        |
|--|-----------|--------------|--------|-------------|--------|--------|
| Cu 324.752†  | 2958230.4 | 20192 µg/L   | 1058.5 | 20192 ppb   | 1058.5 | 5.24%  |
| QC value within limits for Cu 324.752 Recovery = 100.96%               |           |              |        |             |        |        |
| Fe 238.204 Radial†   | -2.3      | 172.51 µg/L  | 28.867 | 172.51 ppb  | 28.867 | 16.73% |
| K 766.490 Radial†  | 647294.5  | 306260 µg/L  | 1746.5 | 306260 ppb  | 1746.5 | 0.57%  |
| QC value within limits for K 766.490 Radial Recovery = 102.09%         |           |              |        |             |        |        |
| Mg 279.077 IEC†  | -4.3      | 111.32 µg/L  | 6.938  | 111.32 ppb  | 6.938  | 6.23%  |
| Mn 257.610†  | 2915152.0 | 9461.3 µg/L  | 512.22 | 9461.3 ppb  | 512.22 | 5.41%  |
| QC value within limits for Mn 257.610 Recovery = 94.61%                |           |              |        |             |        |        |
| Mo 202.031†  | 95992.0   | 10075 µg/L   | 551.5  | 10075 ppb   | 551.5  | 5.47%  |
| QC value within limits for Mo 202.031 Recovery = 100.75%               |           |              |        |             |        |        |
| Na 589.592 Radial†   | 738.3     | 373.44 µg/L  | 81.278 | 373.44 ppb  | 81.278 | 21.76% |
| Ni 231.604†  | 164182.1  | 9702.2 µg/L  | 561.86 | 9702.2 ppb  | 561.86 | 5.79%  |
| QC value within limits for Ni 231.604 Recovery = 97.02%                |           |              |        |             |        |        |
| P 214.914†   | 10819.9   | 17129 µg/L   | 1521.2 | 17129 ppb   | 1521.2 | 8.88%  |
| QC value greater than the upper limit for P 214.914 Recovery = 114.19% |           |              |        |             |        |        |
| Pb 220.353†  | 89926.9   | 25029 µg/L   | 1132.2 | 25029 ppb   | 1132.2 | 4.52%  |
| QC value within limits for Pb 220.353 Recovery = 100.12%               |           |              |        |             |        |        |
| S 181.975 Axial†   | 15419.7   | 51268 µg/L   | 3195.5 | 51268 ppb   | 3195.5 | 6.23%  |
| QC value within limits for S 181.975 Axial Recovery = 102.54%          |           |              |        |             |        |        |
| Sb 206.836†  | 10541.2   | 9922.6 µg/L  | 699.48 | 9922.6 ppb  | 699.48 | 7.05%  |
| QC value within limits for Sb 206.836 Recovery = 99.23%                |           |              |        |             |        |        |
| Se 196.026†  | 9692.9    | 9727.0 µg/L  | 615.29 | 9727.0 ppb  | 615.29 | 6.33%  |
| QC value within limits for Se 196.026 Recovery = 97.27%                |           |              |        |             |        |        |
| SiO2†  | 515219.7  | 97594 µg/L   | 3704.9 | 97594 ppb   | 3704.9 | 3.80%  |
| QC value within limits for SiO2 Recovery = 91.21%                      |           |              |        |             |        |        |
| Si 251.611†  | 639311.0  | 45541 µg/L   | 1747.2 | 45541 ppb   | 1747.2 | 3.84%  |
| QC value within limits for Si 251.611 Recovery = 91.08%                |           |              |        |             |        |        |
| Sn 189.927†  | 23940.3   | 10056 µg/L   | 906.3  | 10056 ppb   | 906.3  | 9.01%  |
| QC value within limits for Sn 189.927 Recovery = 100.56%               |           |              |        |             |        |        |
| Sr 421.552†  | 1648634.7 | 9984.7 µg/L  | 60.89  | 9984.7 ppb  | 60.89  | 0.61%  |
| QC value within limits for Sr 421.552 Recovery = 99.85%                |           |              |        |             |        |        |
| Ti 334.940†  | 3882268.6 | 9530.5 µg/L  | 511.03 | 9530.5 ppb  | 511.03 | 5.36%  |
| QC value within limits for Ti 334.940 Recovery = 95.31%                |           |              |        |             |        |        |
| Tl 190.801†  | 9387.2    | 9871.4 µg/L  | 415.55 | 9871.4 ppb  | 415.55 | 4.21%  |
| QC value within limits for Tl 190.801 Recovery = 98.71%                |           |              |        |             |        |        |
| U 409.014†   | -1930.6   | -180.08 µg/L | 11.645 | -180.08 ppb | 11.645 | 6.47%  |
| V 292.402†   | 787565.9  | 10049 µg/L   | 565.2  | 10049 ppb   | 565.2  | 5.62%  |
| QC value within limits for V 292.402 Recovery = 100.49%                |           |              |        |             |        |        |
| Zn 213.857†  | 600224.6  | 14442 µg/L   | 757.7  | 14442 ppb   | 757.7  | 5.25%  |
| QC value within limits for Zn 213.857 Recovery = 96.28%                |           |              |        |             |        |        |
| QC Failed. Continue with analysis.                                     |           |              |        |             |        |        |

Sequence No.: 13  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/15/2010 12:07:59  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 90027.2          | 90027.2                | 98.1 %                |                       | 12:08:31         |
| 1     | Al 396.153Radial†  | 9775.7           | 10128.1                | 4947.5 µg/L           | 4947.5 ppb            | 12:08:31         |
| 1     | Ca 317.933Radial†  | 13306.7          | 13224.2                | 4976.4 µg/L           | 4976.4 ppb            | 12:08:31         |
| 1     | Fe 238.204 Radial† | 391.6            | 386.1                  | 4819.5 µg/L           | 4819.5 ppb            | 12:08:52         |
| 1     | K 766.490 Radial†  | 11594.6          | 11414.7                | 5400.7 µg/L           | 5400.7 ppb            | 12:08:31         |
| 1     | Mg 279.077 IEC†    | 363.4            | 361.4                  | 4892.8 µg/L           | 4892.8 ppb            | 12:08:52         |
| 1     | Na 589.592 Radial† | 19144.4          | 19326.2                | 9774.8 µg/L           | 9774.8 ppb            | 12:08:31         |
| 1     | Sr 421.552†        | 79108.1          | 80509.7                | 487.59 µg/L           | 487.59 ppb            | 12:08:31         |
| 1     | Sc 361.383         | 1903679.0        | 1903679.0              | 97.619 %              |                       | 12:09:55         |
| 1     | Y 371.029          | 1299133.9        | 1299133.9              | 97.436 %              |                       | 12:09:55         |
| 1     | Ag 328.068†        | 57525.6          | 59452.5                | 504.06 µg/L           | 504.06 ppb            | 12:10:01         |
| 1     | As 188.979†        | 325.8            | 337.1                  | 524.46 µg/L           | 524.46 ppb            | 12:10:22         |
| 1     | B 249.677†         | 10594.7          | 10575.8                | 507.01 µg/L           | 507.01 ppb            | 12:10:01         |
| 1     | Ba 233.527†        | 21383.3          | 21932.1                | 508.35 µg/L           | 508.35 ppb            | 12:10:01         |
| 1     | Be 313.107†        | 794468.1         | 815408.4               | 506.62 µg/L           | 506.62 ppb            | 12:09:55         |
| 1     | Cd 226.502†        | 19232.6          | 19867.1                | 508.08 µg/L           | 508.08 ppb            | 12:10:01         |
| 1     | Co 228.616†        | 11013.3          | 11247.6                | 510.14 µg/L           | 510.14 ppb            | 12:10:01         |
| 1     | Cr 267.716†        | 21586.6          | 22020.9                | 514.13 µg/L           | 514.13 ppb            | 12:10:01         |
| 1     | Cu 324.752†        | 77659.0          | 75329.6                | 515.08 µg/L           | 515.08 ppb            | 12:10:01         |
| 1     | Mn 257.610†        | 153790.4         | 158281.6               | 513.67 µg/L           | 513.67 ppb            | 12:09:55         |
| 1     | Mo 202.031†        | 5082.5           | 5194.1                 | 545.35 µg/L           | 545.35 ppb            | 12:10:22         |
| 1     | Ni 231.604†        | 8747.5           | 8603.5                 | 508.46 µg/L           | 508.46 ppb            | 12:10:01         |
| 1     | P 214.914†         | 1734.0           | 1488.4                 | 2580.2 µg/L           | 2580.2 ppb            | 12:10:22         |
| 1     | Pb 220.353†        | 1877.4           | 1883.6                 | 524.99 µg/L           | 524.99 ppb            | 12:10:22         |
| 1     | S 181.975 Axial†   | 326.7            | 311.7                  | 1036.5 µg/L           | 1036.5 ppb            | 12:10:22         |
| 1     | Sb 206.836†        | 582.9            | 569.2                  | 544.71 µg/L           | 544.71 ppb            | 12:10:22         |
| 1     | Se 196.026†        | 527.0            | 518.0                  | 531.07 µg/L           | 531.07 ppb            | 12:10:22         |
| 1     | SiO2†              | 30513.8          | 28516.5                | 5401.6 µg/L           | 5401.6 ppb            | 12:10:01         |
| 1     | Si 251.611†        | 35055.4          | 35488.8                | 2528.0 µg/L           | 2528.0 ppb            | 12:10:01         |
| 1     | Sn 189.927†        | 1251.4           | 1287.2                 | 541.17 µg/L           | 541.17 ppb            | 12:10:22         |
| 1     | Ti 334.940†        | 202230.5         | 207855.4               | 509.95 µg/L           | 509.95 ppb            | 12:09:55         |
| 1     | Tl 190.801†        | 450.3            | 495.7                  | 521.68 µg/L           | 521.68 ppb            | 12:10:22         |
| 1     | U 409.014†         | 5261.2           | 5429.4                 | 505.47 µg/L           | 505.47 ppb            | 12:10:01         |
| 1     | V 292.402†         | 39369.0          | 40230.2                | 511.95 µg/L           | 511.95 ppb            | 12:10:01         |
| 1     | Zn 213.857†        | 21356.8          | 21219.5                | 509.66 µg/L           | 509.66 ppb            | 12:10:01         |
| 2     | Sc RADIAL          | 89558.4          | 89558.4                | 97.6 %                |                       | 12:08:57         |
| 2     | Al 396.153Radial†  | 9722.2           | 10125.4                | 4946.5 µg/L           | 4946.5 ppb            | 12:08:57         |
| 2     | Ca 317.933Radial†  | 13136.8          | 13121.2                | 4937.6 µg/L           | 4937.6 ppb            | 12:08:57         |
| 2     | Fe 238.204 Radial† | 392.9            | 389.5                  | 4862.7 µg/L           | 4862.7 ppb            | 12:09:18         |
| 2     | K 766.490 Radial†  | 11272.5          | 11146.5                | 5273.8 µg/L           | 5273.8 ppb            | 12:08:57         |
| 2     | Mg 279.077 IEC†    | 364.6            | 364.5                  | 4934.9 µg/L           | 4934.9 ppb            | 12:09:18         |
| 2     | Na 589.592 Radial† | 19055.2          | 19336.9                | 9780.3 µg/L           | 9780.3 ppb            | 12:08:57         |
| 2     | Sr 421.552†        | 78610.1          | 80421.4                | 487.06 µg/L           | 487.06 ppb            | 12:08:57         |
| 2     | Sc 361.383         | 1898646.0        | 1898646.0              | 97.360 %              |                       | 12:10:29         |
| 2     | Y 371.029          | 1294420.5        | 1294420.5              | 97.082 %              |                       | 12:10:29         |
| 2     | Ag 328.068†        | 57358.7          | 59437.2                | 503.96 µg/L           | 503.96 ppb            | 12:10:34         |
| 2     | As 188.979†        | 323.1            | 335.2                  | 521.45 µg/L           | 521.45 ppb            | 12:10:55         |
| 2     | B 249.677†         | 10535.7          | 10544.0                | 505.46 µg/L           | 505.46 ppb            | 12:10:34         |
| 2     | Ba 233.527†        | 21393.7          | 22000.8                | 509.94 µg/L           | 509.94 ppb            | 12:10:34         |
| 2     | Be 313.107†        | 791039.0         | 814043.6               | 505.77 µg/L           | 505.77 ppb            | 12:10:29         |
| 2     | Cd 226.502†        | 19263.7          | 19951.3                | 510.23 µg/L           | 510.23 ppb            | 12:10:34         |
| 2     | Co 228.616†        | 11060.5          | 11325.9                | 513.69 µg/L           | 513.69 ppb            | 12:10:34         |
| 2     | Cr 267.716†        | 21599.2          | 22092.4                | 515.80 µg/L           | 515.80 ppb            | 12:10:34         |
| 2     | Cu 324.752†        | 77404.6          | 75279.2                | 514.74 µg/L           | 514.74 ppb            | 12:10:34         |
| 2     | Mn 257.610†        | 153632.2         | 158536.7               | 514.49 µg/L           | 514.49 ppb            | 12:10:29         |
| 2     | Mo 202.031†        | 4959.0           | 5081.1                 | 533.50 µg/L           | 533.50 ppb            | 12:10:55         |
| 2     | Ni 231.604†        | 8838.3           | 8720.5                 | 515.38 µg/L           | 515.38 ppb            | 12:10:34         |
| 2     | P 214.914†         | 1694.6           | 1452.5                 | 2516.6 µg/L           | 2516.6 ppb            | 12:10:55         |
| 2     | Pb 220.353†        | 1847.4           | 1858.0                 | 517.80 µg/L           | 517.80 ppb            | 12:10:55         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 328.3     | 314.3     | 1045.0 µg/L | 1045.0 ppb | 12:10:55 |
| 2 | Sb 206.836†        | 569.9     | 557.4     | 533.31 µg/L | 533.31 ppb | 12:10:55 |
| 2 | Se 196.026†        | 513.0     | 505.1     | 518.16 µg/L | 518.16 ppb | 12:10:55 |
| 2 | SiO2†              | 30486.9   | 28571.7   | 5412.1 µg/L | 5412.1 ppb | 12:10:34 |
| 2 | Si 251.611†        | 35141.5   | 35672.5   | 2541.1 µg/L | 2541.1 ppb | 12:10:34 |
| 2 | Sn 189.927†        | 1206.0    | 1244.0    | 523.03 µg/L | 523.03 ppb | 12:10:55 |
| 2 | Ti 334.940†        | 201579.3  | 207735.7  | 509.66 µg/L | 509.66 ppb | 12:10:29 |
| 2 | Tl 190.801†        | 445.6     | 492.1     | 517.92 µg/L | 517.92 ppb | 12:10:55 |
| 2 | U 409.014†         | 5363.6    | 5548.9    | 516.62 µg/L | 516.62 ppb | 12:10:34 |
| 2 | V 292.402†         | 39503.4   | 40475.2   | 514.95 µg/L | 514.95 ppb | 12:10:34 |
| 2 | Zn 213.857†        | 21365.4   | 21286.4   | 511.24 µg/L | 511.24 ppb | 12:10:34 |
| 3 | Sc RADIAL          | 89594.5   | 89594.5   | 97.6 %      |            | 12:09:23 |
| 3 | Al 396.153Radial†  | 9740.8    | 10140.4   | 4955.9 µg/L | 4955.9 ppb | 12:09:23 |
| 3 | Ca 317.933Radial†  | 13220.1   | 13201.1   | 4967.7 µg/L | 4967.7 ppb | 12:09:23 |
| 3 | Fe 238.204 Radial† | 389.0     | 385.4     | 4809.9 µg/L | 4809.9 ppb | 12:09:44 |
| 3 | K 766.490 Radial†  | 11169.7   | 11036.5   | 5221.7 µg/L | 5221.7 ppb | 12:09:23 |
| 3 | Mg 279.077 IEC†    | 357.9     | 357.5     | 4838.8 µg/L | 4838.8 ppb | 12:09:44 |
| 3 | Na 589.592 Radial† | 18982.2   | 19254.2   | 9738.5 µg/L | 9738.5 ppb | 12:09:23 |
| 3 | Sr 421.552†        | 78821.5   | 80605.6   | 488.17 µg/L | 488.17 ppb | 12:09:23 |
| 3 | Sc 361.383         | 1907748.7 | 1907748.7 | 97.827 %    |            | 12:11:02 |
| 3 | Y 371.029          | 1300304.4 | 1300304.4 | 97.524 %    |            | 12:11:02 |
| 3 | Ag 328.068†        | 53254.7   | 54961.0   | 465.85 µg/L | 465.85 ppb | 12:11:08 |
| 3 | As 188.979†        | 265.3     | 274.5     | 426.87 µg/L | 426.87 ppb | 12:11:28 |
| 3 | B 249.677†         | 9759.9    | 9699.4    | 464.74 µg/L | 464.74 ppb | 12:11:08 |
| 3 | Ba 233.527†        | 19228.9   | 19683.0   | 456.20 µg/L | 456.20 ppb | 12:11:08 |
| 3 | Be 313.107†        | 722225.7  | 739825.3  | 459.66 µg/L | 459.66 ppb | 12:11:02 |
| 3 | Cd 226.502†        | 17143.9   | 17690.0   | 452.34 µg/L | 452.34 ppb | 12:11:08 |
| 3 | Co 228.616†        | 9742.9    | 9924.9    | 450.08 µg/L | 450.08 ppb | 12:11:08 |
| 3 | Cr 267.716†        | 18483.0   | 18801.2   | 438.97 µg/L | 438.97 ppb | 12:11:08 |
| 3 | Cu 324.752†        | 69193.9   | 66506.8   | 454.86 µg/L | 454.86 ppb | 12:11:08 |
| 3 | Mn 257.610†        | 140675.3  | 144539.1  | 469.07 µg/L | 469.07 ppb | 12:11:02 |
| 3 | Mo 202.031†        | 4045.6    | 4123.2    | 432.95 µg/L | 432.95 ppb | 12:11:28 |
| 3 | Ni 231.604†        | 7804.4    | 7620.3    | 450.37 µg/L | 450.37 ppb | 12:11:08 |
| 3 | P 214.914†         | 1468.5    | 1213.1    | 2098.6 µg/L | 2098.6 ppb | 12:11:28 |
| 3 | Pb 220.353†        | 1577.0    | 1572.5    | 438.22 µg/L | 438.22 ppb | 12:11:28 |
| 3 | S 181.975 Axial†   | 282.1     | 265.4     | 882.38 µg/L | 882.38 ppb | 12:11:28 |
| 3 | Sb 206.836†        | 481.9     | 464.8     | 444.35 µg/L | 444.35 ppb | 12:11:28 |
| 3 | Se 196.026†        | 445.1     | 433.2     | 445.91 µg/L | 445.91 ppb | 12:11:28 |
| 3 | SiO2†              | 27998.0   | 25878.1   | 4901.9 µg/L | 4901.9 ppb | 12:11:08 |
| 3 | Si 251.611†        | 32042.6   | 32332.6   | 2303.2 µg/L | 2303.2 ppb | 12:11:08 |
| 3 | Sn 189.927†        | 969.1     | 995.9     | 418.81 µg/L | 418.81 ppb | 12:11:28 |
| 3 | Ti 334.940†        | 182603.8  | 187350.9  | 459.62 µg/L | 459.62 ppb | 12:11:02 |
| 3 | Tl 190.801†        | 385.2     | 428.1     | 450.73 µg/L | 450.73 ppb | 12:11:28 |
| 3 | U 409.014†         | 4536.7    | 4677.3    | 435.32 µg/L | 435.32 ppb | 12:11:08 |
| 3 | V 292.402†         | 34640.1   | 35310.3   | 448.88 µg/L | 448.88 ppb | 12:11:08 |
| 3 | Zn 213.857†        | 18925.2   | 18687.2   | 448.77 µg/L | 448.77 ppb | 12:11:08 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1903357.9                | 97.602 %           | 0.2338   |                    |          | 0.24%  |
| Sc RADIAL   | 89726.7                  | 97.8 %             | 0.28     |                    |          | 0.29%  |
| Y 371.029   | 1297952.9                | 97.347 %           | 0.2336   |                    |          | 0.24%  |
| Ag 328.068†   | 57950.2                  | 491.29 µg/L        | 22.030   | 491.29 ppb         | 22.030   | 4.48%  |
| QC value within limits for Ag 328.068 Recovery = 98.26%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 10131.3                  | 4950.0 µg/L        | 5.15     | 4950.0 ppb         | 5.15     | 0.10%  |
| QC value within limits for Al 396.153Radial Recovery = 99.00% |                          |                    |          |                    |          |        |
| As 188.979†   | 315.6                    | 490.93 µg/L        | 55.493   | 490.93 ppb         | 55.493   | 11.30% |
| QC value within limits for As 188.979 Recovery = 98.19%       |                          |                    |          |                    |          |        |
| B 249.677†  | 10273.1                  | 492.40 µg/L        | 23.971   | 492.40 ppb         | 23.971   | 4.87%  |
| QC value within limits for B 249.677 Recovery = 98.48%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 21205.3                  | 491.50 µg/L        | 30.578   | 491.50 ppb         | 30.578   | 6.22%  |
| QC value within limits for Ba 233.527 Recovery = 98.30%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 789759.1                 | 490.68 µg/L        | 26.870   | 490.68 ppb         | 26.870   | 5.48%  |
| QC value within limits for Be 313.107 Recovery = 98.14%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 13182.2                  | 4960.5 µg/L        | 20.34    | 4960.5 ppb         | 20.34    | 0.41%  |
| QC value within limits for Ca 317.933Radial Recovery = 99.21% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 19169.4                  | 490.22 µg/L        | 32.821   | 490.22 ppb         | 32.821   | 6.70%  |
| QC value within limits for Cd 226.502 Recovery = 98.04%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 10832.8                  | 491.30 µg/L        | 35.742   | 491.30 ppb         | 35.742   | 7.27%  |

|  |          |             |        |            |        |
|--|----------|-------------|--------|------------|--------|
| QC value within limits for Co 228.616 Recovery = 98.26%        |          |             |        |            |        |
| Cr 267.716†  | 20971.5  | 489.63 µg/L | 43.887 | 489.63 ppb | 8.96%  |
| QC value within limits for Cr 267.716 Recovery = 97.93%        |          |             |        |            |        |
| Cu 324.752†  | 72371.9  | 494.89 µg/L | 34.673 | 494.89 ppb | 7.01%  |
| QC value within limits for Cu 324.752 Recovery = 98.98%        |          |             |        |            |        |
| Fe 238.204 Radial†   | 387.0    | 4830.7 µg/L | 28.16  | 4830.7 ppb | 0.58%  |
| QC value within limits for Fe 238.204 Radial Recovery = 96.61% |          |             |        |            |        |
| K 766.490 Radial†  | 11199.3  | 5298.7 µg/L | 92.03  | 5298.7 ppb | 1.74%  |
| QC value within limits for K 766.490 Radial Recovery = 105.97% |          |             |        |            |        |
| Mg 279.077 IEC†  | 361.1    | 4888.9 µg/L | 48.17  | 4888.9 ppb | 0.99%  |
| QC value within limits for Mg 279.077 IEC Recovery = 97.78%    |          |             |        |            |        |
| Mn 257.610†  | 153785.8 | 499.08 µg/L | 25.991 | 499.08 ppb | 5.21%  |
| QC value within limits for Mn 257.610 Recovery = 99.82%        |          |             |        |            |        |
| Mo 202.031†  | 4799.5   | 503.93 µg/L | 61.762 | 503.93 ppb | 12.26% |
| QC value within limits for Mo 202.031 Recovery = 100.79%       |          |             |        |            |        |
| Na 589.592 Radial†   | 19305.8  | 9764.5 µg/L | 22.74  | 9764.5 ppb | 0.23%  |
| QC value within limits for Na 589.592 Radial Recovery = 97.65% |          |             |        |            |        |
| Ni 231.604†  | 8314.8   | 491.40 µg/L | 35.707 | 491.40 ppb | 7.27%  |
| QC value within limits for Ni 231.604 Recovery = 98.28%        |          |             |        |            |        |
| P 214.914†   | 1384.7   | 2398.5 µg/L | 261.64 | 2398.5 ppb | 10.91% |
| QC value within limits for P 214.914 Recovery = 95.94%         |          |             |        |            |        |
| Pb 220.353†  | 1771.3   | 493.67 µg/L | 48.155 | 493.67 ppb | 9.75%  |
| QC value within limits for Pb 220.353 Recovery = 98.73%        |          |             |        |            |        |
| S 181.975 Axial†   | 297.1    | 987.94 µg/L | 91.515 | 987.94 ppb | 9.26%  |
| QC value within limits for S 181.975 Axial Recovery = 98.79%   |          |             |        |            |        |
| Sb 206.836†  | 530.5    | 507.46 µg/L | 54.946 | 507.46 ppb | 10.83% |
| QC value within limits for Sb 206.836 Recovery = 101.49%       |          |             |        |            |        |
| Se 196.026†  | 485.4    | 498.38 µg/L | 45.897 | 498.38 ppb | 9.21%  |
| QC value within limits for Se 196.026 Recovery = 99.68%        |          |             |        |            |        |
| SiO2†  | 27655.4  | 5238.5 µg/L | 291.61 | 5238.5 ppb | 5.57%  |
| QC value within limits for SiO2 Recovery = 97.96%              |          |             |        |            |        |
| Si 251.611†  | 34498.0  | 2457.5 µg/L | 133.75 | 2457.5 ppb | 5.44%  |
| QC value within limits for Si 251.611 Recovery = 98.30%        |          |             |        |            |        |
| Sn 189.927†  | 1175.7   | 494.34 µg/L | 66.036 | 494.34 ppb | 13.36% |
| QC value within limits for Sn 189.927 Recovery = 98.87%        |          |             |        |            |        |
| Sr 421.552†  | 80512.2  | 487.61 µg/L | 0.558  | 487.61 ppb | 0.11%  |
| QC value within limits for Sr 421.552 Recovery = 97.52%        |          |             |        |            |        |
| Ti 334.940†  | 200980.6 | 493.08 µg/L | 28.974 | 493.08 ppb | 5.88%  |
| QC value within limits for Ti 334.940 Recovery = 98.62%        |          |             |        |            |        |
| Tl 190.801†  | 472.0    | 496.78 µg/L | 39.922 | 496.78 ppb | 8.04%  |
| QC value within limits for Tl 190.801 Recovery = 99.36%        |          |             |        |            |        |
| U 409.014†   | 5218.6   | 485.80 µg/L | 44.073 | 485.80 ppb | 9.07%  |
| QC value within limits for U 409.014 Recovery = 97.16%         |          |             |        |            |        |
| V 292.402†   | 38671.9  | 491.93 µg/L | 37.311 | 491.93 ppb | 7.58%  |
| QC value within limits for V 292.402 Recovery = 98.39%         |          |             |        |            |        |
| Zn 213.857†  | 20397.7  | 489.89 µg/L | 35.622 | 489.89 ppb | 7.27%  |
| QC value within limits for Zn 213.857 Recovery = 97.98%        |          |             |        |            |        |

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/15/2010 12:11:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|-------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88644.7       | 88644.7             | 96.6        | %            |                    | 12:12:08      |
| 1     | Al 396.153Radial†  | -130.7        | 27.1                | 13.242      | µg/L         | 13.242 ppb         | 12:12:08      |
| 1     | Ca 317.933Radial†  | 353.1         | 24.6                | 9.2504      | µg/L         | 9.2504 ppb         | 12:12:28      |
| 1     | Fe 238.204 Radial† | 14.4          | 1.8                 | 22.035      | µg/L         | 22.035 ppb         | 12:12:28      |
| 1     | K 766.490 Radial†  | 614.2         | 230.7               | 109.16      | µg/L         | 109.16 ppb         | 12:12:08      |
| 1     | Mg 279.077 IEC†    | 11.8          | 3.2                 | 43.287      | µg/L         | 43.287 ppb         | 12:12:28      |
| 1     | Na 589.592 Radial† | 278.5         | 98.2                | 49.666      | µg/L         | 49.666 ppb         | 12:12:08      |
| 1     | Sr 421.552†        | 183.2         | 54.4                | 0.3292      | µg/L         | 0.3292 ppb         | 12:12:08      |
| 1     | Sc 361.383         | 1906748.1     | 1906748.1           | 97.776      | %            |                    | 12:13:30      |
| 1     | Y 371.029          | 1302812.0     | 1302812.0           | 97.712      | %            |                    | 12:13:30      |
| 1     | Ag 328.068†        | -541.5        | -30.3               | -0.2519     | µg/L         | -0.2519 ppb        | 12:13:36      |
| 1     | As 188.979†        | 1.5           | 4.9                 | 7.6425      | µg/L         | 7.6425 ppb         | 12:13:56      |
| 1     | B 249.677†         | 372.6         | 103.8               | 4.9797      | µg/L         | 4.9797 ppb         | 12:13:36      |
| 1     | Ba 233.527†        | -3.9          | 23.1                | 0.5343      | µg/L         | 0.5343 ppb         | 12:13:56      |
| 1     | Be 313.107†        | -1367.5       | 160.3               | 0.0992      | µg/L         | 0.0992 ppb         | 12:13:36      |
| 1     | Cd 226.502†        | -155.8        | 6.0                 | 0.1501      | µg/L         | 0.1501 ppb         | 12:13:56      |
| 1     | Co 228.616†        | 35.3          | 1.7                 | 0.0766      | µg/L         | 0.0766 ppb         | 12:13:56      |
| 1     | Cr 267.716†        | 106.0         | 16.1                | 0.3753      | µg/L         | 0.3753 ppb         | 12:13:36      |
| 1     | Cu 324.752†        | 4780.3        | 665.1               | 4.5439      | µg/L         | 4.5439 ppb         | 12:13:36      |
| 1     | Mn 257.610†        | -627.5        | 97.6                | 0.3152      | µg/L         | 0.3152 ppb         | 12:13:56      |
| 1     | Mo 202.031†        | 27.1          | 15.3                | 1.6085      | µg/L         | 1.6085 ppb         | 12:13:56      |
| 1     | Ni 231.604†        | 349.5         | 0.0                 | 0.0011      | µg/L         | 0.0011 ppb         | 12:13:56      |
| 1     | P 214.914†         | 289.1         | 7.7                 | 13.201      | µg/L         | 13.201 ppb         | 12:13:56      |
| 1     | Pb 220.353†        | 48.5          | 10.0                | 2.7905      | µg/L         | 2.7905 ppb         | 12:13:56      |
| 1     | S 181.975 Axial†   | 21.0          | -1.4                | -4.6894     | µg/L         | -4.6894 ppb        | 12:13:56      |
| 1     | Sb 206.836†        | 34.5          | 7.4                 | 7.0491      | µg/L         | 7.0491 ppb         | 12:13:56      |
| 1     | Se 196.026†        | 20.6          | -0.7                | -0.6779     | µg/L         | -0.6779 ppb        | 12:13:56      |
| 1     | SiO2†              | 2677.6        | -3.2                | -0.6059     | µg/L         | -0.6059 ppb        | 12:13:36      |
| 1     | Si 251.611†        | 471.9         | 60.9                | 4.3401      | µg/L         | 4.3401 ppb         | 12:13:56      |
| 1     | Sn 189.927†        | -1.2          | 4.0                 | 1.7019      | µg/L         | 1.7019 ppb         | 12:13:56      |
| 1     | Ti 334.940†        | -297.6        | 387.0               | 0.9467      | µg/L         | 0.9467 ppb         | 12:13:36      |
| 1     | Tl 190.801†        | -31.0         | 2.6                 | 2.7540      | µg/L         | 2.7540 ppb         | 12:13:56      |
| 1     | U 409.014†         | -19.7         | 19.7                | 1.8355      | µg/L         | 1.8355 ppb         | 12:13:36      |
| 1     | V 292.402†         | 110.8         | 14.2                | 0.1907      | µg/L         | 0.1907 ppb         | 12:13:36      |
| 1     | Zn 213.857†        | 644.0         | 0.4                 | -0.0018     | µg/L         | -0.0018 ppb        | 12:13:56      |
| 2     | Sc RADIAL          | 88226.7       | 88226.7             | 96.1        | %            |                    | 12:12:34      |
| 2     | Al 396.153Radial†  | -140.6        | 16.2                | 7.9028      | µg/L         | 7.9028 ppb         | 12:12:34      |
| 2     | Ca 317.933Radial†  | 361.6         | 35.2                | 13.240      | µg/L         | 13.240 ppb         | 12:12:54      |
| 2     | Fe 238.204 Radial† | 14.5          | 2.0                 | 25.429      | µg/L         | 25.429 ppb         | 12:12:54      |
| 2     | K 766.490 Radial†  | 674.8         | 296.8               | 140.42      | µg/L         | 140.42 ppb         | 12:12:34      |
| 2     | Mg 279.077 IEC†    | 12.1          | 3.5                 | 47.993      | µg/L         | 47.993 ppb         | 12:12:54      |
| 2     | Na 589.592 Radial† | 286.1         | 107.4               | 54.326      | µg/L         | 54.326 ppb         | 12:12:34      |
| 2     | Sr 421.552†        | 142.0         | 12.3                | 0.0747      | µg/L         | 0.0747 ppb         | 12:12:34      |
| 2     | Sc 361.383         | 1898146.8     | 1898146.8           | 97.335      | %            |                    | 12:14:02      |
| 2     | Y 371.029          | 1297073.3     | 1297073.3           | 97.281      | %            |                    | 12:14:02      |
| 2     | Ag 328.068†        | -522.0        | -12.8               | -0.1057     | µg/L         | -0.1057 ppb        | 12:14:08      |
| 2     | As 188.979†        | 4.2           | 7.7                 | 12.027      | µg/L         | 12.027 ppb         | 12:14:28      |
| 2     | B 249.677†         | 331.3         | 63.0                | 3.0190      | µg/L         | 3.0190 ppb         | 12:14:08      |
| 2     | Ba 233.527†        | -16.3         | 10.4                | 0.2395      | µg/L         | 0.2395 ppb         | 12:14:28      |
| 2     | Be 313.107†        | -1383.1       | 137.9               | 0.0853      | µg/L         | 0.0853 ppb         | 12:14:08      |
| 2     | Cd 226.502†        | -150.4        | 10.8                | 0.2741      | µg/L         | 0.2741 ppb         | 12:14:28      |
| 2     | Co 228.616†        | 40.9          | 7.6                 | 0.3450      | µg/L         | 0.3450 ppb         | 12:14:28      |
| 2     | Cr 267.716†        | 117.7         | 28.6                | 0.6677      | µg/L         | 0.6677 ppb         | 12:14:08      |
| 2     | Cu 324.752†        | 4840.4        | 749.0               | 5.1173      | µg/L         | 5.1173 ppb         | 12:14:08      |
| 2     | Mn 257.610†        | -636.1        | 85.9                | 0.2771      | µg/L         | 0.2771 ppb         | 12:14:28      |
| 2     | Mo 202.031†        | 29.4          | 17.9                | 1.8797      | µg/L         | 1.8797 ppb         | 12:14:28      |
| 2     | Ni 231.604†        | 361.8         | 14.3                | 0.8442      | µg/L         | 0.8442 ppb         | 12:14:28      |
| 2     | P 214.914†         | 291.7         | 11.7                | 20.182      | µg/L         | 20.182 ppb         | 12:14:28      |
| 2     | Pb 220.353†        | 41.0          | 2.6                 | 0.7091      | µg/L         | 0.7091 ppb         | 12:14:28      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.5      | -2.9      | -9.4802 µg/L | -9.4802 ppb | 12:14:28 |
| 2 | Sb 206.836†        | 35.7      | 8.8       | 8.4016 µg/L  | 8.4016 ppb  | 12:14:28 |
| 2 | Se 196.026†        | 23.5      | 2.4       | 2.4120 µg/L  | 2.4120 ppb  | 12:14:28 |
| 2 | SiO2†              | 2686.8    | 18.7      | 3.5352 µg/L  | 3.5352 ppb  | 12:14:08 |
| 2 | Si 251.611†        | 445.1     | 35.6      | 2.5376 µg/L  | 2.5376 ppb  | 12:14:28 |
| 2 | Sn 189.927†        | 7.7       | 13.2      | 5.5273 µg/L  | 5.5273 ppb  | 12:14:28 |
| 2 | Ti 334.940†        | -313.1    | 369.7     | 0.9039 µg/L  | 0.9039 ppb  | 12:14:08 |
| 2 | Tl 190.801†        | -33.9     | -0.5      | -0.4645 µg/L | -0.4645 ppb | 12:14:28 |
| 2 | U 409.014†         | -46.8     | -8.2      | -0.7715 µg/L | -0.7715 ppb | 12:14:08 |
| 2 | V 292.402†         | 96.6      | 0.1       | 0.0131 µg/L  | 0.0131 ppb  | 12:14:08 |
| 2 | Zn 213.857†        | 648.5     | 7.9       | 0.1762 µg/L  | 0.1762 ppb  | 12:14:28 |
| 3 | Sc RADIAL          | 87973.3   | 87973.3   | 95.9 %       |             | 12:13:00 |
| 3 | Al 396.153Radial†  | -161.7    | -6.2      | -3.1126 µg/L | -3.1126 ppb | 12:13:00 |
| 3 | Ca 317.933Radial†  | 350.8     | 25.0      | 9.4045 µg/L  | 9.4045 ppb  | 12:13:20 |
| 3 | Fe 238.204 Radial† | 13.9      | 1.4       | 17.519 µg/L  | 17.519 ppb  | 12:13:20 |
| 3 | K 766.490 Radial†  | 526.2     | 143.8     | 68.030 µg/L  | 68.030 ppb  | 12:13:00 |
| 3 | Mg 279.077 IEC†    | 8.9       | 0.2       | 2.6125 µg/L  | 2.6125 ppb  | 12:13:20 |
| 3 | Na 589.592 Radial† | 266.0     | 87.3      | 44.172 µg/L  | 44.172 ppb  | 12:13:00 |
| 3 | Sr 421.552†        | 150.7     | 21.9      | 0.1325 µg/L  | 0.1325 ppb  | 12:13:00 |
| 3 | Sc 361.383         | 1889513.2 | 1889513.2 | 96.892 %     |             | 12:14:35 |
| 3 | Y 371.029          | 1290447.5 | 1290447.5 | 96.784 %     |             | 12:14:35 |
| 3 | Ag 328.068†        | -499.0    | 8.6       | 0.0753 µg/L  | 0.0753 ppb  | 12:14:40 |
| 3 | As 188.979†        | -0.2      | 3.2       | 5.0183 µg/L  | 5.0183 ppb  | 12:15:01 |
| 3 | B 249.677†         | 349.9     | 83.8      | 4.0200 µg/L  | 4.0200 ppb  | 12:14:40 |
| 3 | Ba 233.527†        | -8.6      | 18.2      | 0.4222 µg/L  | 0.4222 ppb  | 12:15:01 |
| 3 | Be 313.107†        | -1373.3   | 141.4     | 0.0876 µg/L  | 0.0876 ppb  | 12:14:40 |
| 3 | Cd 226.502†        | -150.0    | 10.5      | 0.2688 µg/L  | 0.2688 ppb  | 12:15:01 |
| 3 | Co 228.616†        | 29.0      | -4.5      | -0.2036 µg/L | -0.2036 ppb | 12:15:01 |
| 3 | Cr 267.716†        | 48.5      | -42.2     | -0.9854 µg/L | -0.9854 ppb | 12:14:40 |
| 3 | Cu 324.752†        | 4716.3    | 643.6     | 4.3964 µg/L  | 4.3964 ppb  | 12:14:40 |
| 3 | Mn 257.610†        | -638.7    | 80.2      | 0.2612 µg/L  | 0.2612 ppb  | 12:15:01 |
| 3 | Mo 202.031†        | 37.5      | 26.3      | 2.7618 µg/L  | 2.7618 ppb  | 12:15:01 |
| 3 | Ni 231.604†        | 363.0     | 17.2      | 1.0189 µg/L  | 1.0189 ppb  | 12:15:01 |
| 3 | P 214.914†         | 291.7     | 13.1      | 22.718 µg/L  | 22.718 ppb  | 12:15:01 |
| 3 | Pb 220.353†        | 43.9      | 5.8       | 1.5944 µg/L  | 1.5944 ppb  | 12:15:01 |
| 3 | S 181.975 Axial†   | 24.1      | 2.0       | 6.6265 µg/L  | 6.6265 ppb  | 12:15:01 |
| 3 | Sb 206.836†        | 34.0      | 7.2       | 6.9313 µg/L  | 6.9313 ppb  | 12:15:01 |
| 3 | Se 196.026†        | 19.5      | -1.7      | -1.6111 µg/L | -1.6111 ppb | 12:15:01 |
| 3 | SiO2†              | 2690.5    | 35.0      | 6.6385 µg/L  | 6.6385 ppb  | 12:14:40 |
| 3 | Si 251.611†        | 464.9     | 58.1      | 4.1404 µg/L  | 4.1404 ppb  | 12:15:01 |
| 3 | Sn 189.927†        | -0.5      | 4.7       | 1.9695 µg/L  | 1.9695 ppb  | 12:15:01 |
| 3 | Ti 334.940†        | -376.1    | 303.2     | 0.7443 µg/L  | 0.7443 ppb  | 12:14:40 |
| 3 | Tl 190.801†        | -33.6     | -0.3      | -0.3115 µg/L | -0.3115 ppb | 12:15:01 |
| 3 | U 409.014†         | 52.6      | 94.2      | 8.7836 µg/L  | 8.7836 ppb  | 12:14:40 |
| 3 | V 292.402†         | 118.8     | 23.4      | 0.3211 µg/L  | 0.3211 ppb  | 12:14:40 |
| 3 | Zn 213.857†        | 646.9     | 9.3       | 0.2126 µg/L  | 0.2126 ppb  | 12:15:01 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1898136.0                | 97.334 %           | 0.4419   |                    |          | 0.45%   |
| Sc RADIAL   | 88281.6                  | 96.2 %             | 0.37     |                    |          | 0.38%   |
| Y 371.029   | 1296777.6                | 97.259 %           | 0.4641   |                    |          | 0.48%   |
| Ag 328.068†   | -11.5                    | -0.0941 µg/L       | 0.16392  | -0.0941 ppb        | 0.16392  | 174.23% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 12.4                     | 6.0108 µg/L        | 8.33991  | 6.0108 ppb         | 8.33991  | 138.75% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 5.3                      | 8.2294 µg/L        | 3.54119  | 8.2294 ppb         | 3.54119  | 43.03%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 83.5                     | 4.0062 µg/L        | 0.98044  | 4.0062 ppb         | 0.98044  | 24.47%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 17.2                     | 0.3987 µg/L        | 0.14880  | 0.3987 ppb         | 0.14880  | 37.32%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 146.5                    | 0.0907 µg/L        | 0.00746  | 0.0907 ppb         | 0.00746  | 8.22%   |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 28.3                     | 10.632 µg/L        | 2.2601   | 10.632 ppb         | 2.2601   | 21.26%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | 9.1                      | 0.2310 µg/L        | 0.07012  | 0.2310 ppb         | 0.07012  | 30.35%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | 1.6                      | 0.0726 µg/L        | 0.27432  | 0.0726 ppb         | 0.27432  | 377.65% |



|  |                 |       |              |         |             |         |         |
|--|-----------------|-------|--------------|---------|-------------|---------|---------|
| Cr   | 267.716†        | 0.8   | 0.0192 µg/L  | 0.88223 | 0.0192 ppb  | 0.88223 | >999.9% |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Cu   | 324.752†        | 685.9 | 4.6859 µg/L  | 0.38084 | 4.6859 ppb  | 0.38084 | 8.13%   |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Fe   | 238.204 Radial† | 1.7   | 21.661 µg/L  | 3.9683  | 21.661 ppb  | 3.9683  | 18.32%  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |
| K  | 766.490 Radial† | 223.8 | 105.87 µg/L  | 36.304  | 105.87 ppb  | 36.304  | 34.29%  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |         |             |         |         |
| Mg   | 279.077 IEC†    | 2.3   | 31.298 µg/L  | 24.9534 | 31.298 ppb  | 24.9534 | 79.73%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |         |             |         |         |
| Mn   | 257.610†        | 87.9  | 0.2845 µg/L  | 0.02774 | 0.2845 ppb  | 0.02774 | 9.75%   |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Mo   | 202.031†        | 19.8  | 2.0833 µg/L  | 0.60301 | 2.0833 ppb  | 0.60301 | 28.94%  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Na   | 589.592 Radial† | 97.6  | 49.388 µg/L  | 5.0825  | 49.388 ppb  | 5.0825  | 10.29%  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |
| Ni   | 231.604†        | 10.5  | 0.6214 µg/L  | 0.54428 | 0.6214 ppb  | 0.54428 | 87.59%  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| P  | 214.914†        | 10.8  | 18.700 µg/L  | 4.9284  | 18.700 ppb  | 4.9284  | 26.35%  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |         |             |         |         |
| Pb   | 220.353†        | 6.1   | 1.6980 µg/L  | 1.04457 | 1.6980 ppb  | 1.04457 | 61.52%  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| S  | 181.975 Axial†  | -0.8  | -2.5143 µg/L | 8.27072 | -2.5143 ppb | 8.27072 | 328.94% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |         |             |         |         |
| Sb   | 206.836†        | 7.8   | 7.4607 µg/L  | 0.81701 | 7.4607 ppb  | 0.81701 | 10.95%  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Se   | 196.026†        | -0.0  | 0.0410 µg/L  | 2.10566 | 0.0410 ppb  | 2.10566 | >999.9% |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| SiO2†  |                 | 16.8  | 3.1893 µg/L  | 3.63459 | 3.1893 ppb  | 3.63459 | 113.96% |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |         |             |         |         |
| Si   | 251.611†        | 51.6  | 3.6727 µg/L  | 0.98812 | 3.6727 ppb  | 0.98812 | 26.90%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Sn   | 189.927†        | 7.3   | 3.0662 µg/L  | 2.13553 | 3.0662 ppb  | 2.13553 | 69.65%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Sr   | 421.552†        | 29.5  | 0.1788 µg/L  | 0.13341 | 0.1788 ppb  | 0.13341 | 74.61%  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Ti   | 334.940†        | 353.3 | 0.8650 µg/L  | 0.10669 | 0.8650 ppb  | 0.10669 | 12.33%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| Tl   | 190.801†        | 0.6   | 0.6593 µg/L  | 1.81565 | 0.6593 ppb  | 1.81565 | 275.38% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |         |             |         |         |
| U  | 409.014†        | 35.2  | 3.2825 µg/L  | 4.93916 | 3.2825 ppb  | 4.93916 | 150.47% |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |         |             |         |         |
| V  | 292.402†        | 12.6  | 0.1749 µg/L  | 0.15461 | 0.1749 ppb  | 0.15461 | 88.38%  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |         |             |         |         |
| Zn   | 213.857†        | 5.9   | 0.1290 µg/L  | 0.11474 | 0.1290 ppb  | 0.11474 | 88.96%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |         |             |         |         |

All analyte(s) passed QC.

=====  
Analysis Begun

Start Time: 3/15/2010 12:22:32

Plasma On Time: 3/12/2010 12:50:39

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\031510.sif

Batch ID:

Results Data Set: 031510A

Results Library: c:\pe\optimal\Results\Results.mdb  
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## Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 3/15/2010 00:47:23

IEC File: 011510.iec

MSF File:

Method Description:

| Analyte           | Calibration Equation | Processing | View   | Internal Standard | IEC |
|-------------------|----------------------|------------|--------|-------------------|-----|
| Ag 328.068        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Al 396.153Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| As 188.979        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| B 249.677         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ba 233.527        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Be 313.107        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ca 317.933Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Cd 226.502        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Co 228.616        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cr 267.716        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cu 324.752        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Fe 238.204 Radial | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| K 766.490 Radial  | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Mg 279.077 IEC    | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | Yes |
| Mn 257.610        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Mo 202.031        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Na 589.592 Radial | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Ni 231.604        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| P 214.914         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Pb 220.353        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| S 181.975 Axial   | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Sb 206.836        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sc 361.383        | Lin Thru 0           | Peak Area  | Axial  | n/a               | n/a |
| Sc RADIAL         | Lin, Calc Int        | Peak Area  | Radial | n/a               | n/a |
| Se 196.026        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| SiO2              | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Si 251.611        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | No  |
| Sn 189.927        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sr 421.552        | Lin Thru 0           | Peak Area  | Radial | Sc RADIAL         | No  |
| Ti 334.940        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Tl 190.801        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| U 409.014         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| V 292.402         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Y 371.029         | Lin, Calc Int        | Peak Area  | Axial  | n/a               | n/a |
| Zn 213.857        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |

Sequence No.: 1

Autosampler Location: 113

Sample ID: LR1

Date Collected: 3/15/2010 12:22:34

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: LR1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88537.6       | 88537.6             | 96.5 %             |                    | 12:23:06      |
| 1     | Al 396.153Radial†  | -163.9        | -7.5                | -3.3820 µg/L       | -3.3820 ppb        | 12:23:06      |
| 1     | Ca 317.933Radial†  | 458.0         | 133.8               | 50.363 µg/L        | 50.363 ppb         | 12:23:26      |
| 1     | Fe 238.204 Radial† | 27979.8       | 28990.3             | 361080 µg/L        | 361080 ppb         | 12:23:06      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 1 | K 766.490 Radial†  | 208.5     | -189.1    | -89.453 µg/L | -89.453 ppb | 12:23:06 |
| 1 | Mg 279.077 IEC†    | 13.5      | 5.0       | -320.30 µg/L | -320.30 ppb | 12:23:26 |
| 1 | Na 589.592 Radial† | 244.3     | 63.1      | 31.920 µg/L  | 31.920 ppb  | 12:23:06 |
| 1 | Sr 421.552†        | 206.5     | 78.8      | 0.4770 µg/L  | 0.4770 ppb  | 12:23:06 |
| 1 | Sc 361.383         | 1836274.2 | 1836274.2 | 94.162 %     |             | 12:24:29 |
| 1 | Y 371.029          | 1248207.9 | 1248207.9 | 93.616 %     |             | 12:24:29 |
| 1 | Ag 328.068†        | -3378.0   | -3063.9   | 2.3801 µg/L  | 2.3801 ppb  | 12:24:35 |
| 1 | As 188.979†        | -18.4     | -16.1     | -69.789 µg/L | -69.789 ppb | 12:24:55 |
| 1 | B 249.677†         | 2384.9    | 2255.4    | -79.933 µg/L | -79.933 ppb | 12:24:35 |
| 1 | Ba 233.527†        | 507.0     | 565.5     | 13.194 µg/L  | 13.194 ppb  | 12:24:55 |
| 1 | Be 313.107†        | -1563.5   | -101.6    | -0.0632 µg/L | -0.0632 ppb | 12:24:35 |
| 1 | Cd 226.502†        | 1724.0    | 1996.2    | 10.249 µg/L  | 10.249 ppb  | 12:24:35 |
| 1 | Co 228.616†        | 449.8     | 443.2     | 20.112 µg/L  | 20.112 ppb  | 12:24:55 |
| 1 | Cr 267.716†        | -148.4    | -249.9    | -5.7937 µg/L | -5.7937 ppb | 12:24:55 |
| 1 | Cu 324.752†        | -2712.6   | -7104.7   | 19.388 µg/L  | 19.388 ppb  | 12:24:35 |
| 1 | Mn 257.610†        | 214.1     | 966.8     | 24.509 µg/L  | 24.509 ppb  | 12:24:29 |
| 1 | Mo 202.031†        | -109.5    | -128.6    | 0.2201 µg/L  | 0.2201 ppb  | 12:24:35 |
| 1 | Ni 231.604†        | 285.9     | -53.8     | 1.4849 µg/L  | 1.4849 ppb  | 12:24:55 |
| 1 | P 214.914†         | 459.7     | 200.2     | 65.596 µg/L  | 65.596 ppb  | 12:24:55 |
| 1 | Pb 220.353†        | 54.2      | 18.0      | 11.025 µg/L  | 11.025 ppb  | 12:24:55 |
| 1 | S 181.975 Axial†   | -11.7     | -35.4     | -117.60 µg/L | -117.60 ppb | 12:24:55 |
| 1 | Sb 206.836†        | 22.4      | -4.1      | -4.0392 µg/L | -4.0392 ppb | 12:24:55 |
| 1 | Se 196.026†        | -253.6    | -291.1    | 855.99 µg/L  | 855.99 ppb  | 12:24:55 |
| 1 | SiO2†              | 2456.5    | -132.9    | -25.182 µg/L | -25.182 ppb | 12:24:35 |
| 1 | Si 251.611†        | -282.6    | -721.8    | -51.419 µg/L | -51.419 ppb | 12:24:35 |
| 1 | Sn 189.927†        | -2.4      | 2.7       | -0.5902 µg/L | -0.5902 ppb | 12:24:55 |
| 1 | Ti 334.940†        | -592.3    | 62.3      | 0.1485 µg/L  | 0.1485 ppb  | 12:24:35 |
| 1 | Tl 190.801†        | -40.0     | -8.1      | 42.577 µg/L  | 42.577 ppb  | 12:24:55 |
| 1 | U 409.014†         | 802.7     | 892.4     | 33.049 µg/L  | 33.049 ppb  | 12:24:35 |
| 1 | V 292.402†         | 4619.4    | 4806.6    | 14.689 µg/L  | 14.689 ppb  | 12:24:35 |
| 1 | Zn 213.857†        | 2449.1    | 1942.6    | 29.923 µg/L  | 29.923 ppb  | 12:24:55 |
| 2 | Sc RADIAL          | 88728.7   | 88728.7   | 96.7 %       |             | 12:23:32 |
| 2 | Al 396.153Radial†  | -204.8    | -49.4     | -23.868 µg/L | -23.868 ppb | 12:23:32 |
| 2 | Ca 317.933Radial†  | 459.3     | 134.2     | 50.483 µg/L  | 50.483 ppb  | 12:23:52 |
| 2 | Fe 238.204 Radial† | 28203.4   | 29159.0   | 363180 µg/L  | 363180 ppb  | 12:23:32 |
| 2 | K 766.490 Radial†  | 237.1     | -159.9    | -75.669 µg/L | -75.669 ppb | 12:23:32 |
| 2 | Mg 279.077 IEC†    | 13.2      | 4.6       | -327.25 µg/L | -327.25 ppb | 12:23:52 |
| 2 | Na 589.592 Radial† | 181.3     | -2.6      | -1.3133 µg/L | -1.3133 ppb | 12:23:32 |
| 2 | Sr 421.552†        | 198.0     | 69.5      | 0.4207 µg/L  | 0.4207 ppb  | 12:23:32 |
| 2 | Sc 361.383         | 1842213.3 | 1842213.3 | 94.467 %     |             | 12:25:02 |
| 2 | Y 371.029          | 1250573.1 | 1250573.1 | 93.794 %     |             | 12:25:02 |
| 2 | Ag 328.068†        | -3574.6   | -3260.4   | 0.8784 µg/L  | 0.8784 ppb  | 12:25:07 |
| 2 | As 188.979†        | -17.4     | -15.1     | -68.384 µg/L | -68.384 ppb | 12:25:28 |
| 2 | B 249.677†         | 2390.5    | 2253.2    | -81.135 µg/L | -81.135 ppb | 12:25:07 |
| 2 | Ba 233.527†        | 497.9     | 554.2     | 12.929 µg/L  | 12.929 ppb  | 12:25:28 |
| 2 | Be 313.107†        | -1607.5   | -142.8    | -0.0889 µg/L | -0.0889 ppb | 12:25:07 |
| 2 | Cd 226.502†        | 1695.2    | 1959.8    | 9.0801 µg/L  | 9.0801 ppb  | 12:25:07 |
| 2 | Co 228.616†        | 450.7     | 442.6     | 20.084 µg/L  | 20.084 ppb  | 12:25:28 |
| 2 | Cr 267.716†        | -144.1    | -244.8    | -5.6754 µg/L | -5.6754 ppb | 12:25:28 |
| 2 | Cu 324.752†        | -2870.7   | -7262.7   | 18.704 µg/L  | 18.704 ppb  | 12:25:07 |
| 2 | Mn 257.610†        | 160.7     | 909.5     | 24.448 µg/L  | 24.448 ppb  | 12:25:02 |
| 2 | Mo 202.031†        | -124.9    | -144.6    | -1.3743 µg/L | -1.3743 ppb | 12:25:07 |
| 2 | Ni 231.604†        | 290.8     | -49.6     | 1.7604 µg/L  | 1.7604 ppb  | 12:25:28 |
| 2 | P 214.914†         | 461.1     | 200.2     | 63.958 µg/L  | 63.958 ppb  | 12:25:28 |
| 2 | Pb 220.353†        | 65.2      | 29.4      | 14.239 µg/L  | 14.239 ppb  | 12:25:28 |
| 2 | S 181.975 Axial†   | -17.3     | -41.3     | -137.23 µg/L | -137.23 ppb | 12:25:28 |
| 2 | Sb 206.836†        | 29.1      | 3.0       | 2.6542 µg/L  | 2.6542 ppb  | 12:25:28 |
| 2 | Se 196.026†        | -249.6    | -286.1    | 867.78 µg/L  | 867.78 ppb  | 12:25:28 |
| 2 | SiO2†              | 2449.1    | -149.1    | -28.245 µg/L | -28.245 ppb | 12:25:07 |
| 2 | Si 251.611†        | -302.3    | -741.7    | -52.835 µg/L | -52.835 ppb | 12:25:07 |
| 2 | Sn 189.927†        | 5.6       | 11.2      | 2.9668 µg/L  | 2.9668 ppb  | 12:25:28 |
| 2 | Ti 334.940†        | -562.4    | 96.0      | 0.2316 µg/L  | 0.2316 ppb  | 12:25:07 |
| 2 | Tl 190.801†        | -38.9     | -6.8      | 44.178 µg/L  | 44.178 ppb  | 12:25:28 |
| 2 | U 409.014†         | 763.1     | 847.7     | 28.589 µg/L  | 28.589 ppb  | 12:25:07 |
| 2 | V 292.402†         | 4523.6    | 4689.4    | 12.928 µg/L  | 12.928 ppb  | 12:25:07 |
| 2 | Zn 213.857†        | 2405.9    | 1888.5    | 28.515 µg/L  | 28.515 ppb  | 12:25:28 |
| 3 | Sc RADIAL          | 88743.2   | 88743.2   | 96.7 %       |             | 12:23:58 |
| 3 | Al 396.153Radial†  | -184.0    | -27.8     | -13.366 µg/L | -13.366 ppb | 12:23:58 |
| 3 | Ca 317.933Radial†  | 455.9     | 130.6     | 49.130 µg/L  | 49.130 ppb  | 12:24:18 |
| 3 | Fe 238.204 Radial† | 28213.0   | 29164.1   | 363240 µg/L  | 363240 ppb  | 12:23:58 |
| 3 | K 766.490 Radial†  | 242.1     | -154.8    | -73.235 µg/L | -73.235 ppb | 12:23:58 |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 3 | Mg 279.077 IEC†    | 7.7       | -1.1      | -405.31 µg/L | -405.31 ppb | 12:24:18 |
| 3 | Na 589.592 Radial† | 170.1     | -14.3     | -7.2204 µg/L | -7.2204 ppb | 12:23:58 |
| 3 | Sr 421.552†        | 205.8     | 77.5      | 0.4694 µg/L  | 0.4694 ppb  | 12:23:58 |
| 3 | Sc 361.383         | 1840186.3 | 1840186.3 | 94.363 %     |             | 12:25:34 |
| 3 | Y 371.029          | 1251307.4 | 1251307.4 | 93.849 %     |             | 12:25:34 |
| 3 | Ag 328.068†        | -3086.1   | -2747.0   | 5.1719 µg/L  | 5.1719 ppb  | 12:25:40 |
| 3 | As 188.979†        | -13.2     | -10.6     | -61.364 µg/L | -61.364 ppb | 12:26:00 |
| 3 | B 249.677†         | 2244.3    | 2101.1    | -88.484 µg/L | -88.484 ppb | 12:25:40 |
| 3 | Ba 233.527†        | 393.2     | 443.8     | 10.366 µg/L  | 10.366 ppb  | 12:26:00 |
| 3 | Be 313.107†        | -1599.6   | -136.4    | -0.0849 µg/L | -0.0849 ppb | 12:25:40 |
| 3 | Cd 226.502†        | 1480.6    | 1734.3    | 3.3086 µg/L  | 3.3086 ppb  | 12:25:40 |
| 3 | Co 228.616†        | 404.9     | 394.7     | 17.909 µg/L  | 17.909 ppb  | 12:26:00 |
| 3 | Cr 267.716†        | -91.8     | -189.6    | -4.3894 µg/L | -4.3894 ppb | 12:26:00 |
| 3 | Cu 324.752†        | -1887.3   | -6224.0   | 25.806 µg/L  | 25.806 ppb  | 12:25:40 |
| 3 | Mn 257.610†        | 138.2     | 885.8     | 24.380 µg/L  | 24.380 ppb  | 12:25:34 |
| 3 | Mo 202.031†        | -100.1    | -118.4    | 1.3713 µg/L  | 1.3713 ppb  | 12:25:40 |
| 3 | Ni 231.604†        | 308.4     | -30.7     | 2.8869 µg/L  | 2.8869 ppb  | 12:26:00 |
| 3 | P 214.914†         | 423.0     | 160.3     | -7.3517 µg/L | -7.3517 ppb | 12:26:00 |
| 3 | Pb 220.353†        | 62.2      | 26.4      | 13.403 µg/L  | 13.403 ppb  | 12:26:00 |
| 3 | S 181.975 Axial†   | -1.9      | -24.9     | -82.775 µg/L | -82.775 ppb | 12:26:00 |
| 3 | Sb 206.836†        | 34.9      | 9.1       | 8.5413 µg/L  | 8.5413 ppb  | 12:26:00 |
| 3 | Se 196.026†        | -199.4    | -233.1    | 921.18 µg/L  | 921.18 ppb  | 12:26:00 |
| 3 | SiO2†              | 2504.1    | -88.0     | -16.678 µg/L | -16.678 ppb | 12:25:40 |
| 3 | Si 251.611†        | -213.0    | -647.4    | -46.120 µg/L | -46.120 ppb | 12:25:40 |
| 3 | Sn 189.927†        | 2.7       | 8.1       | 1.6677 µg/L  | 1.6677 ppb  | 12:26:00 |
| 3 | Ti 334.940†        | -516.4    | 144.2     | 0.3559 µg/L  | 0.3559 ppb  | 12:25:40 |
| 3 | Tl 190.801†        | -43.1     | -11.3     | 39.562 µg/L  | 39.562 ppb  | 12:26:00 |
| 3 | U 409.014†         | 668.6     | 748.5     | 19.322 µg/L  | 19.322 ppb  | 12:25:40 |
| 3 | V 292.402†         | 4146.3    | 4294.8    | 7.9639 µg/L  | 7.9639 ppb  | 12:25:40 |
| 3 | Zn 213.857†        | 2095.3    | 1562.2    | 20.609 µg/L  | 20.609 ppb  | 12:26:00 |

## Mean Data: LR1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383         | 1839557.9                | 94.330 %     |        | 0.1548   |                    |          | 0.16%   |
| Sc RADIAL          | 88669.8                  | 96.6 %       |        | 0.13     |                    |          | 0.13%   |
| Y 371.029          | 1250029.5                | 93.753 %     |        | 0.1215   |                    |          | 0.13%   |
| Ag 328.068†        | -3023.8                  | 2.8101 µg/L  |        | 2.17881  | 2.8101 ppb         | 2.17881  | 77.53%  |
| Al 396.153Radial†  | -28.2                    | -13.539 µg/L |        | 10.2443  | -13.539 ppb        | 10.2443  | 75.67%  |
| As 188.979†        | -13.9                    | -66.512 µg/L |        | 4.5135   | -66.512 ppb        | 4.5135   | 6.79%   |
| B 249.677†         | 2203.2                   | -83.184 µg/L |        | 4.6290   | -83.184 ppb        | 4.6290   | 5.56%   |
| Ba 233.527†        | 521.2                    | 12.163 µg/L  |        | 1.5619   | 12.163 ppb         | 1.5619   | 12.84%  |
| Be 313.107†        | -126.9                   | -0.0790 µg/L |        | 0.01380  | -0.0790 ppb        | 0.01380  | 17.47%  |
| Ca 317.933Radial†  | 132.8                    | 49.992 µg/L  |        | 0.7488   | 49.992 ppb         | 0.7488   | 1.50%   |
| Cd 226.502†        | 1896.8                   | 7.5460 µg/L  |        | 3.71601  | 7.5460 ppb         | 3.71601  | 49.24%  |
| Co 228.616†        | 426.8                    | 19.368 µg/L  |        | 1.2642   | 19.368 ppb         | 1.2642   | 6.53%   |
| Cr 267.716†        | -228.1                   | -5.2862 µg/L |        | 0.77886  | -5.2862 ppb        | 0.77886  | 14.73%  |
| Cu 324.752†        | -6863.8                  | 21.300 µg/L  |        | 3.9179   | 21.300 ppb         | 3.9179   | 18.39%  |
| Fe 238.204 Radial† | 29104.5                  | 362500 µg/L  |        | 1232.2   | 362500 ppb         | 1232.2   | 0.34%   |
| K 766.490 Radial†  | -167.9                   | -79.452 µg/L |        | 8.7455   | -79.452 ppb        | 8.7455   | 11.01%  |
| Mg 279.077 IEC†    | 2.8                      | -350.95 µg/L |        | 47.204   | -350.95 ppb        | 47.204   | 13.45%  |
| Mn 257.610†        | 920.7                    | 24.446 µg/L  |        | 0.0645   | 24.446 ppb         | 0.0645   | 0.26%   |
| Mo 202.031†        | -130.6                   | 0.0724 µg/L  |        | 1.37873  | 0.0724 ppb         | 1.37873  | >999.9% |
| Na 589.592 Radial† | 15.4                     | 7.7956 µg/L  |        | 21.10043 | 7.7956 ppb         | 21.10043 | 270.67% |
| Ni 231.604†        | -44.7                    | 2.0441 µg/L  |        | 0.74276  | 2.0441 ppb         | 0.74276  | 36.34%  |
| P 214.914†         | 186.9                    | 40.734 µg/L  |        | 41.6516  | 40.734 ppb         | 41.6516  | 102.25% |
| Pb 220.353†        | 24.6                     | 12.889 µg/L  |        | 1.6675   | 12.889 ppb         | 1.6675   | 12.94%  |
| S 181.975 Axial†   | -33.8                    | -112.53 µg/L |        | 27.579   | -112.53 ppb        | 27.579   | 24.51%  |
| Sb 206.836†        | 2.7                      | 2.3854 µg/L  |        | 6.29456  | 2.3854 ppb         | 6.29456  | 263.88% |
| Se 196.026†        | -270.1                   | 881.65 µg/L  |        | 34.738   | 881.65 ppb         | 34.738   | 3.94%   |
| SiO2†              | -123.4                   | -23.368 µg/L |        | 5.9933   | -23.368 ppb        | 5.9933   | 25.65%  |
| Si 251.611†        | -703.7                   | -50.124 µg/L |        | 3.5394   | -50.124 ppb        | 3.5394   | 7.06%   |
| Sn 189.927†        | 7.3                      | 1.3481 µg/L  |        | 1.79990  | 1.3481 ppb         | 1.79990  | 133.51% |
| Sr 421.552†        | 75.2                     | 0.4557 µg/L  |        | 0.03055  | 0.4557 ppb         | 0.03055  | 6.70%   |
| Ti 334.940†        | 100.8                    | 0.2453 µg/L  |        | 0.10438  | 0.2453 ppb         | 0.10438  | 42.55%  |
| Tl 190.801†        | -8.7                     | 42.105 µg/L  |        | 2.3438   | 42.105 ppb         | 2.3438   | 5.57%   |
| U 409.014†         | 829.5                    | 26.987 µg/L  |        | 7.0024   | 26.987 ppb         | 7.0024   | 25.95%  |
| V 292.402†         | 4596.9                   | 11.860 µg/L  |        | 3.4873   | 11.860 ppb         | 3.4873   | 29.40%  |
| Zn 213.857†        | 1797.8                   | 26.349 µg/L  |        | 5.0209   | 26.349 ppb         | 5.0209   | 19.06%  |

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/15/2010 12:26:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|-------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 87249.5       | 87249.5             | 95.1 %      |              |                    | 12:26:42      |
| 1     | Al 396.153Radial†  | 9705.4        | 10371.3             | 5066.8 µg/L |              | 5066.8 ppb         | 12:26:42      |
| 1     | Ca 317.933Radial†  | 13078.1       | 13415.7             | 5048.4 µg/L |              | 5048.4 ppb         | 12:26:42      |
| 1     | Fe 238.204 Radial† | 395.6         | 403.0               | 5030.3 µg/L |              | 5030.3 ppb         | 12:27:03      |
| 1     | K 766.490 Radial†  | 10496.7       | 10636.1             | 5032.3 µg/L |              | 5032.3 ppb         | 12:26:42      |
| 1     | Mg 279.077 IEC†    | 361.5         | 371.1               | 5024.5 µg/L |              | 5024.5 ppb         | 12:27:03      |
| 1     | Na 589.592 Radial† | 18632.9       | 19409.5             | 9817.0 µg/L |              | 9817.0 ppb         | 12:26:42      |
| 1     | Sr 421.552†        | 78548.8       | 82488.8             | 499.58 µg/L |              | 499.58 ppb         | 12:26:42      |
| 1     | Sc 361.383         | 1877524.4     | 1877524.4           | 96.277 %    |              |                    | 12:28:06      |
| 1     | Y 371.029          | 1278095.9     | 1278095.9           | 95.858 %    |              |                    | 12:28:06      |
| 1     | Ag 328.068†        | 57261.2       | 59998.7             | 508.72 µg/L |              | 508.72 ppb         | 12:28:12      |
| 1     | As 188.979†        | 326.8         | 342.8               | 533.23 µg/L |              | 533.23 ppb         | 12:28:33      |
| 1     | B 249.677†         | 10306.0       | 10427.1             | 499.76 µg/L |              | 499.76 ppb         | 12:28:12      |
| 1     | Ba 233.527†        | 21282.5       | 22132.5             | 513.00 µg/L |              | 513.00 ppb         | 12:28:12      |
| 1     | Be 313.107†        | 790412.2      | 822532.8            | 511.05 µg/L |              | 511.05 ppb         | 12:28:06      |
| 1     | Cd 226.502†        | 19123.9       | 20028.7             | 512.20 µg/L |              | 512.20 ppb         | 12:28:12      |
| 1     | Co 228.616†        | 10977.3       | 11367.3             | 515.56 µg/L |              | 515.56 ppb         | 12:28:12      |
| 1     | Cr 267.716†        | 21536.8       | 22277.2             | 520.12 µg/L |              | 520.12 ppb         | 12:28:12      |
| 1     | Cu 324.752†        | 76799.5       | 75545.1             | 516.59 µg/L |              | 516.59 ppb         | 12:28:12      |
| 1     | Mn 257.610†        | 153187.3      | 159849.8            | 518.76 µg/L |              | 518.76 ppb         | 12:28:06      |
| 1     | Mo 202.031†        | 4953.1        | 5132.2              | 538.86 µg/L |              | 538.86 ppb         | 12:28:33      |
| 1     | Ni 231.604†        | 8785.0        | 8767.3              | 518.15 µg/L |              | 518.15 ppb         | 12:28:12      |
| 1     | P 214.914†         | 1729.5        | 1508.4              | 2615.3 µg/L |              | 2615.3 ppb         | 12:28:33      |
| 1     | Pb 220.353†        | 1870.7        | 1903.5              | 530.50 µg/L |              | 530.50 ppb         | 12:28:33      |
| 1     | S 181.975 Axial†   | 315.5         | 304.8               | 1013.3 µg/L |              | 1013.3 ppb         | 12:28:33      |
| 1     | Sb 206.836†        | 556.4         | 550.0               | 526.29 µg/L |              | 526.29 ppb         | 12:28:33      |
| 1     | Se 196.026†        | 532.7         | 531.4               | 545.09 µg/L |              | 545.09 ppb         | 12:28:33      |
| 1     | SiO2†              | 30214.3       | 28640.9             | 5425.2 µg/L |              | 5425.2 ppb         | 12:28:12      |
| 1     | Si 251.611†        | 34764.7       | 35687.2             | 2542.2 µg/L |              | 2542.2 ppb         | 12:28:12      |
| 1     | Sn 189.927†        | 1235.5        | 1288.5              | 541.76 µg/L |              | 541.76 ppb         | 12:28:33      |
| 1     | Ti 334.940†        | 200665.4      | 209115.6            | 513.04 µg/L |              | 513.04 ppb         | 12:28:06      |
| 1     | Tl 190.801†        | 435.5         | 486.7               | 512.32 µg/L |              | 512.32 ppb         | 12:28:33      |
| 1     | U 409.014†         | 5295.8        | 5540.5              | 515.80 µg/L |              | 515.80 ppb         | 12:28:12      |
| 1     | V 292.402†         | 39296.9       | 40717.1             | 518.03 µg/L |              | 518.03 ppb         | 12:28:12      |
| 1     | Zn 213.857†        | 21217.9       | 21380.0             | 513.48 µg/L |              | 513.48 ppb         | 12:28:12      |
| 2     | Sc RADIAL          | 87992.5       | 87992.5             | 95.9 %      |              |                    | 12:27:08      |
| 2     | Al 396.153Radial†  | 9788.4        | 10371.8             | 5067.3 µg/L |              | 5067.3 ppb         | 12:27:08      |
| 2     | Ca 317.933Radial†  | 13166.0       | 13391.1             | 5039.2 µg/L |              | 5039.2 ppb         | 12:27:08      |
| 2     | Fe 238.204 Radial† | 396.3         | 400.2               | 4995.8 µg/L |              | 4995.8 ppb         | 12:27:29      |
| 2     | K 766.490 Radial†  | 10531.8       | 10579.6             | 5005.5 µg/L |              | 5005.5 ppb         | 12:27:08      |
| 2     | Mg 279.077 IEC†    | 367.9         | 374.7               | 5072.3 µg/L |              | 5072.3 ppb         | 12:27:29      |
| 2     | Na 589.592 Radial† | 18780.7       | 19398.2             | 9811.2 µg/L |              | 9811.2 ppb         | 12:27:08      |
| 2     | Sr 421.552†        | 78909.6       | 82167.5             | 497.63 µg/L |              | 497.63 ppb         | 12:27:08      |
| 2     | Sc 361.383         | 1885927.5     | 1885927.5           | 96.708 %    |              |                    | 12:28:40      |
| 2     | Y 371.029          | 1286298.0     | 1286298.0           | 96.473 %    |              |                    | 12:28:40      |
| 2     | Ag 328.068†        | 57270.4       | 59743.3             | 506.58 µg/L |              | 506.58 ppb         | 12:28:45      |
| 2     | As 188.979†        | 319.4         | 333.7               | 519.05 µg/L |              | 519.05 ppb         | 12:29:06      |
| 2     | B 249.677†         | 10411.8       | 10488.9             | 502.75 µg/L |              | 502.75 ppb         | 12:28:45      |
| 2     | Ba 233.527†        | 21420.2       | 22176.3             | 514.01 µg/L |              | 514.01 ppb         | 12:28:45      |
| 2     | Be 313.107†        | 793835.3      | 822414.5            | 510.97 µg/L |              | 510.97 ppb         | 12:28:40      |
| 2     | Cd 226.502†        | 19261.7       | 20082.7             | 513.58 µg/L |              | 513.58 ppb         | 12:28:45      |
| 2     | Co 228.616†        | 11052.4       | 11394.1             | 516.77 µg/L |              | 516.77 ppb         | 12:28:45      |
| 2     | Cr 267.716†        | 21643.3       | 22287.6             | 520.36 µg/L |              | 520.36 ppb         | 12:28:45      |
| 2     | Cu 324.752†        | 77097.6       | 75497.9             | 516.26 µg/L |              | 516.26 ppb         | 12:28:45      |
| 2     | Mn 257.610†        | 154045.4      | 160028.2            | 519.33 µg/L |              | 519.33 ppb         | 12:28:40      |
| 2     | Mo 202.031†        | 4812.5        | 4963.9              | 521.20 µg/L |              | 521.20 ppb         | 12:29:06      |
| 2     | Ni 231.604†        | 8810.4        | 8752.8              | 517.29 µg/L |              | 517.29 ppb         | 12:28:45      |
| 2     | P 214.914†         | 1691.7        | 1461.3              | 2531.9 µg/L |              | 2531.9 ppb         | 12:29:06      |
| 2     | Pb 220.353†        | 1845.5        | 1868.7              | 520.78 µg/L |              | 520.78 ppb         | 12:29:06      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 320.4     | 308.4     | 1025.2 µg/L | 1025.2 ppb | 12:29:06 |
| 2 | Sb 206.836†        | 552.3     | 543.3     | 519.56 µg/L | 519.56 ppb | 12:29:06 |
| 2 | Se 196.026†        | 519.1     | 515.0     | 528.44 µg/L | 528.44 ppb | 12:29:06 |
| 2 | SiO2†              | 30376.4   | 28668.6   | 5430.5 µg/L | 5430.5 ppb | 12:28:45 |
| 2 | Si 251.611†        | 34866.2   | 35631.3   | 2538.2 µg/L | 2538.2 ppb | 12:28:45 |
| 2 | Sn 189.927†        | 1197.7    | 1243.7    | 522.92 µg/L | 522.92 ppb | 12:29:06 |
| 2 | Ti 334.940†        | 201411.1  | 208958.1  | 512.65 µg/L | 512.65 ppb | 12:28:40 |
| 2 | Tl 190.801†        | 436.1     | 485.3     | 510.89 µg/L | 510.89 ppb | 12:29:06 |
| 2 | U 409.014†         | 5339.2    | 5560.9    | 517.70 µg/L | 517.70 ppb | 12:28:45 |
| 2 | V 292.402†         | 39584.0   | 40832.2   | 519.35 µg/L | 519.35 ppb | 12:28:45 |
| 2 | Zn 213.857†        | 21319.1   | 21386.4   | 513.64 µg/L | 513.64 ppb | 12:28:45 |
| 3 | Sc RADIAL          | 88096.9   | 88096.9   | 96.0 %      |            | 12:27:34 |
| 3 | Al 396.153Radial†  | 9786.2    | 10357.4   | 5062.2 µg/L | 5062.2 ppb | 12:27:34 |
| 3 | Ca 317.933Radial†  | 13179.1   | 13388.6   | 5038.2 µg/L | 5038.2 ppb | 12:27:34 |
| 3 | Fe 238.204 Radial† | 398.0     | 401.5     | 5010.7 µg/L | 5010.7 ppb | 12:27:55 |
| 3 | K 766.490 Radial†  | 10406.3   | 10435.7   | 4937.5 µg/L | 4937.5 ppb | 12:27:34 |
| 3 | Mg 279.077 IEC†    | 361.4     | 367.4     | 4972.1 µg/L | 4972.1 ppb | 12:27:55 |
| 3 | Na 589.592 Radial† | 18778.9   | 19373.0   | 9798.5 µg/L | 9798.5 ppb | 12:27:34 |
| 3 | Sr 421.552†        | 78836.2   | 81993.4   | 496.58 µg/L | 496.58 ppb | 12:27:34 |
| 3 | Sc 361.383         | 1881193.2 | 1881193.2 | 96.466 %    |            | 12:29:13 |
| 3 | Y 371.029          | 1281511.5 | 1281511.5 | 96.114 %    |            | 12:29:13 |
| 3 | Ag 328.068†        | 53002.3   | 55467.8   | 470.17 µg/L | 470.17 ppb | 12:29:19 |
| 3 | As 188.979†        | 258.6     | 271.5     | 422.05 µg/L | 422.05 ppb | 12:29:39 |
| 3 | B 249.677†         | 9540.1    | 9612.3    | 460.45 µg/L | 460.45 ppb | 12:29:19 |
| 3 | Ba 233.527†        | 19013.6   | 19737.4   | 457.47 µg/L | 457.47 ppb | 12:29:19 |
| 3 | Be 313.107†        | 719652.3  | 747579.2  | 464.48 µg/L | 464.48 ppb | 12:29:13 |
| 3 | Cd 226.502†        | 17043.3   | 17833.1   | 455.99 µg/L | 455.99 ppb | 12:29:19 |
| 3 | Co 228.616†        | 9685.0    | 10005.5   | 453.73 µg/L | 453.73 ppb | 12:29:19 |
| 3 | Cr 267.716†        | 18438.5   | 19021.7   | 444.12 µg/L | 444.12 ppb | 12:29:19 |
| 3 | Cu 324.752†        | 68408.8   | 66691.4   | 456.15 µg/L | 456.15 ppb | 12:29:19 |
| 3 | Mn 257.610†        | 140201.2  | 146077.6  | 474.06 µg/L | 474.06 ppb | 12:29:13 |
| 3 | Mo 202.031†        | 3930.1    | 4061.8    | 426.51 µg/L | 426.51 ppb | 12:29:39 |
| 3 | Ni 231.604†        | 7805.0    | 7733.5    | 457.06 µg/L | 457.06 ppb | 12:29:19 |
| 3 | P 214.914†         | 1457.4    | 1222.8    | 2115.6 µg/L | 2115.6 ppb | 12:29:39 |
| 3 | Pb 220.353†        | 1550.8    | 1568.1    | 436.97 µg/L | 436.97 ppb | 12:29:39 |
| 3 | S 181.975 Axial†   | 285.8     | 273.4     | 908.95 µg/L | 908.95 ppb | 12:29:39 |
| 3 | Sb 206.836†        | 472.0     | 461.5     | 441.03 µg/L | 441.03 ppb | 12:29:39 |
| 3 | Se 196.026†        | 448.3     | 442.9     | 456.21 µg/L | 456.21 ppb | 12:29:39 |
| 3 | SiO2†              | 27712.8   | 25986.5   | 4922.4 µg/L | 4922.4 ppb | 12:29:19 |
| 3 | Si 251.611†        | 31599.2   | 32335.3   | 2303.4 µg/L | 2303.4 ppb | 12:29:19 |
| 3 | Sn 189.927†        | 969.9     | 1010.7    | 425.03 µg/L | 425.03 ppb | 12:29:39 |
| 3 | Ti 334.940†        | 181367.1  | 188703.7  | 462.93 µg/L | 462.93 ppb | 12:29:13 |
| 3 | Tl 190.801†        | 383.3     | 431.7     | 454.55 µg/L | 454.55 ppb | 12:29:39 |
| 3 | U 409.014†         | 4598.8    | 4807.2    | 447.40 µg/L | 447.40 ppb | 12:29:19 |
| 3 | V 292.402†         | 34596.4   | 35764.8   | 454.55 µg/L | 454.55 ppb | 12:29:19 |
| 3 | Zn 213.857†        | 18815.0   | 18846.1   | 452.56 µg/L | 452.56 ppb | 12:29:19 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1881548.4                | 96.484 %           | 0.2160   |                    |          | 0.22%  |
| Sc RADIAL  | 87779.6                  | 95.6 %             | 0.50     |                    |          | 0.53%  |
| Y 371.029  | 1281968.5                | 96.149 %           | 0.3090   |                    |          | 0.32%  |
| Ag 328.068†  | 58403.3                  | 495.16 µg/L        | 21.662   | 495.16 ppb         | 21.662   | 4.37%  |
| QC value within limits for Ag 328.068 Recovery = 99.03%        |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 10366.8                  | 5065.5 µg/L        | 2.79     | 5065.5 ppb         | 2.79     | 0.06%  |
| QC value within limits for Al 396.153Radial Recovery = 101.31% |                          |                    |          |                    |          |        |
| As 188.979†  | 316.0                    | 491.45 µg/L        | 60.512   | 491.45 ppb         | 60.512   | 12.31% |
| QC value within limits for As 188.979 Recovery = 98.29%        |                          |                    |          |                    |          |        |
| B 249.677†   | 10176.1                  | 487.65 µg/L        | 23.604   | 487.65 ppb         | 23.604   | 4.84%  |
| QC value within limits for B 249.677 Recovery = 97.53%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21348.8                  | 494.83 µg/L        | 32.357   | 494.83 ppb         | 32.357   | 6.54%  |
| QC value within limits for Ba 233.527 Recovery = 98.97%        |                          |                    |          |                    |          |        |
| Be 313.107†  | 797508.8                 | 495.50 µg/L        | 26.865   | 495.50 ppb         | 26.865   | 5.42%  |
| QC value within limits for Be 313.107 Recovery = 99.10%        |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13398.5                  | 5041.9 µg/L        | 5.63     | 5041.9 ppb         | 5.63     | 0.11%  |
| QC value within limits for Ca 317.933Radial Recovery = 100.84% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19314.8                  | 493.92 µg/L        | 32.861   | 493.92 ppb         | 32.861   | 6.65%  |
| QC value within limits for Cd 226.502 Recovery = 98.78%        |                          |                    |          |                    |          |        |
| Co 228.616†  | 10922.3                  | 495.35 µg/L        | 36.051   | 495.35 ppb         | 36.051   | 7.28%  |

|  |                    |             |        |        |
|--|--------------------|-------------|--------|--------|
| QC value within limits for Co 228.616        | Recovery = 99.07%  |             |        |        |
| Cr 267.716†                                  | 21195.5            | 494.86 µg/L | 43.948 | 8.88%  |
| QC value within limits for Cr 267.716        | Recovery = 98.97%  |             |        |        |
| Cu 324.752†                                  | 72578.1            | 496.33 µg/L | 34.798 | 7.01%  |
| QC value within limits for Cu 324.752        | Recovery = 99.27%  |             |        |        |
| Fe 238.204 Radial†                           | 401.6              | 5012.3 µg/L | 17.32  | 0.35%  |
| QC value within limits for Fe 238.204 Radial | Recovery = 100.25% |             |        |        |
| K 766.490 Radial†                            | 10550.5            | 4991.8 µg/L | 48.88  | 0.98%  |
| QC value within limits for K 766.490 Radial  | Recovery = 99.84%  |             |        |        |
| Mg 279.077 IEC†                              | 371.1              | 5023.0 µg/L | 50.13  | 1.00%  |
| QC value within limits for Mg 279.077 IEC    | Recovery = 100.46% |             |        |        |
| Mn 257.610†                                  | 155318.5           | 504.05 µg/L | 25.972 | 5.15%  |
| QC value within limits for Mn 257.610        | Recovery = 100.81% |             |        |        |
| Mo 202.031†                                  | 4719.3             | 495.53 µg/L | 60.416 | 12.19% |
| QC value within limits for Mo 202.031        | Recovery = 99.11%  |             |        |        |
| Na 589.592 Radial†                           | 19393.6            | 9808.9 µg/L | 9.44   | 0.10%  |
| QC value within limits for Na 589.592 Radial | Recovery = 98.09%  |             |        |        |
| Ni 231.604†                                  | 8417.9             | 497.50 µg/L | 35.024 | 7.04%  |
| QC value within limits for Ni 231.604        | Recovery = 99.50%  |             |        |        |
| P 214.914†                                   | 1397.5             | 2420.9 µg/L | 267.69 | 11.06% |
| QC value within limits for P 214.914         | Recovery = 96.84%  |             |        |        |
| Pb 220.353†                                  | 1780.1             | 496.08 µg/L | 51.419 | 10.37% |
| QC value within limits for Pb 220.353        | Recovery = 99.22%  |             |        |        |
| S 181.975 Axial†                             | 295.5              | 982.49 µg/L | 63.964 | 6.51%  |
| QC value within limits for S 181.975 Axial   | Recovery = 98.25%  |             |        |        |
| Sb 206.836†                                  | 518.2              | 495.62 µg/L | 47.402 | 9.56%  |
| QC value within limits for Sb 206.836        | Recovery = 99.12%  |             |        |        |
| Se 196.026†                                  | 496.4              | 509.92 µg/L | 47.248 | 9.27%  |
| QC value within limits for Se 196.026        | Recovery = 101.98% |             |        |        |
| SiO2†  | 27765.3            | 5259.4 µg/L | 291.82 | 5.55%  |
| QC value within limits for SiO2              | Recovery = 98.35%  |             |        |        |
| Si 251.611†                                  | 34551.3            | 2461.3 µg/L | 136.72 | 5.55%  |
| QC value within limits for Si 251.611        | Recovery = 98.45%  |             |        |        |
| Sn 189.927†                                  | 1181.0             | 496.57 µg/L | 62.666 | 12.62% |
| QC value within limits for Sn 189.927        | Recovery = 99.31%  |             |        |        |
| Sr 421.552†                                  | 82216.6            | 497.93 µg/L | 1.522  | 0.31%  |
| QC value within limits for Sr 421.552        | Recovery = 99.59%  |             |        |        |
| Ti 334.940†                                  | 202259.2           | 496.21 µg/L | 28.816 | 5.81%  |
| QC value within limits for Ti 334.940        | Recovery = 99.24%  |             |        |        |
| Tl 190.801†                                  | 467.9              | 492.59 µg/L | 32.946 | 6.69%  |
| QC value within limits for Tl 190.801        | Recovery = 98.52%  |             |        |        |
| U 409.014†                                   | 5302.8             | 493.64 µg/L | 40.050 | 8.11%  |
| QC value within limits for U 409.014         | Recovery = 98.73%  |             |        |        |
| V 292.402†                                   | 39104.7            | 497.31 µg/L | 37.034 | 7.45%  |
| QC value within limits for V 292.402         | Recovery = 99.46%  |             |        |        |
| Zn 213.857†                                  | 20537.5            | 493.22 µg/L | 35.216 | 7.14%  |
| QC value within limits for Zn 213.857        | Recovery = 98.64%  |             |        |        |

All analyte(s) passed QC.

Sequence No.: 3  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/15/2010 12:29:48  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88257.5       | 88257.5             | 96.2 %             |                    | 12:30:19      |
| 1     | Al 396.153Radial†  | -149.4        | 7.1                 | 3.4749 µg/L        | 3.4749 ppb         | 12:30:19      |
| 1     | Ca 317.933Radial†  | 337.7         | 10.2                | 3.8333 µg/L        | 3.8333 ppb         | 12:30:39      |
| 1     | Fe 238.204 Radial† | 15.5          | 3.0                 | 37.306 µg/L        | 37.306 ppb         | 12:30:39      |
| 1     | K 766.490 Radial†  | 417.6         | 29.1                | 13.779 µg/L        | 13.779 ppb         | 12:30:19      |
| 1     | Mg 279.077 IEC†    | 7.2           | -1.6                | -21.535 µg/L       | -21.535 ppb        | 12:30:39      |
| 1     | Na 589.592 Radial† | 213.6         | 31.9                | 16.158 µg/L        | 16.158 ppb         | 12:30:19      |
| 1     | Sr 421.552†        | 136.3         | 6.5                 | 0.0391 µg/L        | 0.0391 ppb         | 12:30:19      |
| 1     | Sc 361.383         | 1905450.8     | 1905450.8           | 97.709 %           |                    | 12:31:41      |
| 1     | Y 371.029          | 1301832.7     | 1301832.7           | 97.638 %           |                    | 12:31:41      |
| 1     | Ag 328.068†        | -500.4        | 11.3                | 0.0997 µg/L        | 0.0997 ppb         | 12:31:47      |
| 1     | As 188.979†        | -5.3          | -2.1                | -3.2124 µg/L       | -3.2124 ppb        | 12:32:08      |
| 1     | B 249.677†         | 307.4         | 37.3                | 1.7746 µg/L        | 1.7746 ppb         | 12:31:47      |
| 1     | Ba 233.527†        | -20.0         | 6.6                 | 0.1527 µg/L        | 0.1527 ppb         | 12:32:08      |
| 1     | Be 313.107†        | -1362.1       | 164.7               | 0.1024 µg/L        | 0.1024 ppb         | 12:31:47      |
| 1     | Cd 226.502†        | -167.4        | -6.1                | -0.1579 µg/L       | -0.1579 ppb        | 12:32:08      |
| 1     | Co 228.616†        | 20.6          | -13.4               | -0.6067 µg/L       | -0.6067 ppb        | 12:32:08      |
| 1     | Cr 267.716†        | 83.4          | -7.0                | -0.1624 µg/L       | -0.1624 ppb        | 12:31:47      |
| 1     | Cu 324.752†        | 4165.1        | 38.8                | 0.2717 µg/L        | 0.2717 ppb         | 12:31:47      |
| 1     | Mn 257.610†        | -684.5        | 38.8                | 0.1296 µg/L        | 0.1296 ppb         | 12:32:08      |
| 1     | Mo 202.031†        | 16.6          | 4.7                 | 0.4908 µg/L        | 0.4908 ppb         | 12:32:08      |
| 1     | Ni 231.604†        | 371.0         | 22.3                | 1.3201 µg/L        | 1.3201 ppb         | 12:32:08      |
| 1     | P 214.914†         | 285.5         | 4.2                 | 7.3690 µg/L        | 7.3690 ppb         | 12:32:08      |
| 1     | Pb 220.353†        | 58.5          | 20.3                | 5.6559 µg/L        | 5.6559 ppb         | 12:32:08      |
| 1     | S 181.975 Axial†   | 19.4          | -3.1                | -10.237 µg/L       | -10.237 ppb        | 12:32:08      |
| 1     | Sb 206.836†        | 27.6          | 0.3                 | 0.3328 µg/L        | 0.3328 ppb         | 12:32:08      |
| 1     | Se 196.026†        | 20.2          | -1.1                | -0.9818 µg/L       | -0.9818 ppb        | 12:32:08      |
| 1     | SiO2†              | 2650.5        | -29.1               | -5.5061 µg/L       | -5.5061 ppb        | 12:31:47      |
| 1     | Si 251.611†        | 398.0         | -14.4               | -1.0237 µg/L       | -1.0237 ppb        | 12:32:08      |
| 1     | Sn 189.927†        | -1.9          | 3.3                 | 1.4029 µg/L        | 1.4029 ppb         | 12:32:08      |
| 1     | Ti 334.940†        | -635.6        | 40.9                | 0.1022 µg/L        | 0.1022 ppb         | 12:31:47      |
| 1     | Tl 190.801†        | -36.8         | -3.3                | -3.3954 µg/L       | -3.3954 ppb        | 12:32:08      |
| 1     | U 409.014†         | -3.0          | 36.8                | 3.4286 µg/L        | 3.4286 ppb         | 12:31:47      |
| 1     | V 292.402†         | 113.1         | 16.6                | 0.2110 µg/L        | 0.2110 ppb         | 12:31:47      |
| 1     | Zn 213.857†        | 620.7         | -23.0               | -0.5641 µg/L       | -0.5641 ppb        | 12:32:08      |
| 2     | Sc RADIAL          | 87928.2       | 87928.2             | 95.8 %             |                    | 12:30:45      |
| 2     | Al 396.153Radial†  | -133.2        | 23.5                | 11.455 µg/L        | 11.455 ppb         | 12:30:45      |
| 2     | Ca 317.933Radial†  | 336.3         | 10.1                | 3.7905 µg/L        | 3.7905 ppb         | 12:31:05      |
| 2     | Fe 238.204 Radial† | 13.8          | 1.3                 | 15.758 µg/L        | 15.758 ppb         | 12:31:05      |
| 2     | K 766.490 Radial†  | 405.6         | 18.2                | 8.5974 µg/L        | 8.5974 ppb         | 12:30:45      |
| 2     | Mg 279.077 IEC†    | 1.8           | -7.2                | -96.954 µg/L       | -96.954 ppb        | 12:31:05      |
| 2     | Na 589.592 Radial† | 211.5         | 30.6                | 15.477 µg/L        | 15.477 ppb         | 12:30:45      |
| 2     | Sr 421.552†        | 156.5         | 28.0                | 0.1698 µg/L        | 0.1698 ppb         | 12:30:45      |
| 2     | Sc 361.383         | 1905199.5     | 1905199.5           | 97.697 %           |                    | 12:32:14      |
| 2     | Y 371.029          | 1302887.8     | 1302887.8           | 97.717 %           |                    | 12:32:14      |
| 2     | Ag 328.068†        | -536.5        | -25.6               | -0.2138 µg/L       | -0.2138 ppb        | 12:32:19      |
| 2     | As 188.979†        | 1.6           | 5.0                 | 7.8720 µg/L        | 7.8720 ppb         | 12:32:40      |
| 2     | B 249.677†         | 308.2         | 38.2                | 1.8284 µg/L        | 1.8284 ppb         | 12:32:19      |
| 2     | Ba 233.527†        | -16.0         | 10.7                | 0.2484 µg/L        | 0.2484 ppb         | 12:32:40      |
| 2     | Be 313.107†        | -1320.6       | 207.1               | 0.1285 µg/L        | 0.1285 ppb         | 12:32:19      |
| 2     | Cd 226.502†        | -157.0        | 4.6                 | 0.1158 µg/L        | 0.1158 ppb         | 12:32:40      |
| 2     | Co 228.616†        | 24.0          | -9.9                | -0.4477 µg/L       | -0.4477 ppb        | 12:32:40      |
| 2     | Cr 267.716†        | 105.9         | 16.0                | 0.3744 µg/L        | 0.3744 ppb         | 12:32:19      |
| 2     | Cu 324.752†        | 4203.7        | 78.9                | 0.5416 µg/L        | 0.5416 ppb         | 12:32:19      |
| 2     | Mn 257.610†        | -676.8        | 46.7                | 0.1590 µg/L        | 0.1590 ppb         | 12:32:40      |
| 2     | Mo 202.031†        | 26.4          | 14.7                | 1.5447 µg/L        | 1.5447 ppb         | 12:32:40      |
| 2     | Ni 231.604†        | 343.6         | -5.7                | -0.3382 µg/L       | -0.3382 ppb        | 12:32:40      |
| 2     | P 214.914†         | 288.8         | 7.6                 | 13.409 µg/L        | 13.409 ppb         | 12:32:40      |
| 2     | Pb 220.353†        | 50.1          | 11.6                | 3.2458 µg/L        | 3.2458 ppb         | 12:32:40      |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.4      | -3.1      | -10.185 µg/L | -10.185 ppb | 12:32:40 |
| 2 | Sb 206.836†        | 30.1      | 3.0       | 2.8512 µg/L  | 2.8512 ppb  | 12:32:40 |
| 2 | Se 196.026†        | 18.5      | -2.9      | -2.7775 µg/L | -2.7775 ppb | 12:32:40 |
| 2 | SiO2†              | 2616.7    | -63.3     | -11.999 µg/L | -11.999 ppb | 12:32:19 |
| 2 | Si 251.611†        | 400.0     | -12.3     | -0.8767 µg/L | -0.8767 ppb | 12:32:40 |
| 2 | Sn 189.927†        | -5.3      | -0.2      | -0.0913 µg/L | -0.0913 ppb | 12:32:40 |
| 2 | Ti 334.940†        | -496.6    | 183.0     | 0.4570 µg/L  | 0.4570 ppb  | 12:32:19 |
| 2 | Tl 190.801†        | -35.6     | -2.1      | -2.1857 µg/L | -2.1857 ppb | 12:32:40 |
| 2 | U 409.014†         | -23.2     | 16.2      | 1.5044 µg/L  | 1.5044 ppb  | 12:32:19 |
| 2 | V 292.402†         | 102.3     | 5.5       | 0.0811 µg/L  | 0.0811 ppb  | 12:32:19 |
| 2 | Zn 213.857†        | 614.6     | -29.2     | -0.7004 µg/L | -0.7004 ppb | 12:32:40 |
| 3 | Sc RADIAL          | 88084.9   | 88084.9   | 96.0 %       |             | 12:31:11 |
| 3 | Al 396.153Radial†  | -163.8    | -8.2      | -4.0365 µg/L | -4.0365 ppb | 12:31:11 |
| 3 | Ca 317.933Radial†  | 342.1     | 15.5      | 5.8402 µg/L  | 5.8402 ppb  | 12:31:31 |
| 3 | Fe 238.204 Radial† | 15.0      | 2.6       | 31.895 µg/L  | 31.895 ppb  | 12:31:31 |
| 3 | K 766.490 Radial†  | 344.1     | -46.7     | -22.078 µg/L | -22.078 ppb | 12:31:11 |
| 3 | Mg 279.077 IEC†    | 8.8       | 0.1       | 1.3211 µg/L  | 1.3211 ppb  | 12:31:31 |
| 3 | Na 589.592 Radial† | 227.3     | 46.7      | 23.608 µg/L  | 23.608 ppb  | 12:31:11 |
| 3 | Sr 421.552†        | 123.3     | -6.8      | -0.0414 µg/L | -0.0414 ppb | 12:31:11 |
| 3 | Sc 361.383         | 1900302.2 | 1900302.2 | 97.445 %     |             | 12:32:46 |
| 3 | Y 371.029          | 1299334.6 | 1299334.6 | 97.451 %     |             | 12:32:46 |
| 3 | Ag 328.068†        | -602.6    | -94.8     | -0.7974 µg/L | -0.7974 ppb | 12:32:51 |
| 3 | As 188.979†        | -6.4      | -3.2      | -4.9868 µg/L | -4.9868 ppb | 12:33:12 |
| 3 | B 249.677†         | 289.6     | 19.9      | 0.9395 µg/L  | 0.9395 ppb  | 12:32:51 |
| 3 | Ba 233.527†        | -30.5     | -4.2      | -0.0986 µg/L | -0.0986 ppb | 12:33:12 |
| 3 | Be 313.107†        | -1429.4   | 91.9      | 0.0570 µg/L  | 0.0570 ppb  | 12:32:51 |
| 3 | Cd 226.502†        | -163.2    | -2.2      | -0.0587 µg/L | -0.0587 ppb | 12:33:12 |
| 3 | Co 228.616†        | 22.8      | -11.0     | -0.4989 µg/L | -0.4989 ppb | 12:33:12 |
| 3 | Cr 267.716†        | 62.2      | -28.5     | -0.6659 µg/L | -0.6659 ppb | 12:32:51 |
| 3 | Cu 324.752†        | 4221.8    | 108.5     | 0.7469 µg/L  | 0.7469 ppb  | 12:32:51 |
| 3 | Mn 257.610†        | -691.4    | 29.8      | 0.0987 µg/L  | 0.0987 ppb  | 12:33:12 |
| 3 | Mo 202.031†        | 18.0      | 6.1       | 0.6456 µg/L  | 0.6456 ppb  | 12:33:12 |
| 3 | Ni 231.604†        | 358.5     | 10.5      | 0.6205 µg/L  | 0.6205 ppb  | 12:33:12 |
| 3 | P 214.914†         | 288.2     | 7.7       | 13.599 µg/L  | 13.599 ppb  | 12:33:12 |
| 3 | Pb 220.353†        | 53.9      | 15.7      | 4.3778 µg/L  | 4.3778 ppb  | 12:33:12 |
| 3 | S 181.975 Axial†   | 19.1      | -3.4      | -11.157 µg/L | -11.157 ppb | 12:33:12 |
| 3 | Sb 206.836†        | 30.4      | 3.4       | 3.2102 µg/L  | 3.2102 ppb  | 12:33:12 |
| 3 | Se 196.026†        | 24.3      | 3.1       | 3.2605 µg/L  | 3.2605 ppb  | 12:33:12 |
| 3 | SiO2†              | 2622.3    | -50.6     | -9.5929 µg/L | -9.5929 ppb | 12:32:51 |
| 3 | Si 251.611†        | 411.2     | 0.2       | 0.0169 µg/L  | 0.0169 ppb  | 12:33:12 |
| 3 | Sn 189.927†        | 1.6       | 6.8       | 2.8754 µg/L  | 2.8754 ppb  | 12:33:12 |
| 3 | Ti 334.940†        | -554.7    | 122.1     | 0.2998 µg/L  | 0.2998 ppb  | 12:32:51 |
| 3 | Tl 190.801†        | -31.0     | 2.6       | 2.6792 µg/L  | 2.6792 ppb  | 12:33:12 |
| 3 | U 409.014†         | 8.6       | 48.7      | 4.5421 µg/L  | 4.5421 ppb  | 12:32:51 |
| 3 | V 292.402†         | 77.7      | -19.5     | -0.2413 µg/L | -0.2413 ppb | 12:32:51 |
| 3 | Zn 213.857†        | 621.8     | -20.2     | -0.4932 µg/L | -0.4932 ppb | 12:33:12 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1903650.8                | 97.617 %           | 0.1488   |                    |          | 0.15%   |
| Sc RADIAL   | 88090.2                  | 96.0 %             | 0.18     |                    |          | 0.19%   |
| Y 371.029   | 1301351.7                | 97.602 %           | 0.1369   |                    |          | 0.14%   |
| Ag 328.068†   | -36.4                    | -0.3038 µg/L       | 0.45530  | -0.3038 ppb        | 0.45530  | 149.86% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 7.5                      | 3.6313 µg/L        | 7.74710  | 3.6313 ppb         | 7.74710  | 213.34% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.1                     | -0.1091 µg/L       | 6.96852  | -0.1091 ppb        | 6.96852  | >999.9% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 31.8                     | 1.5142 µg/L        | 0.49839  | 1.5142 ppb         | 0.49839  | 32.91%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 4.4                      | 0.1009 µg/L        | 0.17922  | 0.1009 ppb         | 0.17922  | 177.70% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 154.6                    | 0.0960 µg/L        | 0.03618  | 0.0960 ppb         | 0.03618  | 37.69%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 11.9                     | 4.4880 µg/L        | 1.17123  | 4.4880 ppb         | 1.17123  | 26.10%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -1.2                     | -0.0336 µg/L       | 0.13856  | -0.0336 ppb        | 0.13856  | 412.49% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -11.4                    | -0.5178 µg/L       | 0.08114  | -0.5178 ppb        | 0.08114  | 15.67%  |

|                    |  |                           |          |             |                  |
|--------------------|--|---------------------------|----------|-------------|------------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |                  |
|                    | -6.5   | -0.1513 µg/L              | 0.52027  | -0.1513 ppb | 0.52027 343.89%  |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |                  |
|                    | 75.4   | 0.5201 µg/L               | 0.23829  | 0.5201 ppb  | 0.23829 45.82%   |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |                  |
|                    | 2.3  | 28.320 µg/L               | 11.2100  | 28.320 ppb  | 11.2100 39.58%   |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |                  |
|                    | 0.2  | 0.0994 µg/L               | 19.38003 | 0.0994 ppb  | 19.38003 >999.9% |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |                  |
|                    | -2.9   | -39.056 µg/L              | 51.4269  | -39.056 ppb | 51.4269 131.68%  |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |                  |
|                    | 38.5   | 0.1291 µg/L               | 0.03018  | 0.1291 ppb  | 0.03018 23.37%   |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |                  |
|                    | 8.5  | 0.8937 µg/L               | 0.56908  | 0.8937 ppb  | 0.56908 63.68%   |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |                  |
|                    | 36.4   | 18.414 µg/L               | 4.5107   | 18.414 ppb  | 4.5107 24.50%    |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |                  |
|                    | 9.0  | 0.5342 µg/L               | 0.83253  | 0.5342 ppb  | 0.83253 155.86%  |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |                  |
|                    | 6.5  | 11.459 µg/L               | 3.5435   | 11.459 ppb  | 3.5435 30.92%    |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |                  |
|                    | 15.9   | 4.4265 µg/L               | 1.20577  | 4.4265 ppb  | 1.20577 27.24%   |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |                  |
|                    | -3.2   | -10.526 µg/L              | 0.5470   | -10.526 ppb | 0.5470 5.20%     |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |                  |
|                    | 2.2  | 2.1314 µg/L               | 1.56795  | 2.1314 ppb  | 1.56795 73.56%   |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |                  |
|                    | -0.3   | -0.1663 µg/L              | 3.10053  | -0.1663 ppb | 3.10053 >999.9%  |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |                  |
|                    | -47.7  | -9.0327 µg/L              | 3.28252  | -9.0327 ppb | 3.28252 36.34%   |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |                  |
|                    | -8.8   | -0.6278 µg/L              | 0.56313  | -0.6278 ppb | 0.56313 89.69%   |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |                  |
|                    | 3.3  | 1.3956 µg/L               | 1.48336  | 1.3956 ppb  | 1.48336 106.28%  |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |                  |
|                    | 9.2  | 0.0558 µg/L               | 0.10657  | 0.0558 ppb  | 0.10657 190.83%  |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |                  |
|                    | 115.4  | 0.2863 µg/L               | 0.17781  | 0.2863 ppb  | 0.17781 62.10%   |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |                  |
|                    | -0.9   | -0.9673 µg/L              | 3.21537  | -0.9673 ppb | 3.21537 332.41%  |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |                  |
|                    | 33.9   | 3.1584 µg/L               | 1.53679  | 3.1584 ppb  | 1.53679 48.66%   |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |                  |
|                    | 0.8  | 0.0170 µg/L               | 0.23289  | 0.0170 ppb  | 0.23289 >999.9%  |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |                  |
|                    | -24.1  | -0.5859 µg/L              | 0.10529  | -0.5859 ppb | 0.10529 17.97%   |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |          |             |                  |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/15/2010 13:00:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 90272.5          | 90272.5                | 98.4 %                |                       | 13:01:29         |
| 1     | Al 396.153Radial†  | 9782.4           | 10107.8                | 4938.4 µg/L           | 4938.4 ppb            | 13:01:29         |
| 1     | Ca 317.933Radial†  | 12849.9          | 12723.0                | 4787.7 µg/L           | 4787.7 ppb            | 13:01:29         |
| 1     | Fe 238.204 Radial† | 387.1            | 380.5                  | 4749.2 µg/L           | 4749.2 ppb            | 13:01:50         |
| 1     | K 766.490 Radial†  | 10367.4          | 10135.0                | 4795.2 µg/L           | 4795.2 ppb            | 13:01:29         |
| 1     | Mg 279.077 IEC†    | 355.0            | 351.9                  | 4763.7 µg/L           | 4763.7 ppb            | 13:01:50         |
| 1     | Na 589.592 Radial† | 18582.4          | 18701.8                | 9459.0 µg/L           | 9459.0 ppb            | 13:01:29         |
| 1     | Sr 421.552†        | 77376.0          | 78529.6                | 475.60 µg/L           | 475.60 ppb            | 13:01:29         |
| 1     | Sc 361.383         | 1935622.6        | 1935622.6              | 99.257 %              |                       | 13:02:53         |
| 1     | Y 371.029          | 1320443.5        | 1320443.5              | 99.034 %              |                       | 13:02:53         |
| 1     | Ag 328.068†        | 56383.0          | 57328.8                | 486.06 µg/L           | 486.06 ppb            | 13:02:59         |
| 1     | As 188.979†        | 315.7            | 321.5                  | 500.10 µg/L           | 500.10 ppb            | 13:03:20         |
| 1     | B 249.677†         | 10179.2          | 9978.2                 | 478.26 µg/L           | 478.26 ppb            | 13:02:59         |
| 1     | Ba 233.527†        | 20851.7          | 21034.9                | 487.56 µg/L           | 487.56 ppb            | 13:02:59         |
| 1     | Be 313.107†        | 773207.8         | 780557.8               | 484.97 µg/L           | 484.97 ppb            | 13:02:53         |
| 1     | Cd 226.502†        | 18691.4          | 18996.8                | 485.81 µg/L           | 485.81 ppb            | 13:02:59         |
| 1     | Co 228.616†        | 10752.4          | 10798.5                | 489.77 µg/L           | 489.77 ppb            | 13:02:59         |
| 1     | Cr 267.716†        | 21035.2          | 21100.5                | 492.64 µg/L           | 492.64 ppb            | 13:02:59         |
| 1     | Cu 324.752†        | 75696.3          | 72039.4                | 492.61 µg/L           | 492.61 ppb            | 13:02:59         |
| 1     | Mn 257.610†        | 150316.4         | 152181.6               | 493.87 µg/L           | 493.87 ppb            | 13:02:53         |
| 1     | Mo 202.031†        | 4803.5           | 4827.1                 | 506.83 µg/L           | 506.83 ppb            | 13:03:20         |
| 1     | Ni 231.604†        | 8596.9           | 8303.9                 | 490.76 µg/L           | 490.76 ppb            | 13:02:59         |
| 1     | P 214.914†         | 1687.8           | 1412.5                 | 2448.1 µg/L           | 2448.1 ppb            | 13:03:20         |
| 1     | Pb 220.353†        | 1817.4           | 1791.5                 | 499.28 µg/L           | 499.28 ppb            | 13:03:20         |
| 1     | S 181.975 Axial†   | 321.6            | 301.1                  | 1001.0 µg/L           | 1001.0 ppb            | 13:03:20         |
| 1     | Sb 206.836†        | 546.3            | 522.5                  | 499.90 µg/L           | 499.90 ppb            | 13:03:20         |
| 1     | Se 196.026†        | 515.3            | 497.3                  | 510.18 µg/L           | 510.18 ppb            | 13:03:20         |
| 1     | SiO2†              | 29639.2          | 27119.5                | 5137.0 µg/L           | 5137.0 ppb            | 13:02:59         |
| 1     | Si 251.611†        | 34018.2          | 33851.3                | 2411.4 µg/L           | 2411.4 ppb            | 13:02:59         |
| 1     | Sn 189.927†        | 1197.6           | 1211.8                 | 509.49 µg/L           | 509.49 ppb            | 13:03:20         |
| 1     | Ti 334.940†        | 195943.1         | 198102.0               | 486.02 µg/L           | 486.02 ppb            | 13:02:53         |
| 1     | Tl 190.801†        | 430.2            | 467.7                  | 492.34 µg/L           | 492.34 ppb            | 13:03:20         |
| 1     | U 409.014†         | 5180.3           | 5259.0                 | 489.60 µg/L           | 489.60 ppb            | 13:02:59         |
| 1     | V 292.402†         | 38573.7          | 38763.4                | 493.12 µg/L           | 493.12 ppb            | 13:02:59         |
| 1     | Zn 213.857†        | 20777.5          | 20274.8                | 486.93 µg/L           | 486.93 ppb            | 13:02:59         |
| 2     | Sc RADIAL          | 91550.9          | 91550.9                | 99.8 %                |                       | 13:01:55         |
| 2     | Al 396.153Radial†  | 9765.6           | 9952.1                 | 4862.3 µg/L           | 4862.3 ppb            | 13:01:55         |
| 2     | Ca 317.933Radial†  | 12819.7          | 12510.3                | 4707.7 µg/L           | 4707.7 ppb            | 13:01:55         |
| 2     | Fe 238.204 Radial† | 383.7            | 371.5                  | 4638.1 µg/L           | 4638.1 ppb            | 13:02:16         |
| 2     | K 766.490 Radial†  | 10486.1          | 10106.8                | 4781.9 µg/L           | 4781.9 ppb            | 13:01:55         |
| 2     | Mg 279.077 IEC†    | 352.7            | 344.5                  | 4663.5 µg/L           | 4663.5 ppb            | 13:02:16         |
| 2     | Na 589.592 Radial† | 18678.4          | 18534.3                | 9374.3 µg/L           | 9374.3 ppb            | 13:01:55         |
| 2     | Sr 421.552†        | 77787.8          | 77844.0                | 471.45 µg/L           | 471.45 ppb            | 13:01:55         |
| 2     | Sc 361.383         | 1927886.8        | 1927886.8              | 98.860 %              |                       | 13:03:27         |
| 2     | Y 371.029          | 1314103.9        | 1314103.9              | 98.559 %              |                       | 13:03:27         |
| 2     | Ag 328.068†        | 56246.9          | 57419.1                | 486.82 µg/L           | 486.82 ppb            | 13:03:32         |
| 2     | As 188.979†        | 305.2            | 312.1                  | 485.42 µg/L           | 485.42 ppb            | 13:03:53         |
| 2     | B 249.677†         | 10130.5          | 9970.0                 | 477.93 µg/L           | 477.93 ppb            | 13:03:32         |
| 2     | Ba 233.527†        | 20784.4          | 21051.2                | 487.94 µg/L           | 487.94 ppb            | 13:03:32         |
| 2     | Be 313.107†        | 768759.9         | 779184.4               | 484.11 µg/L           | 484.11 ppb            | 13:03:27         |
| 2     | Cd 226.502†        | 18648.6          | 19029.0                | 486.65 µg/L           | 486.65 ppb            | 13:03:32         |
| 2     | Co 228.616†        | 10716.0          | 10805.1                | 490.06 µg/L           | 490.06 ppb            | 13:03:32         |
| 2     | Cr 267.716†        | 20978.7          | 21128.4                | 493.29 µg/L           | 493.29 ppb            | 13:03:32         |
| 2     | Cu 324.752†        | 75461.1          | 72107.4                | 493.05 µg/L           | 493.05 ppb            | 13:03:32         |
| 2     | Mn 257.610†        | 149880.4         | 152348.3               | 494.41 µg/L           | 494.41 ppb            | 13:03:27         |
| 2     | Mo 202.031†        | 4704.8           | 4746.8                 | 498.39 µg/L           | 498.39 ppb            | 13:03:53         |
| 2     | Ni 231.604†        | 8575.6           | 8317.1                 | 491.54 µg/L           | 491.54 ppb            | 13:03:32         |
| 2     | P 214.914†         | 1657.6           | 1388.7                 | 2405.9 µg/L           | 2405.9 ppb            | 13:03:53         |
| 2     | Pb 220.353†        | 1773.2           | 1754.1                 | 488.84 µg/L           | 488.84 ppb            | 13:03:53         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 313.5     | 294.2     | 978.25 µg/L | 978.25 ppb | 13:03:53 |
| 2 | Sb 206.836†        | 538.1     | 516.4     | 493.93 µg/L | 493.93 ppb | 13:03:53 |
| 2 | Se 196.026†        | 499.0     | 483.0     | 495.53 µg/L | 495.53 ppb | 13:03:53 |
| 2 | SiO2†              | 29660.9   | 27261.3   | 5163.9 µg/L | 5163.9 ppb | 13:03:32 |
| 2 | Si 251.611†        | 34043.1   | 34014.0   | 2423.0 µg/L | 2423.0 ppb | 13:03:32 |
| 2 | Sn 189.927†        | 1155.6    | 1174.1    | 493.68 µg/L | 493.68 ppb | 13:03:53 |
| 2 | Ti 334.940†        | 195222.9  | 198165.7  | 486.18 µg/L | 486.18 ppb | 13:03:27 |
| 2 | Tl 190.801†        | 435.9     | 475.3     | 500.19 µg/L | 500.19 ppb | 13:03:53 |
| 2 | U 409.014†         | 5195.7    | 5295.5    | 493.03 µg/L | 493.03 ppb | 13:03:32 |
| 2 | V 292.402†         | 38459.0   | 38803.4   | 493.58 µg/L | 493.58 ppb | 13:03:32 |
| 2 | Zn 213.857†        | 20731.2   | 20312.0   | 487.84 µg/L | 487.84 ppb | 13:03:32 |
| 3 | Sc RADIAL          | 91608.0   | 91608.0   | 99.8 %      |            | 13:02:21 |
| 3 | Al 396.153Radial†  | 9740.0    | 9920.4    | 4848.7 µg/L | 4848.7 ppb | 13:02:21 |
| 3 | Ca 317.933Radial†  | 12837.2   | 12519.8   | 4711.3 µg/L | 4711.3 ppb | 13:02:21 |
| 3 | Fe 238.204 Radial† | 389.2     | 376.8     | 4702.2 µg/L | 4702.2 ppb | 13:02:42 |
| 3 | K 766.490 Radial†  | 10322.3   | 9936.1    | 4701.1 µg/L | 4701.1 ppb | 13:02:21 |
| 3 | Mg 279.077 IEC†    | 358.8     | 350.4     | 4741.7 µg/L | 4741.7 ppb | 13:02:42 |
| 3 | Na 589.592 Radial† | 18740.6   | 18584.9   | 9399.9 µg/L | 9399.9 ppb | 13:02:21 |
| 3 | Sr 421.552†        | 77849.6   | 77857.3   | 471.53 µg/L | 471.53 ppb | 13:02:21 |
| 3 | Sc 361.383         | 1934758.7 | 1934758.7 | 99.212 %    |            | 13:04:00 |
| 3 | Y 371.029          | 1320298.1 | 1320298.1 | 99.023 %    |            | 13:04:00 |
| 3 | Ag 328.068†        | 52349.9   | 53289.0   | 451.67 µg/L | 451.67 ppb | 13:04:05 |
| 3 | As 188.979†        | 262.4     | 267.9     | 416.56 µg/L | 416.56 ppb | 13:04:26 |
| 3 | B 249.677†         | 9385.3    | 9182.5    | 439.90 µg/L | 439.90 ppb | 13:04:05 |
| 3 | Ba 233.527†        | 18701.7   | 18877.2   | 437.53 µg/L | 437.53 ppb | 13:04:05 |
| 3 | Be 313.107†        | 702997.1  | 710137.5  | 441.22 µg/L | 441.22 ppb | 13:04:00 |
| 3 | Cd 226.502†        | 16661.2   | 16958.8   | 433.64 µg/L | 433.64 ppb | 13:04:05 |
| 3 | Co 228.616†        | 9441.1    | 9481.7    | 429.98 µg/L | 429.98 ppb | 13:04:05 |
| 3 | Cr 267.716†        | 18007.1   | 18057.7   | 421.61 µg/L | 421.61 ppb | 13:04:05 |
| 3 | Cu 324.752†        | 67564.9   | 63877.5   | 436.89 µg/L | 436.89 ppb | 13:04:05 |
| 3 | Mn 257.610†        | 137638.8  | 139471.0  | 452.62 µg/L | 452.62 ppb | 13:04:00 |
| 3 | Mo 202.031†        | 3858.5    | 3876.8    | 407.08 µg/L | 407.08 ppb | 13:04:26 |
| 3 | Ni 231.604†        | 7636.2    | 7339.4    | 433.77 µg/L | 433.77 ppb | 13:04:05 |
| 3 | P 214.914†         | 1442.6    | 1166.1    | 2017.2 µg/L | 2017.2 ppb | 13:04:26 |
| 3 | Pb 220.353†        | 1528.0    | 1500.6    | 418.17 µg/L | 418.17 ppb | 13:04:26 |
| 3 | S 181.975 Axial†   | 277.7     | 257.0     | 854.34 µg/L | 854.34 ppb | 13:04:26 |
| 3 | Sb 206.836†        | 451.9     | 427.6     | 408.72 µg/L | 408.72 ppb | 13:04:26 |
| 3 | Se 196.026†        | 437.5     | 419.1     | 431.60 µg/L | 431.60 ppb | 13:04:26 |
| 3 | SiO2†              | 27257.2   | 24732.0   | 4684.8 µg/L | 4684.8 ppb | 13:04:05 |
| 3 | Si 251.611†        | 31063.3   | 30888.2   | 2200.3 µg/L | 2200.3 ppb | 13:04:05 |
| 3 | Sn 189.927†        | 933.0     | 945.7     | 397.70 µg/L | 397.70 ppb | 13:04:26 |
| 3 | Ti 334.940†        | 177160.7  | 179258.7  | 439.76 µg/L | 439.76 ppb | 13:04:00 |
| 3 | Tl 190.801†        | 377.1     | 414.5     | 436.39 µg/L | 436.39 ppb | 13:04:26 |
| 3 | U 409.014†         | 4495.9    | 4571.5    | 425.48 µg/L | 425.48 ppb | 13:04:05 |
| 3 | V 292.402†         | 33846.0   | 34015.5   | 432.34 µg/L | 432.34 ppb | 13:04:05 |
| 3 | Zn 213.857†        | 18504.0   | 17992.6   | 432.08 µg/L | 432.08 ppb | 13:04:05 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383  | 1932756.0                | 99.110 %           | 0.2174   |                    |          | 0.22% |
| Sc RADIAL   | 91143.8                  | 99.3 %             | 0.82     |                    |          | 0.83% |
| Y 371.029   | 1318281.9                | 98.872 %           | 0.2714   |                    |          | 0.27% |
| Ag 328.068†   | 56012.3                  | 474.85 µg/L        | 20.080   | 474.85 ppb         | 20.080   | 4.23% |
| QC value within limits for Ag 328.068 Recovery = 94.97%       |                          |                    |          |                    |          |       |
| Al 396.153Radial†   | 9993.4                   | 4883.1 µg/L        | 48.34    | 4883.1 ppb         | 48.34    | 0.99% |
| QC value within limits for Al 396.153Radial Recovery = 97.66% |                          |                    |          |                    |          |       |
| As 188.979†   | 300.5                    | 467.36 µg/L        | 44.603   | 467.36 ppb         | 44.603   | 9.54% |
| QC value within limits for As 188.979 Recovery = 93.47%       |                          |                    |          |                    |          |       |
| B 249.677†  | 9710.2                   | 465.37 µg/L        | 22.053   | 465.37 ppb         | 22.053   | 4.74% |
| QC value within limits for B 249.677 Recovery = 93.07%        |                          |                    |          |                    |          |       |
| Ba 233.527†   | 20321.1                  | 471.01 µg/L        | 28.994   | 471.01 ppb         | 28.994   | 6.16% |
| QC value within limits for Ba 233.527 Recovery = 94.20%       |                          |                    |          |                    |          |       |
| Be 313.107†   | 756626.6                 | 470.10 µg/L        | 25.017   | 470.10 ppb         | 25.017   | 5.32% |
| QC value within limits for Be 313.107 Recovery = 94.02%       |                          |                    |          |                    |          |       |
| Ca 317.933Radial†   | 12584.4                  | 4735.6 µg/L        | 45.21    | 4735.6 ppb         | 45.21    | 0.95% |
| QC value within limits for Ca 317.933Radial Recovery = 94.71% |                          |                    |          |                    |          |       |
| Cd 226.502†   | 18328.2                  | 468.70 µg/L        | 30.367   | 468.70 ppb         | 30.367   | 6.48% |
| QC value within limits for Cd 226.502 Recovery = 93.74%       |                          |                    |          |                    |          |       |
| Co 228.616†   | 10361.8                  | 469.93 µg/L        | 34.603   | 469.93 ppb         | 34.603   | 7.36% |

|  |          |             |        |            |               |
|--|----------|-------------|--------|------------|---------------|
| QC value within limits for Co 228.616 Recovery = 93.99%        |          |             |        |            |               |
| Cr 267.716†  | 20095.5  | 469.18 µg/L | 41.201 | 469.18 ppb | 41.201 8.78%  |
| QC value within limits for Cr 267.716 Recovery = 93.84%        |          |             |        |            |               |
| Cu 324.752†  | 69341.4  | 474.18 µg/L | 32.298 | 474.18 ppb | 32.298 6.81%  |
| QC value within limits for Cu 324.752 Recovery = 94.84%        |          |             |        |            |               |
| Fe 238.204 Radial†   | 376.3    | 4696.5 µg/L | 55.79  | 4696.5 ppb | 55.79 1.19%   |
| QC value within limits for Fe 238.204 Radial Recovery = 93.93% |          |             |        |            |               |
| K 766.490 Radial†  | 10059.3  | 4759.4 µg/L | 50.92  | 4759.4 ppb | 50.92 1.07%   |
| QC value within limits for K 766.490 Radial Recovery = 95.19%  |          |             |        |            |               |
| Mg 279.077 IEC†  | 348.9    | 4723.0 µg/L | 52.70  | 4723.0 ppb | 52.70 1.12%   |
| QC value within limits for Mg 279.077 IEC Recovery = 94.46%    |          |             |        |            |               |
| Mn 257.610†  | 148000.3 | 480.30 µg/L | 23.976 | 480.30 ppb | 23.976 4.99%  |
| QC value within limits for Mn 257.610 Recovery = 96.06%        |          |             |        |            |               |
| Mo 202.031†  | 4483.5   | 470.77 µg/L | 55.316 | 470.77 ppb | 55.316 11.75% |
| QC value within limits for Mo 202.031 Recovery = 94.15%        |          |             |        |            |               |
| Na 589.592 Radial†   | 18607.0  | 9411.1 µg/L | 43.46  | 9411.1 ppb | 43.46 0.46%   |
| QC value within limits for Na 589.592 Radial Recovery = 94.11% |          |             |        |            |               |
| Ni 231.604†  | 7986.8   | 472.02 µg/L | 33.129 | 472.02 ppb | 33.129 7.02%  |
| QC value within limits for Ni 231.604 Recovery = 94.40%        |          |             |        |            |               |
| P 214.914†   | 1322.4   | 2290.4 µg/L | 237.57 | 2290.4 ppb | 237.57 10.37% |
| QC value within limits for P 214.914 Recovery = 91.62%         |          |             |        |            |               |
| Pb 220.353†  | 1682.0   | 468.76 µg/L | 44.126 | 468.76 ppb | 44.126 9.41%  |
| QC value within limits for Pb 220.353 Recovery = 93.75%        |          |             |        |            |               |
| S 181.975 Axial†   | 284.1    | 944.54 µg/L | 78.936 | 944.54 ppb | 78.936 8.36%  |
| QC value within limits for S 181.975 Axial Recovery = 94.45%   |          |             |        |            |               |
| Sb 206.836†  | 488.8    | 467.52 µg/L | 51.005 | 467.52 ppb | 51.005 10.91% |
| QC value within limits for Sb 206.836 Recovery = 93.50%        |          |             |        |            |               |
| Se 196.026†  | 466.5    | 479.10 µg/L | 41.786 | 479.10 ppb | 41.786 8.72%  |
| QC value within limits for Se 196.026 Recovery = 95.82%        |          |             |        |            |               |
| SiO2†  | 26370.9  | 4995.2 µg/L | 269.19 | 4995.2 ppb | 269.19 5.39%  |
| QC value within limits for SiO2 Recovery = 93.41%              |          |             |        |            |               |
| Si 251.611†  | 32917.8  | 2344.9 µg/L | 125.34 | 2344.9 ppb | 125.34 5.35%  |
| QC value within limits for Si 251.611 Recovery = 93.80%        |          |             |        |            |               |
| Sn 189.927†  | 1110.5   | 466.95 µg/L | 60.496 | 466.95 ppb | 60.496 12.96% |
| QC value within limits for Sn 189.927 Recovery = 93.39%        |          |             |        |            |               |
| Sr 421.552†  | 78077.0  | 472.86 µg/L | 2.374  | 472.86 ppb | 2.374 0.50%   |
| QC value within limits for Sr 421.552 Recovery = 94.57%        |          |             |        |            |               |
| Ti 334.940†  | 191842.1 | 470.65 µg/L | 26.754 | 470.65 ppb | 26.754 5.68%  |
| QC value within limits for Ti 334.940 Recovery = 94.13%        |          |             |        |            |               |
| Tl 190.801†  | 452.5    | 476.31 µg/L | 34.794 | 476.31 ppb | 34.794 7.30%  |
| QC value within limits for Tl 190.801 Recovery = 95.26%        |          |             |        |            |               |
| U 409.014†   | 5042.0   | 469.37 µg/L | 38.046 | 469.37 ppb | 38.046 8.11%  |
| QC value within limits for U 409.014 Recovery = 93.87%         |          |             |        |            |               |
| V 292.402†   | 37194.1  | 473.01 µg/L | 35.227 | 473.01 ppb | 35.227 7.45%  |
| QC value within limits for V 292.402 Recovery = 94.60%         |          |             |        |            |               |
| Zn 213.857†  | 19526.5  | 468.95 µg/L | 31.935 | 468.95 ppb | 31.935 6.81%  |
| QC value within limits for Zn 213.857 Recovery = 93.79%        |          |             |        |            |               |
| All analyte(s) passed QC.                                      |          |             |        |            |               |

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/15/2010 13:04:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 91863.0       | 91863.0             | 100 %              |                    | 13:05:06      |
| 1     | Al 396.153Radial†  | -81.8         | 80.7                | 39.541 µg/L        | 39.541 ppb         | 13:05:06      |
| 1     | Ca 317.933Radial†  | 348.7         | 7.4                 | 2.7890 µg/L        | 2.7890 ppb         | 13:05:26      |
| 1     | Fe 238.204 Radial† | 11.5          | -1.6                | -19.988 µg/L       | -19.988 ppb        | 13:05:26      |
| 1     | K 766.490 Radial†  | 466.4         | 60.8                | 28.753 µg/L        | 28.753 ppb         | 13:05:06      |
| 1     | Mg 279.077 IEC†    | 6.9           | -2.2                | -29.223 µg/L       | -29.223 ppb        | 13:05:26      |
| 1     | Na 589.592 Radial† | 225.8         | 35.5                | 17.934 µg/L        | 17.934 ppb         | 13:05:06      |
| 1     | Sr 421.552†        | 118.0         | -17.4               | -0.1055 µg/L       | -0.1055 ppb        | 13:05:06      |
| 1     | Sc 361.383         | 1962312.0     | 1962312.0           | 100.63 %           |                    | 13:06:28      |
| 1     | Y 371.029          | 1340750.6     | 1340750.6           | 100.56 %           |                    | 13:06:28      |
| 1     | Ag 328.068†        | -506.1        | 20.6                | 0.1692 µg/L        | 0.1692 ppb         | 13:06:34      |
| 1     | As 188.979†        | -1.9          | 1.5                 | 2.3245 µg/L        | 2.3245 ppb         | 13:06:54      |
| 1     | B 249.677†         | 273.5         | -5.5                | -0.2561 µg/L       | -0.2561 ppb        | 13:06:54      |
| 1     | Ba 233.527†        | -23.1         | 4.2                 | 0.0955 µg/L        | 0.0955 ppb         | 13:06:54      |
| 1     | Be 313.107†        | -1430.7       | 137.1               | 0.0851 µg/L        | 0.0851 ppb         | 13:06:34      |
| 1     | Cd 226.502†        | -166.7        | -0.3                | -0.0072 µg/L       | -0.0072 ppb        | 13:06:54      |
| 1     | Co 228.616†        | 24.6          | -10.0               | -0.4541 µg/L       | -0.4541 ppb        | 13:06:54      |
| 1     | Cr 267.716†        | 88.0          | -4.8                | -0.1128 µg/L       | -0.1128 ppb        | 13:06:34      |
| 1     | Cu 324.752†        | 4225.9        | -24.3               | -0.1698 µg/L       | -0.1698 ppb        | 13:06:34      |
| 1     | Mn 257.610†        | -490.6        | 251.9               | 0.8182 µg/L        | 0.8182 ppb         | 13:06:54      |
| 1     | Mo 202.031†        | 8.0           | -4.5                | -0.4679 µg/L       | -0.4679 ppb        | 13:06:54      |
| 1     | Ni 231.604†        | 342.8         | -16.7               | -0.9893 µg/L       | -0.9893 ppb        | 13:06:54      |
| 1     | P 214.914†         | 282.4         | -7.3                | -12.813 µg/L       | -12.813 ppb        | 13:06:54      |
| 1     | Pb 220.353†        | 37.8          | -2.0                | -0.5543 µg/L       | -0.5543 ppb        | 13:06:54      |
| 1     | S 181.975 Axial†   | 17.5          | -5.5                | -18.438 µg/L       | -18.438 ppb        | 13:06:54      |
| 1     | Sb 206.836†        | 32.4          | 4.3                 | 4.0926 µg/L        | 4.0926 ppb         | 13:06:54      |
| 1     | Se 196.026†        | 21.8          | -0.2                | -0.1989 µg/L       | -0.1989 ppb        | 13:06:54      |
| 1     | SiO2†              | 2610.6        | -147.3              | -27.907 µg/L       | -27.907 ppb        | 13:06:34      |
| 1     | Si 251.611†        | 368.0         | -56.0               | -3.9860 µg/L       | -3.9860 ppb        | 13:06:54      |
| 1     | Sn 189.927†        | 0.3           | 5.5                 | 2.3312 µg/L        | 2.3312 ppb         | 13:06:54      |
| 1     | Ti 334.940†        | -646.4        | 49.0                | 0.1226 µg/L        | 0.1226 ppb         | 13:06:34      |
| 1     | Tl 190.801†        | -31.0         | 3.6                 | 3.7230 µg/L        | 3.7230 ppb         | 13:06:54      |
| 1     | U 409.014†         | -22.8         | 17.2                | 1.6094 µg/L        | 1.6094 ppb         | 13:06:34      |
| 1     | V 292.402†         | 67.6          | -32.0               | -0.4032 µg/L       | -0.4032 ppb        | 13:06:34      |
| 1     | Zn 213.857†        | 616.1         | -46.0               | -1.1048 µg/L       | -1.1048 ppb        | 13:06:54      |
| 2     | Sc RADIAL          | 91421.8       | 91421.8             | 99.6 %             |                    | 13:05:32      |
| 2     | Al 396.153Radial†  | -85.5         | 76.6                | 37.513 µg/L        | 37.513 ppb         | 13:05:32      |
| 2     | Ca 317.933Radial†  | 351.3         | 11.7                | 4.4063 µg/L        | 4.4063 ppb         | 13:05:52      |
| 2     | Fe 238.204 Radial† | 13.3          | 0.2                 | 2.6797 µg/L        | 2.6797 ppb         | 13:05:52      |
| 2     | K 766.490 Radial†  | 417.6         | 14.0                | 6.6427 µg/L        | 6.6427 ppb         | 13:05:32      |
| 2     | Mg 279.077 IEC†    | 10.1          | 1.1                 | 14.524 µg/L        | 14.524 ppb         | 13:05:52      |
| 2     | Na 589.592 Radial† | 140.4         | -49.2               | -24.882 µg/L       | -24.882 ppb        | 13:05:32      |
| 2     | Sr 421.552†        | 100.1         | -34.9               | -0.2112 µg/L       | -0.2112 ppb        | 13:05:32      |
| 2     | Sc 361.383         | 1956327.1     | 1956327.1           | 100.32 %           |                    | 13:07:00      |
| 2     | Y 371.029          | 1337864.6     | 1337864.6           | 100.34 %           |                    | 13:07:00      |
| 2     | Ag 328.068†        | -543.1        | -17.9               | -0.1544 µg/L       | -0.1544 ppb        | 13:07:06      |
| 2     | As 188.979†        | -3.1          | 0.3                 | 0.4561 µg/L        | 0.4561 ppb         | 13:07:26      |
| 2     | B 249.677†         | 275.7         | -2.5                | -0.1216 µg/L       | -0.1216 ppb        | 13:07:26      |
| 2     | Ba 233.527†        | -21.4         | 5.7                 | 0.1319 µg/L        | 0.1319 ppb         | 13:07:26      |
| 2     | Be 313.107†        | -1424.5       | 138.8               | 0.0862 µg/L        | 0.0862 ppb         | 13:07:06      |
| 2     | Cd 226.502†        | -161.6        | 4.2                 | 0.1066 µg/L        | 0.1066 ppb         | 13:07:26      |
| 2     | Co 228.616†        | 21.7          | -12.8               | -0.5822 µg/L       | -0.5822 ppb        | 13:07:26      |
| 2     | Cr 267.716†        | 82.3          | -10.3               | -0.2408 µg/L       | -0.2408 ppb        | 13:07:06      |
| 2     | Cu 324.752†        | 4247.6        | 10.2                | 0.0698 µg/L        | 0.0698 ppb         | 13:07:06      |
| 2     | Mn 257.610†        | -487.0        | 253.9               | 0.8233 µg/L        | 0.8233 ppb         | 13:07:26      |
| 2     | Mo 202.031†        | 16.6          | 4.2                 | 0.4359 µg/L        | 0.4359 ppb         | 13:07:26      |
| 2     | Ni 231.604†        | 356.9         | -1.6                | -0.0966 µg/L       | -0.0966 ppb        | 13:07:26      |
| 2     | P 214.914†         | 294.0         | 5.1                 | 8.9405 µg/L        | 8.9405 ppb         | 13:07:26      |
| 2     | Pb 220.353†        | 47.7          | 8.0                 | 2.2201 µg/L        | 2.2201 ppb         | 13:07:26      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.7      | -3.3      | -10.985 µg/L | -10.985 ppb | 13:07:26 |
| 2 | Sb 206.836†        | 26.8      | -1.1      | -1.0537 µg/L | -1.0537 ppb | 13:07:26 |
| 2 | Se 196.026†        | 23.5      | 1.6       | 1.6511 µg/L  | 1.6511 ppb  | 13:07:26 |
| 2 | SiO2†              | 2578.1    | -171.8    | -32.539 µg/L | -32.539 ppb | 13:07:06 |
| 2 | Si 251.611†        | 383.6     | -39.4     | -2.8039 µg/L | -2.8039 ppb | 13:07:26 |
| 2 | Sn 189.927†        | -3.2      | 2.1       | 0.8781 µg/L  | 0.8781 ppb  | 13:07:26 |
| 2 | Ti 334.940†        | -607.9    | 85.4      | 0.2085 µg/L  | 0.2085 ppb  | 13:07:06 |
| 2 | Tl 190.801†        | -33.8     | 0.6       | 0.6805 µg/L  | 0.6805 ppb  | 13:07:26 |
| 2 | U 409.014†         | -5.9      | 34.0      | 3.1675 µg/L  | 3.1675 ppb  | 13:07:06 |
| 2 | V 292.402†         | 50.4      | -49.0     | -0.6110 µg/L | -0.6110 ppb | 13:07:06 |
| 2 | Zn 213.857†        | 618.4     | -41.9     | -1.0136 µg/L | -1.0136 ppb | 13:07:26 |
| 3 | Sc RADIAL          | 92213.9   | 92213.9   | 100 %        |             | 13:05:58 |
| 3 | Al 396.153Radial†  | -70.0     | 92.8      | 45.410 µg/L  | 45.410 ppb  | 13:05:58 |
| 3 | Ca 317.933Radial†  | 347.0     | 4.4       | 1.6391 µg/L  | 1.6391 ppb  | 13:06:18 |
| 3 | Fe 238.204 Radial† | 12.7      | -0.5      | -5.6166 µg/L | -5.6166 ppb | 13:06:18 |
| 3 | K 766.490 Radial†  | 460.6     | 53.3      | 25.219 µg/L  | 25.219 ppb  | 13:05:58 |
| 3 | Mg 279.077 IEC†    | 8.0       | -1.1      | -14.425 µg/L | -14.425 ppb | 13:06:18 |
| 3 | Na 589.592 Radial† | 112.6     | -78.0     | -39.474 µg/L | -39.474 ppb | 13:05:58 |
| 3 | Sr 421.552†        | 125.9     | -10.0     | -0.0607 µg/L | -0.0607 ppb | 13:05:58 |
| 3 | Sc 361.383         | 1948291.3 | 1948291.3 | 99.906 %     |             | 13:07:32 |
| 3 | Y 371.029          | 1331475.6 | 1331475.6 | 99.862 %     |             | 13:07:32 |
| 3 | Ag 328.068†        | -503.0    | 20.0      | 0.1646 µg/L  | 0.1646 ppb  | 13:07:38 |
| 3 | As 188.979†        | -2.7      | 0.7       | 1.0526 µg/L  | 1.0526 ppb  | 13:07:59 |
| 3 | B 249.677†         | 284.2     | 7.2       | 0.3469 µg/L  | 0.3469 ppb  | 13:07:59 |
| 3 | Ba 233.527†        | -31.9     | -4.9      | -0.1137 µg/L | -0.1137 ppb | 13:07:59 |
| 3 | Be 313.107†        | -1428.0   | 129.5     | 0.0803 µg/L  | 0.0803 ppb  | 13:07:38 |
| 3 | Cd 226.502†        | -157.4    | 7.8       | 0.1997 µg/L  | 0.1997 ppb  | 13:07:59 |
| 3 | Co 228.616†        | 30.6      | -3.8      | -0.1744 µg/L | -0.1744 ppb | 13:07:59 |
| 3 | Cr 267.716†        | 49.6      | -42.7     | -0.9958 µg/L | -0.9958 ppb | 13:07:38 |
| 3 | Cu 324.752†        | 4194.1    | -25.9     | -0.1781 µg/L | -0.1781 ppb | 13:07:38 |
| 3 | Mn 257.610†        | -504.4    | 234.6     | 0.7620 µg/L  | 0.7620 ppb  | 13:07:59 |
| 3 | Mo 202.031†        | 18.5      | 6.2       | 0.6469 µg/L  | 0.6469 ppb  | 13:07:59 |
| 3 | Ni 231.604†        | 368.3     | 11.2      | 0.6620 µg/L  | 0.6620 ppb  | 13:07:59 |
| 3 | P 214.914†         | 281.2     | -6.5      | -11.479 µg/L | -11.479 ppb | 13:07:59 |
| 3 | Pb 220.353†        | 36.5      | -3.0      | -0.8332 µg/L | -0.8332 ppb | 13:07:59 |
| 3 | S 181.975 Axial†   | 22.1      | -0.8      | -2.5846 µg/L | -2.5846 ppb | 13:07:59 |
| 3 | Sb 206.836†        | 29.3      | 1.5       | 1.4489 µg/L  | 1.4489 ppb  | 13:07:59 |
| 3 | Se 196.026†        | 18.3      | -3.4      | -3.4691 µg/L | -3.4691 ppb | 13:07:59 |
| 3 | SiO2†              | 2579.1    | -160.2    | -30.351 µg/L | -30.351 ppb | 13:07:38 |
| 3 | Si 251.611†        | 376.4     | -45.0     | -3.2034 µg/L | -3.2034 ppb | 13:07:59 |
| 3 | Sn 189.927†        | -9.6      | -4.4      | -1.8396 µg/L | -1.8396 ppb | 13:07:59 |
| 3 | Ti 334.940†        | -556.0    | 134.9     | 0.3323 µg/L  | 0.3323 ppb  | 13:07:38 |
| 3 | Tl 190.801†        | -33.6     | 0.7       | 0.7557 µg/L  | 0.7557 ppb  | 13:07:59 |
| 3 | U 409.014†         | -55.5     | -15.7     | -1.4639 µg/L | -1.4639 ppb | 13:07:38 |
| 3 | V 292.402†         | 55.5      | -43.7     | -0.5482 µg/L | -0.5482 ppb | 13:07:38 |
| 3 | Zn 213.857†        | 612.9     | -44.8     | -1.0861 µg/L | -1.0861 ppb | 13:07:59 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1955643.5                | 100.28 %           | 0.361    |                    |          | 0.36%   |
| Sc RADIAL   | 91832.9                  | 100 %              | 0.4      |                    |          | 0.43%   |
| Y 371.029   | 1336696.9                | 100.25 %           | 0.356    |                    |          | 0.36%   |
| Ag 328.068†   | 7.6                      | 0.0598 µg/L        | 0.18554  | 0.0598 ppb         | 0.18554  | 310.19% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 83.4                     | 40.821 µg/L        | 4.1013   | 40.821 ppb         | 4.1013   | 10.05%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 0.8                      | 1.2777 µg/L        | 0.95433  | 1.2777 ppb         | 0.95433  | 74.69%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | -0.3                     | -0.0103 µg/L       | 0.31654  | -0.0103 ppb        | 0.31654  | >999.9% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 1.7                      | 0.0379 µg/L        | 0.13256  | 0.0379 ppb         | 0.13256  | 349.91% |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 135.1                    | 0.0839 µg/L        | 0.00313  | 0.0839 ppb         | 0.00313  | 3.73%   |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 7.8                      | 2.9448 µg/L        | 1.39017  | 2.9448 ppb         | 1.39017  | 47.21%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | 3.9                      | 0.0997 µg/L        | 0.10363  | 0.0997 ppb         | 0.10363  | 103.96% |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -8.9                     | -0.4035 µg/L       | 0.20856  | -0.4035 ppb        | 0.20856  | 51.68%  |

|  |                 |        |              |          |             |          |         |
|--|-----------------|--------|--------------|----------|-------------|----------|---------|
| Cr   | 267.716†        | -19.3  | -0.4498 µg/L | 0.47715  | -0.4498 ppb | 0.47715  | 106.08% |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Cu   | 324.752†        | -13.4  | -0.0927 µg/L | 0.14078  | -0.0927 ppb | 0.14078  | 151.89% |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Fe   | 238.204 Radial† | -0.6   | -7.6415 µg/L | 11.46863 | -7.6415 ppb | 11.46863 | 150.08% |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| K  | 766.490 Radial† | 42.7   | 20.205 µg/L  | 11.8775  | 20.205 ppb  | 11.8775  | 58.79%  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |        |              |          |             |          |         |
| Mg   | 279.077 IEC†    | -0.7   | -9.7080 µg/L | 22.25136 | -9.7080 ppb | 22.25136 | 229.21% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |        |              |          |             |          |         |
| Mn   | 257.610†        | 246.8  | 0.8012 µg/L  | 0.03404  | 0.8012 ppb  | 0.03404  | 4.25%   |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |        |              |          |             |          |         |
| Mo   | 202.031†        | 2.0    | 0.2050 µg/L  | 0.59219  | 0.2050 ppb  | 0.59219  | 288.93% |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Na   | 589.592 Radial† | -30.6  | -15.474 µg/L | 29.8378  | -15.474 ppb | 29.8378  | 192.82% |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Ni   | 231.604†        | -2.4   | -0.1413 µg/L | 0.82659  | -0.1413 ppb | 0.82659  | 585.00% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |        |              |          |             |          |         |
| P  | 214.914†        | -2.9   | -5.1174 µg/L | 12.19275 | -5.1174 ppb | 12.19275 | 238.26% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Pb   | 220.353†        | 1.0    | 0.2775 µg/L  | 1.68810  | 0.2775 ppb  | 1.68810  | 608.26% |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| S  | 181.975 Axial†  | -3.2   | -10.669 µg/L | 7.9314   | -10.669 ppb | 7.9314   | 74.34%  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Sb   | 206.836†        | 1.6    | 1.4959 µg/L  | 2.57347  | 1.4959 ppb  | 2.57347  | 172.03% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |        |              |          |             |          |         |
| Se   | 196.026†        | -0.7   | -0.6723 µg/L | 2.59276  | -0.6723 ppb | 2.59276  | 385.66% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| SiO2†  |                 | -159.8 | -30.266 µg/L | 2.3174   | -30.266 ppb | 2.3174   | 7.66%   |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Si   | 251.611†        | -46.8  | -3.3311 µg/L | 0.60131  | -3.3311 ppb | 0.60131  | 18.05%  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |        |              |          |             |          |         |
| Sn   | 189.927†        | 1.1    | 0.4565 µg/L  | 2.11712  | 0.4565 ppb  | 2.11712  | 463.73% |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Sr   | 421.552†        | -20.8  | -0.1258 µg/L | 0.07724  | -0.1258 ppb | 0.07724  | 61.40%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Ti   | 334.940†        | 89.8   | 0.2212 µg/L  | 0.10542  | 0.2212 ppb  | 0.10542  | 47.67%  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| Tl   | 190.801†        | 1.6    | 1.7197 µg/L  | 1.73527  | 1.7197 ppb  | 1.73527  | 100.90% |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| U  | 409.014†        | 11.8   | 1.1044 µg/L  | 2.35664  | 1.1044 ppb  | 2.35664  | 213.39% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |        |              |          |             |          |         |
| V  | 292.402†        | -41.6  | -0.5208 µg/L | 0.10658  | -0.5208 ppb | 0.10658  | 20.47%  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| Zn   | 213.857†        | -44.2  | -1.0682 µg/L | 0.04817  | -1.0682 ppb | 0.04817  | 4.51%   |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |        |              |          |             |          |         |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |        |              |          |             |          |         |

All analyte(s) passed QC.



Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/15/2010 13:44:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 89853.1          | 89853.1                | 97.9 %                |                       | 13:45:01         |
| 1     | Al 396.153Radial†  | 9465.7           | 9830.7                 | 4802.6 µg/L           | 4802.6 ppb            | 13:45:01         |
| 1     | Ca 317.933Radial†  | 12730.4          | 12661.9                | 4764.7 µg/L           | 4764.7 ppb            | 13:45:01         |
| 1     | Fe 238.204 Radial† | 402.9            | 398.4                  | 4973.1 µg/L           | 4973.1 ppb            | 13:45:21         |
| 1     | K 766.490 Radial†  | 10108.8          | 9920.0                 | 4693.5 µg/L           | 4693.5 ppb            | 13:45:01         |
| 1     | Mg 279.077 IEC†    | 360.6            | 359.2                  | 4862.7 µg/L           | 4862.7 ppb            | 13:45:21         |
| 1     | Na 589.592 Radial† | 19486.5          | 19713.4                | 9970.7 µg/L           | 9970.7 ppb            | 13:45:01         |
| 1     | Sr 421.552†        | 78610.6          | 80157.8                | 485.46 µg/L           | 485.46 ppb            | 13:45:01         |
| 1     | Sc 361.383         | 1903740.2        | 1903740.2              | 97.622 %              |                       | 13:46:25         |
| 1     | Y 371.029          | 1299685.8        | 1299685.8              | 97.477 %              |                       | 13:46:25         |
| 1     | Ag 328.068†        | 56342.2          | 58238.4                | 493.78 µg/L           | 493.78 ppb            | 13:46:30         |
| 1     | As 188.979†        | 313.1            | 324.1                  | 504.16 µg/L           | 504.16 ppb            | 13:46:51         |
| 1     | B 249.677†         | 10133.4          | 10103.0                | 484.16 µg/L           | 484.16 ppb            | 13:46:30         |
| 1     | Ba 233.527†        | 20658.1          | 21188.5                | 491.12 µg/L           | 491.12 ppb            | 13:46:30         |
| 1     | Be 313.107†        | 768189.2         | 788463.1               | 489.88 µg/L           | 489.88 ppb            | 13:46:25         |
| 1     | Cd 226.502†        | 18593.7          | 19212.0                | 491.29 µg/L           | 491.29 ppb            | 13:46:30         |
| 1     | Co 228.616†        | 10596.5          | 10820.2                | 490.74 µg/L           | 490.74 ppb            | 13:46:30         |
| 1     | Cr 267.716†        | 21018.4          | 21438.1                | 500.53 µg/L           | 500.53 ppb            | 13:46:30         |
| 1     | Cu 324.752†        | 74826.2          | 72425.2                | 495.28 µg/L           | 495.28 ppb            | 13:46:30         |
| 1     | Mn 257.610†        | 149614.7         | 153999.1               | 499.78 µg/L           | 499.78 ppb            | 13:46:25         |
| 1     | Mo 202.031†        | 4780.9           | 4885.0                 | 512.91 µg/L           | 512.91 ppb            | 13:46:51         |
| 1     | Ni 231.604†        | 8487.0           | 8336.4                 | 492.68 µg/L           | 492.68 ppb            | 13:46:30         |
| 1     | P 214.914†         | 1674.7           | 1427.5                 | 2474.1 µg/L           | 2474.1 ppb            | 13:46:51         |
| 1     | Pb 220.353†        | 1780.8           | 1784.6                 | 497.36 µg/L           | 497.36 ppb            | 13:46:51         |
| 1     | S 181.975 Axial†   | 312.1            | 296.8                  | 986.68 µg/L           | 986.68 ppb            | 13:46:51         |
| 1     | Sb 206.836†        | 538.6            | 523.8                  | 501.14 µg/L           | 501.14 ppb            | 13:46:51         |
| 1     | Se 196.026†        | 502.9            | 493.4                  | 506.86 µg/L           | 506.86 ppb            | 13:46:51         |
| 1     | Si 202†            | 29405.8          | 27380.5                | 5186.5 µg/L           | 5186.5 ppb            | 13:46:30         |
| 1     | Si 251.611†        | 33720.5          | 34120.3                | 2430.6 µg/L           | 2430.6 ppb            | 13:46:30         |
| 1     | Sn 189.927†        | 1175.0           | 1208.9                 | 508.27 µg/L           | 508.27 ppb            | 13:46:51         |
| 1     | Ti 334.940†        | 194886.4         | 200325.7               | 491.47 µg/L           | 491.47 ppb            | 13:46:25         |
| 1     | Tl 190.801†        | 439.5            | 484.6                  | 510.03 µg/L           | 510.03 ppb            | 13:46:51         |
| 1     | U 409.014†         | 5167.3           | 5333.1                 | 496.48 µg/L           | 496.48 ppb            | 13:46:30         |
| 1     | V 292.402†         | 38496.2          | 39334.9                | 500.36 µg/L           | 500.36 ppb            | 13:46:30         |
| 1     | Zn 213.857†        | 20592.2          | 20435.5                | 490.79 µg/L           | 490.79 ppb            | 13:46:30         |
| 2     | Sc RADIAL          | 89680.9          | 89680.9                | 97.7 %                |                       | 13:45:27         |
| 2     | Al 396.153Radial†  | 9464.1           | 9847.7                 | 4811.1 µg/L           | 4811.1 ppb            | 13:45:27         |
| 2     | Ca 317.933Radial†  | 12743.7          | 12700.5                | 4779.3 µg/L           | 4779.3 ppb            | 13:45:27         |
| 2     | Fe 238.204 Radial† | 408.3            | 404.7                  | 5051.0 µg/L           | 5051.0 ppb            | 13:45:47         |
| 2     | K 766.490 Radial†  | 10077.3          | 9907.6                 | 4687.6 µg/L           | 4687.6 ppb            | 13:45:27         |
| 2     | Mg 279.077 IEC†    | 356.9            | 356.2                  | 4821.6 µg/L           | 4821.6 ppb            | 13:45:47         |
| 2     | Na 589.592 Radial† | 19484.4          | 19749.5                | 9988.9 µg/L           | 9988.9 ppb            | 13:45:27         |
| 2     | Sr 421.552†        | 78615.6          | 80317.1                | 486.43 µg/L           | 486.43 ppb            | 13:45:27         |
| 2     | Sc 361.383         | 1894257.2        | 1894257.2              | 97.135 %              |                       | 13:46:58         |
| 2     | Y 371.029          | 1293435.3        | 1293435.3              | 97.009 %              |                       | 13:46:58         |
| 2     | Ag 328.068†        | 56205.8          | 58386.8                | 495.06 µg/L           | 495.06 ppb            | 13:47:04         |
| 2     | As 188.979†        | 307.8            | 320.3                  | 498.22 µg/L           | 498.22 ppb            | 13:47:24         |
| 2     | B 249.677†         | 10075.8          | 10095.6                | 483.77 µg/L           | 483.77 ppb            | 13:47:04         |
| 2     | Ba 233.527†        | 20612.6          | 21247.5                | 492.49 µg/L           | 492.49 ppb            | 13:47:04         |
| 2     | Be 313.107†        | 766614.3         | 790781.1               | 491.32 µg/L           | 491.32 ppb            | 13:46:58         |
| 2     | Cd 226.502†        | 18577.6          | 19290.8                | 493.30 µg/L           | 493.30 ppb            | 13:47:04         |
| 2     | Co 228.616†        | 10600.2          | 10878.4                | 493.38 µg/L           | 493.38 ppb            | 13:47:04         |
| 2     | Cr 267.716†        | 20998.2          | 21525.2                | 502.56 µg/L           | 502.56 ppb            | 13:47:04         |
| 2     | Cu 324.752†        | 74603.2          | 72579.4                | 496.35 µg/L           | 496.35 ppb            | 13:47:04         |
| 2     | Mn 257.610†        | 149358.1         | 154502.2               | 501.42 µg/L           | 501.42 ppb            | 13:46:58         |
| 2     | Mo 202.031†        | 4674.4           | 4799.9                 | 503.99 µg/L           | 503.99 ppb            | 13:47:24         |
| 2     | Ni 231.604†        | 8467.7           | 8360.0                 | 494.08 µg/L           | 494.08 ppb            | 13:47:04         |
| 2     | P 214.914†         | 1651.4           | 1412.1                 | 2446.7 µg/L           | 2446.7 ppb            | 13:47:24         |
| 2     | Pb 220.353†        | 1773.5           | 1786.3                 | 497.81 µg/L           | 497.81 ppb            | 13:47:24         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 309.6     | 295.8     | 983.56 µg/L | 983.56 ppb | 13:47:24 |
| 2 | Sb 206.836†        | 536.5     | 524.4     | 501.55 µg/L | 501.55 ppb | 13:47:24 |
| 2 | Se 196.026†        | 503.6     | 496.6     | 510.41 µg/L | 510.41 ppb | 13:47:24 |
| 2 | SiO2†              | 29339.0   | 27462.5   | 5202.0 µg/L | 5202.0 ppb | 13:47:04 |
| 2 | Si 251.611†        | 33694.6   | 34266.6   | 2441.0 µg/L | 2441.0 ppb | 13:47:04 |
| 2 | Sn 189.927†        | 1155.4    | 1194.8    | 502.34 µg/L | 502.34 ppb | 13:47:24 |
| 2 | Ti 334.940†        | 194253.2  | 200673.3  | 492.32 µg/L | 492.32 ppb | 13:46:58 |
| 2 | Tl 190.801†        | 430.3     | 477.4     | 502.51 µg/L | 502.51 ppb | 13:47:24 |
| 2 | U 409.014†         | 5084.9    | 5274.8    | 491.03 µg/L | 491.03 ppb | 13:47:04 |
| 2 | V 292.402†         | 38499.8   | 39536.0   | 502.82 µg/L | 502.82 ppb | 13:47:04 |
| 2 | Zn 213.857†        | 20558.2   | 20506.1   | 492.49 µg/L | 492.49 ppb | 13:47:04 |
| 3 | Sc RADIAL          | 90094.6   | 90094.6   | 98.2 %      |            | 13:45:53 |
| 3 | Al 396.153Radial†  | 9448.0    | 9786.8    | 4783.1 µg/L | 4783.1 ppb | 13:45:53 |
| 3 | Ca 317.933Radial†  | 12785.3   | 12683.0   | 4772.7 µg/L | 4772.7 ppb | 13:45:53 |
| 3 | Fe 238.204 Radial† | 404.0     | 398.4     | 4971.9 µg/L | 4971.9 ppb | 13:46:13 |
| 3 | K 766.490 Radial†  | 10119.0   | 9902.7    | 4685.3 µg/L | 4685.3 ppb | 13:45:53 |
| 3 | Mg 279.077 IEC†    | 359.7     | 357.4     | 4836.3 µg/L | 4836.3 ppb | 13:46:13 |
| 3 | Na 589.592 Radial† | 19488.3   | 19661.9   | 9944.6 µg/L | 9944.6 ppb | 13:45:53 |
| 3 | Sr 421.552†        | 78695.0   | 80028.6   | 484.68 µg/L | 484.68 ppb | 13:45:53 |
| 3 | Sc 361.383         | 1887548.9 | 1887548.9 | 96.791 %    |            | 13:47:31 |
| 3 | Y 371.029          | 1288117.3 | 1288117.3 | 96.610 %    |            | 13:47:31 |
| 3 | Ag 328.068†        | 51993.1   | 54240.2   | 459.75 µg/L | 459.75 ppb | 13:47:37 |
| 3 | As 188.979†        | 256.6     | 268.5     | 417.51 µg/L | 417.51 ppb | 13:47:58 |
| 3 | B 249.677†         | 9267.4    | 9297.3    | 445.30 µg/L | 445.30 ppb | 13:47:37 |
| 3 | Ba 233.527†        | 18359.6   | 18995.3   | 440.28 µg/L | 440.28 ppb | 13:47:37 |
| 3 | Be 313.107†        | 696997.7  | 721661.6  | 448.38 µg/L | 448.38 ppb | 13:47:31 |
| 3 | Cd 226.502†        | 16471.7   | 17183.0   | 439.34 µg/L | 439.34 ppb | 13:47:37 |
| 3 | Co 228.616†        | 9319.2    | 9593.7    | 435.06 µg/L | 435.06 ppb | 13:47:37 |
| 3 | Cr 267.716†        | 17910.0   | 18411.4   | 429.87 µg/L | 429.87 ppb | 13:47:37 |
| 3 | Cu 324.752†        | 66133.3   | 64101.6   | 438.47 µg/L | 438.47 ppb | 13:47:37 |
| 3 | Mn 257.610†        | 136453.9  | 141716.7  | 459.92 µg/L | 459.92 ppb | 13:47:31 |
| 3 | Mo 202.031†        | 3837.7    | 3952.6    | 415.05 µg/L | 415.05 ppb | 13:47:58 |
| 3 | Ni 231.604†        | 7472.3    | 7362.5    | 435.13 µg/L | 435.13 ppb | 13:47:37 |
| 3 | P 214.914†         | 1423.3    | 1182.5    | 2046.0 µg/L | 2046.0 ppb | 13:47:58 |
| 3 | Pb 220.353†        | 1505.3    | 1515.6    | 422.38 µg/L | 422.38 ppb | 13:47:58 |
| 3 | S 181.975 Axial†   | 269.2     | 255.2     | 848.51 µg/L | 848.51 ppb | 13:47:58 |
| 3 | Sb 206.836†        | 457.7     | 445.0     | 425.36 µg/L | 425.36 ppb | 13:47:58 |
| 3 | Se 196.026†        | 435.1     | 427.7     | 440.96 µg/L | 440.96 ppb | 13:47:58 |
| 3 | SiO2†              | 26816.6   | 24963.8   | 4728.7 µg/L | 4728.7 ppb | 13:47:37 |
| 3 | Si 251.611†        | 30443.3   | 31030.8   | 2210.5 µg/L | 2210.5 ppb | 13:47:37 |
| 3 | Sn 189.927†        | 932.6     | 968.7     | 407.39 µg/L | 407.39 ppb | 13:47:58 |
| 3 | Ti 334.940†        | 175345.1  | 181849.1  | 446.11 µg/L | 446.11 ppb | 13:47:31 |
| 3 | Tl 190.801†        | 377.4     | 424.3     | 446.70 µg/L | 446.70 ppb | 13:47:58 |
| 3 | U 409.014†         | 4431.3    | 4618.1    | 429.79 µg/L | 429.79 ppb | 13:47:37 |
| 3 | V 292.402†         | 33665.7   | 34682.5   | 440.79 µg/L | 440.79 ppb | 13:47:37 |
| 3 | Zn 213.857†        | 18199.4   | 18144.4   | 435.72 µg/L | 435.72 ppb | 13:47:37 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1895182.1                | 97.183 %           | 0.4172   |                    |          | 0.43%  |
| Sc RADIAL   | 89876.2                  | 97.9 %             | 0.23     |                    |          | 0.23%  |
| Y 371.029   | 1293746.1                | 97.032 %           | 0.4343   |                    |          | 0.45%  |
| Ag 328.068†   | 56955.1                  | 482.86 µg/L        | 20.028   | 482.86 ppb         | 20.028   | 4.15%  |
| QC value within limits for Ag 328.068 Recovery = 96.57%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 9821.7                   | 4798.9 µg/L        | 14.35    | 4798.9 ppb         | 14.35    | 0.30%  |
| QC value within limits for Al 396.153Radial Recovery = 95.98% |                          |                    |          |                    |          |        |
| As 188.979†   | 304.3                    | 473.30 µg/L        | 48.403   | 473.30 ppb         | 48.403   | 10.23% |
| QC value within limits for As 188.979 Recovery = 94.66%       |                          |                    |          |                    |          |        |
| B 249.677†  | 9832.0                   | 471.08 µg/L        | 22.328   | 471.08 ppb         | 22.328   | 4.74%  |
| QC value within limits for B 249.677 Recovery = 94.22%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 20477.1                  | 474.63 µg/L        | 29.761   | 474.63 ppb         | 29.761   | 6.27%  |
| QC value within limits for Ba 233.527 Recovery = 94.93%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 766968.6                 | 476.53 µg/L        | 24.388   | 476.53 ppb         | 24.388   | 5.12%  |
| QC value within limits for Be 313.107 Recovery = 95.31%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 12681.8                  | 4772.2 µg/L        | 7.27     | 4772.2 ppb         | 7.27     | 0.15%  |
| QC value within limits for Ca 317.933Radial Recovery = 95.44% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 18561.9                  | 474.64 µg/L        | 30.590   | 474.64 ppb         | 30.590   | 6.44%  |
| QC value within limits for Cd 226.502 Recovery = 94.93%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 10430.8                  | 473.06 µg/L        | 32.937   | 473.06 ppb         | 32.937   | 6.96%  |

|  |                   |             |        |            |
|--|-------------------|-------------|--------|------------|
| QC value within limits for Co 228.616        | Recovery = 94.61% |             |        |            |
| Cr 267.716†                                  | 20458.2           | 477.65 µg/L | 41.395 | 477.65 ppb |
| QC value within limits for Cr 267.716        | Recovery = 95.53% |             |        |            |
| Cu 324.752†                                  | 69702.1           | 476.70 µg/L | 33.114 | 476.70 ppb |
| QC value within limits for Cu 324.752        | Recovery = 95.34% |             |        |            |
| Fe 238.204 Radial†                           | 400.5             | 4998.7 µg/L | 45.36  | 4998.7 ppb |
| QC value within limits for Fe 238.204 Radial | Recovery = 99.97% |             |        |            |
| K 766.490 Radial†                            | 9910.1            | 4688.8 µg/L | 4.23   | 4688.8 ppb |
| QC value within limits for K 766.490 Radial  | Recovery = 93.78% |             |        |            |
| Mg 279.077 IEC†                              | 357.6             | 4840.2 µg/L | 20.83  | 4840.2 ppb |
| QC value within limits for Mg 279.077 IEC    | Recovery = 96.80% |             |        |            |
| Mn 257.610†                                  | 150072.7          | 487.04 µg/L | 23.502 | 487.04 ppb |
| QC value within limits for Mn 257.610        | Recovery = 97.41% |             |        |            |
| Mo 202.031†                                  | 4545.8            | 477.32 µg/L | 54.109 | 477.32 ppb |
| QC value within limits for Mo 202.031        | Recovery = 95.46% |             |        |            |
| Na 589.592 Radial†                           | 19708.3           | 9968.1 µg/L | 22.27  | 9968.1 ppb |
| QC value within limits for Na 589.592 Radial | Recovery = 99.68% |             |        |            |
| Ni 231.604†                                  | 8019.6            | 473.97 µg/L | 33.636 | 473.97 ppb |
| QC value within limits for Ni 231.604        | Recovery = 94.79% |             |        |            |
| P 214.914†                                   | 1340.7            | 2322.3 µg/L | 239.69 | 2322.3 ppb |
| QC value within limits for P 214.914         | Recovery = 92.89% |             |        |            |
| Pb 220.353†                                  | 1695.5            | 472.52 µg/L | 43.422 | 472.52 ppb |
| QC value within limits for Pb 220.353        | Recovery = 94.50% |             |        |            |
| S 181.975 Axial†                             | 282.6             | 939.58 µg/L | 78.888 | 939.58 ppb |
| QC value within limits for S 181.975 Axial   | Recovery = 93.96% |             |        |            |
| Sb 206.836†                                  | 497.7             | 476.02 µg/L | 43.872 | 476.02 ppb |
| QC value within limits for Sb 206.836        | Recovery = 95.20% |             |        |            |
| Se 196.026†                                  | 472.6             | 486.08 µg/L | 39.114 | 486.08 ppb |
| QC value within limits for Se 196.026        | Recovery = 97.22% |             |        |            |
| SiO2†  | 26602.3           | 5039.0 µg/L | 268.89 | 5039.0 ppb |
| QC value within limits for SiO2              | Recovery = 94.23% |             |        |            |
| Si 251.611†                                  | 33139.2           | 2360.7 µg/L | 130.18 | 2360.7 ppb |
| QC value within limits for Si 251.611        | Recovery = 94.43% |             |        |            |
| Sn 189.927†                                  | 1124.1            | 472.67 µg/L | 56.605 | 472.67 ppb |
| QC value within limits for Sn 189.927        | Recovery = 94.53% |             |        |            |
| Sr 421.552†                                  | 80167.8           | 485.52 µg/L | 0.875  | 485.52 ppb |
| QC value within limits for Sr 421.552        | Recovery = 97.10% |             |        |            |
| Ti 334.940†                                  | 194282.7          | 476.63 µg/L | 26.437 | 476.63 ppb |
| QC value within limits for Ti 334.940        | Recovery = 95.33% |             |        |            |
| Tl 190.801†                                  | 462.1             | 486.41 µg/L | 34.597 | 486.41 ppb |
| QC value within limits for Tl 190.801        | Recovery = 97.28% |             |        |            |
| U 409.014†                                   | 5075.3            | 472.43 µg/L | 37.032 | 472.43 ppb |
| QC value within limits for U 409.014         | Recovery = 94.49% |             |        |            |
| V 292.402†                                   | 37851.1           | 481.32 µg/L | 35.125 | 481.32 ppb |
| QC value within limits for V 292.402         | Recovery = 96.26% |             |        |            |
| Zn 213.857†                                  | 19695.4           | 473.00 µg/L | 32.295 | 473.00 ppb |
| QC value within limits for Zn 213.857        | Recovery = 94.60% |             |        |            |

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/15/2010 13:48:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88969.0          | 88969.0                | 96.9 %                |                       | 13:48:38         |
| 1     | Al 396.153Radial†  | -134.7           | 23.5                   | 11.480 µg/L           | 11.480 ppb            | 13:48:38         |
| 1     | Ca 317.933Radial†  | 349.3            | 19.4                   | 7.2993 µg/L           | 7.2993 ppb            | 13:48:58         |
| 1     | Fe 238.204 Radial† | 14.8             | 2.2                    | 27.413 µg/L           | 27.413 ppb            | 13:48:58         |
| 1     | K 766.490 Radial†  | 426.5            | 34.8                   | 16.485 µg/L           | 16.485 ppb            | 13:48:38         |
| 1     | Mg 279.077 IEC†    | 9.4              | 0.7                    | 8.9358 µg/L           | 8.9358 ppb            | 13:48:58         |
| 1     | Na 589.592 Radial† | 189.0            | 4.8                    | 2.4340 µg/L           | 2.4340 ppb            | 13:48:38         |
| 1     | Sr 421.552†        | 133.9            | 2.8                    | 0.0167 µg/L           | 0.0167 ppb            | 13:48:38         |
| 1     | Sc 361.383         | 1876963.6        | 1876963.6              | 96.249 %              |                       | 13:50:00         |
| 1     | Y 371.029          | 1283961.5        | 1283961.5              | 96.298 %              |                       | 13:50:00         |
| 1     | Ag 328.068†        | -538.7           | -36.2                  | -0.3042 µg/L          | -0.3042 ppb           | 13:50:06         |
| 1     | As 188.979†        | -2.7             | 0.6                    | 0.9570 µg/L           | 0.9570 ppb            | 13:50:27         |
| 1     | B 249.677†         | 291.7            | 25.7                   | 1.2224 µg/L           | 1.2224 ppb            | 13:50:06         |
| 1     | Ba 233.527†        | -12.2            | 14.5                   | 0.3340 µg/L           | 0.3340 ppb            | 13:50:27         |
| 1     | Be 313.107†        | -1243.6          | 266.7                  | 0.1657 µg/L           | 0.1657 ppb            | 13:50:06         |
| 1     | Cd 226.502†        | -162.0           | -3.0                   | -0.0797 µg/L          | -0.0797 ppb           | 13:50:27         |
| 1     | Co 228.616†        | 26.6             | -6.8                   | -0.3084 µg/L          | -0.3084 ppb           | 13:50:27         |
| 1     | Cr 267.716†        | 74.3             | -15.1                  | -0.3524 µg/L          | -0.3524 ppb           | 13:50:06         |
| 1     | Cu 324.752†        | 4076.4           | 11.3                   | 0.0825 µg/L           | 0.0825 ppb            | 13:50:06         |
| 1     | Mn 257.610†        | -635.5           | 79.1                   | 0.2579 µg/L           | 0.2579 ppb            | 13:50:27         |
| 1     | Mo 202.031†        | 14.2             | 2.4                    | 0.2566 µg/L           | 0.2566 ppb            | 13:50:27         |
| 1     | Ni 231.604†        | 353.3            | 9.7                    | 0.5735 µg/L           | 0.5735 ppb            | 13:50:27         |
| 1     | P 214.914†         | 296.2            | 19.8                   | 34.883 µg/L           | 34.883 ppb            | 13:50:27         |
| 1     | Pb 220.353†        | 31.3             | -7.0                   | -1.9538 µg/L          | -1.9538 ppb           | 13:50:27         |
| 1     | S 181.975 Axial†   | 18.0             | -4.2                   | -13.899 µg/L          | -13.899 ppb           | 13:50:27         |
| 1     | Sb 206.836†        | 32.3             | 5.7                    | 5.4124 µg/L           | 5.4124 ppb            | 13:50:27         |
| 1     | Se 196.026†        | 22.7             | 1.8                    | 1.8639 µg/L           | 1.8639 ppb            | 13:50:27         |
| 1     | SiO2†              | 2524.4           | -118.9                 | -22.525 µg/L          | -22.525 ppb           | 13:50:06         |
| 1     | Si 251.611†        | 362.4            | -45.2                  | -3.2206 µg/L          | -3.2206 ppb           | 13:50:27         |
| 1     | Sn 189.927†        | -1.2             | 4.0                    | 1.6718 µg/L           | 1.6718 ppb            | 13:50:27         |
| 1     | Ti 334.940†        | -606.9           | 60.8                   | 0.1487 µg/L           | 0.1487 ppb            | 13:50:06         |
| 1     | Tl 190.801†        | -35.8            | -2.8                   | -2.9370 µg/L          | -2.9370 ppb           | 13:50:27         |
| 1     | U 409.014†         | -1.0             | 38.8                   | 3.6147 µg/L           | 3.6147 ppb            | 13:50:06         |
| 1     | V 292.402†         | 76.7             | -19.5                  | -0.2442 µg/L          | -0.2442 ppb           | 13:50:06         |
| 1     | Zn 213.857†        | 618.2            | -16.0                  | -0.3925 µg/L          | -0.3925 ppb           | 13:50:27         |
| 2     | Sc RADIAL          | 88454.2          | 88454.2                | 96.4 %                |                       | 13:49:04         |
| 2     | Al 396.153Radial†  | -123.6           | 34.2                   | 16.709 µg/L           | 16.709 ppb            | 13:49:04         |
| 2     | Ca 317.933Radial†  | 351.7            | 23.9                   | 9.0102 µg/L           | 9.0102 ppb            | 13:49:24         |
| 2     | Fe 238.204 Radial† | 15.1             | 2.6                    | 31.780 µg/L           | 31.780 ppb            | 13:49:24         |
| 2     | K 766.490 Radial†  | 414.7            | 25.2                   | 11.904 µg/L           | 11.904 ppb            | 13:49:04         |
| 2     | Mg 279.077 IEC†    | 8.6              | -0.1                   | -1.5380 µg/L          | -1.5380 ppb           | 13:49:24         |
| 2     | Na 589.592 Radial† | 235.3            | 53.9                   | 27.281 µg/L           | 27.281 ppb            | 13:49:04         |
| 2     | Sr 421.552†        | 140.1            | 10.0                   | 0.0606 µg/L           | 0.0606 ppb            | 13:49:04         |
| 2     | Sc 361.383         | 1874339.3        | 1874339.3              | 96.114 %              |                       | 13:50:33         |
| 2     | Y 371.029          | 1283541.8        | 1283541.8              | 96.267 %              |                       | 13:50:33         |
| 2     | Ag 328.068†        | -560.0           | -59.2                  | -0.4973 µg/L          | -0.4973 ppb           | 13:50:38         |
| 2     | As 188.979†        | -3.3             | -0.1                   | -0.1025 µg/L          | -0.1025 ppb           | 13:50:59         |
| 2     | B 249.677†         | 269.6            | 3.2                    | 0.1374 µg/L           | 0.1374 ppb            | 13:50:38         |
| 2     | Ba 233.527†        | -17.8            | 8.5                    | 0.1970 µg/L           | 0.1970 ppb            | 13:50:59         |
| 2     | Be 313.107†        | -1301.0          | 205.2                  | 0.1275 µg/L           | 0.1275 ppb            | 13:50:38         |
| 2     | Cd 226.502†        | -160.1           | -1.3                   | -0.0349 µg/L          | -0.0349 ppb           | 13:50:59         |
| 2     | Co 228.616†        | 28.9             | -4.4                   | -0.1992 µg/L          | -0.1992 ppb           | 13:50:59         |
| 2     | Cr 267.716†        | 76.0             | -13.2                  | -0.3083 µg/L          | -0.3083 ppb           | 13:50:38         |
| 2     | Cu 324.752†        | 4145.4           | 89.1                   | 0.6143 µg/L           | 0.6143 ppb            | 13:50:38         |
| 2     | Mn 257.610†        | -622.6           | 91.6                   | 0.2994 µg/L           | 0.2994 ppb            | 13:50:59         |
| 2     | Mo 202.031†        | 17.7             | 6.0                    | 0.6329 µg/L           | 0.6329 ppb            | 13:50:59         |
| 2     | Ni 231.604†        | 360.8            | 18.0                   | 1.0656 µg/L           | 1.0656 ppb            | 13:50:59         |
| 2     | P 214.914†         | 276.8            | -0.0                   | -0.0580 µg/L          | -0.0580 ppb           | 13:50:59         |
| 2     | Pb 220.353†        | 45.9             | 8.2                    | 2.2747 µg/L           | 2.2747 ppb            | 13:50:59         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.9      | -0.1      | -0.4043 µg/L | -0.4043 ppb | 13:50:59 |
| 2 | Sb 206.836†        | 33.7      | 7.2       | 6.8273 µg/L  | 6.8273 ppb  | 13:50:59 |
| 2 | Se 196.026†        | 22.2      | 1.3       | 1.4107 µg/L  | 1.4107 ppb  | 13:50:59 |
| 2 | SiO2†              | 2618.2    | -17.7     | -3.3518 µg/L | -3.3518 ppb | 13:50:38 |
| 2 | Si 251.611†        | 362.1     | -44.9     | -3.2015 µg/L | -3.2015 ppb | 13:50:59 |
| 2 | Sn 189.927†        | -0.3      | 4.9       | 2.0698 µg/L  | 2.0698 ppb  | 13:50:59 |
| 2 | Ti 334.940†        | -573.1    | 95.1      | 0.2337 µg/L  | 0.2337 ppb  | 13:50:38 |
| 2 | Tl 190.801†        | -30.0     | 3.2       | 3.3346 µg/L  | 3.3346 ppb  | 13:50:59 |
| 2 | U 409.014†         | -5.7      | 34.0      | 3.1656 µg/L  | 3.1656 ppb  | 13:50:38 |
| 2 | V 292.402†         | 74.3      | -21.9     | -0.2720 µg/L | -0.2720 ppb | 13:50:38 |
| 2 | Zn 213.857†        | 621.9     | -11.3     | -0.2799 µg/L | -0.2799 ppb | 13:50:59 |
| 3 | Sc RADIAL          | 88947.4   | 88947.4   | 96.9 %       |             | 13:49:30 |
| 3 | Al 396.153Radial†  | -123.7    | 34.8      | 17.038 µg/L  | 17.038 ppb  | 13:49:30 |
| 3 | Ca 317.933Radial†  | 341.3     | 11.2      | 4.2040 µg/L  | 4.2040 ppb  | 13:49:50 |
| 3 | Fe 238.204 Radial† | 15.9      | 3.3       | 41.050 µg/L  | 41.050 ppb  | 13:49:50 |
| 3 | K 766.490 Radial†  | 339.3     | -55.0     | -26.037 µg/L | -26.037 ppb | 13:49:30 |
| 3 | Mg 279.077 IEC†    | 7.7       | -1.1      | -14.555 µg/L | -14.555 ppb | 13:49:50 |
| 3 | Na 589.592 Radial† | 169.5     | -15.3     | -7.7313 µg/L | -7.7313 ppb | 13:49:30 |
| 3 | Sr 421.552†        | 127.5     | -3.8      | -0.0230 µg/L | -0.0230 ppb | 13:49:30 |
| 3 | Sc 361.383         | 1870280.8 | 1870280.8 | 95.906 %     |             | 13:51:05 |
| 3 | Y 371.029          | 1278129.8 | 1278129.8 | 95.861 %     |             | 13:51:05 |
| 3 | Ag 328.068†        | -539.4    | -38.9     | -0.3277 µg/L | -0.3277 ppb | 13:51:10 |
| 3 | As 188.979†        | -5.5      | -2.3      | -3.6293 µg/L | -3.6293 ppb | 13:51:31 |
| 3 | B 249.677†         | 273.1     | 7.5       | 0.3357 µg/L  | 0.3357 ppb  | 13:51:10 |
| 3 | Ba 233.527†        | -17.5     | 8.8       | 0.2029 µg/L  | 0.2029 ppb  | 13:51:31 |
| 3 | Be 313.107†        | -1267.5   | 237.2     | 0.1474 µg/L  | 0.1474 ppb  | 13:51:10 |
| 3 | Cd 226.502†        | -160.3    | -1.9      | -0.0505 µg/L | -0.0505 ppb | 13:51:31 |
| 3 | Co 228.616†        | 29.1      | -4.0      | -0.1831 µg/L | -0.1831 ppb | 13:51:31 |
| 3 | Cr 267.716†        | 54.7      | -35.3     | -0.8230 µg/L | -0.8230 ppb | 13:51:10 |
| 3 | Cu 324.752†        | 4115.5    | 67.2      | 0.4665 µg/L  | 0.4665 ppb  | 13:51:10 |
| 3 | Mn 257.610†        | -627.1    | 85.5      | 0.2811 µg/L  | 0.2811 ppb  | 13:51:31 |
| 3 | Mo 202.031†        | 16.9      | 5.3       | 0.5583 µg/L  | 0.5583 ppb  | 13:51:31 |
| 3 | Ni 231.604†        | 370.6     | 29.0      | 1.7159 µg/L  | 1.7159 ppb  | 13:51:31 |
| 3 | P 214.914†         | 275.1     | -1.1      | -2.0189 µg/L | -2.0189 ppb | 13:51:31 |
| 3 | Pb 220.353†        | 34.9      | -3.2      | -0.9054 µg/L | -0.9054 ppb | 13:51:31 |
| 3 | S 181.975 Axial†   | 23.7      | 1.7       | 5.7738 µg/L  | 5.7738 ppb  | 13:51:31 |
| 3 | Sb 206.836†        | 27.5      | 0.8       | 0.7428 µg/L  | 0.7428 ppb  | 13:51:31 |
| 3 | Se 196.026†        | 17.1      | -4.0      | -3.8461 µg/L | -3.8461 ppb | 13:51:31 |
| 3 | SiO2†              | 2529.1    | -104.7    | -19.824 µg/L | -19.824 ppb | 13:51:10 |
| 3 | Si 251.611†        | 363.6     | -42.6     | -3.0333 µg/L | -3.0333 ppb | 13:51:31 |
| 3 | Sn 189.927†        | -3.9      | 1.2       | 0.4995 µg/L  | 0.4995 ppb  | 13:51:31 |
| 3 | Ti 334.940†        | -658.4    | 4.8       | 0.0130 µg/L  | 0.0130 ppb  | 13:51:10 |
| 3 | Tl 190.801†        | -37.7     | -4.9      | -5.0804 µg/L | -5.0804 ppb | 13:51:31 |
| 3 | U 409.014†         | 64.4      | 107.0     | 9.9749 µg/L  | 9.9749 ppb  | 13:51:10 |
| 3 | V 292.402†         | 56.6      | -40.1     | -0.4979 µg/L | -0.4979 ppb | 13:51:10 |
| 3 | Zn 213.857†        | 636.3     | 5.1       | 0.1146 µg/L  | 0.1146 ppb  | 13:51:31 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1873861.3                | 96.090 %           | 0.1727   |                    |          | 0.18%   |
| Sc RADIAL   | 88790.2                  | 96.7 %             | 0.32     |                    |          | 0.33%   |
| Y 371.029   | 1281877.7                | 96.142 %           | 0.2439   |                    |          | 0.25%   |
| Ag 328.068†   | -44.8                    | -0.3764 µg/L       | 0.10534  | -0.3764 ppb        | 0.10534  | 27.99%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 30.8                     | 15.076 µg/L        | 3.1181   | 15.076 ppb         | 3.1181   | 20.68%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.6                     | -0.9250 µg/L       | 2.40121  | -0.9250 ppb        | 2.40121  | 259.60% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 12.1                     | 0.5651 µg/L        | 0.57778  | 0.5651 ppb         | 0.57778  | 102.24% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 10.6                     | 0.2446 µg/L        | 0.07748  | 0.2446 ppb         | 0.07748  | 31.67%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 236.4                    | 0.1469 µg/L        | 0.01913  | 0.1469 ppb         | 0.01913  | 13.02%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 18.2                     | 6.8378 µg/L        | 2.43612  | 6.8378 ppb         | 2.43612  | 35.63%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -2.0                     | -0.0551 µg/L       | 0.02274  | -0.0551 ppb        | 0.02274  | 41.29%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -5.1                     | -0.2302 µg/L       | 0.06818  | -0.2302 ppb        | 0.06818  | 29.62%  |

|                    |  |                           |          |             |
|--------------------|--|---------------------------|----------|-------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |
|                    | -21.2  | -0.4945 µg/L              | 0.28527  | -0.4945 ppb |
|                    |  |                           | 0.28527  | 57.68%      |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |
|                    | 55.9   | 0.3878 µg/L               | 0.27452  | 0.3878 ppb  |
|                    |  |                           | 0.27452  | 70.80%      |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |
|                    | 2.7  | 33.415 µg/L               | 6.9638   | 33.415 ppb  |
|                    |  |                           | 6.9638   | 20.84%      |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |
|                    | 1.7  | 0.7840 µg/L               | 23.34029 | 0.7840 ppb  |
|                    |  |                           | 23.34029 | >999.9%     |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |
|                    | -0.2   | -2.3857 µg/L              | 11.76840 | -2.3857 ppb |
|                    |  |                           | 11.76840 | 493.28%     |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |
|                    | 85.4   | 0.2794 µg/L               | 0.02078  | 0.2794 ppb  |
|                    |  |                           | 0.02078  | 7.44%       |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |
|                    | 4.6  | 0.4826 µg/L               | 0.19923  | 0.4826 ppb  |
|                    |  |                           | 0.19923  | 41.28%      |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |
|                    | 14.5   | 7.3279 µg/L               | 18.01191 | 7.3279 ppb  |
|                    |  |                           | 18.01191 | 245.80%     |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |
|                    | 18.9   | 1.1183 µg/L               | 0.57303  | 1.1183 ppb  |
|                    |  |                           | 0.57303  | 51.24%      |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |
|                    | 6.2  | 10.935 µg/L               | 20.7625  | 10.935 ppb  |
|                    |  |                           | 20.7625  | 189.86%     |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |
|                    | -0.7   | -0.1948 µg/L              | 2.20199  | -0.1948 ppb |
|                    |  |                           | 2.20199  | >999.9%     |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |
|                    | -0.9   | -2.8432 µg/L              | 10.06064 | -2.8432 ppb |
|                    |  |                           | 10.06064 | 353.85%     |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |
|                    | 4.5  | 4.3275 µg/L               | 3.18400  | 4.3275 ppb  |
|                    |  |                           | 3.18400  | 73.58%      |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |
|                    | -0.3   | -0.1905 µg/L              | 3.17394  | -0.1905 ppb |
|                    |  |                           | 3.17394  | >999.9%     |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |
|                    | -80.4  | -15.233 µg/L              | 10.3781  | -15.233 ppb |
|                    |  |                           | 10.3781  | 68.13%      |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |
|                    | -44.2  | -3.1518 µg/L              | 0.10306  | -3.1518 ppb |
|                    |  |                           | 0.10306  | 3.27%       |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |
|                    | 3.4  | 1.4137 µg/L               | 0.81635  | 1.4137 ppb  |
|                    |  |                           | 0.81635  | 57.75%      |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |
|                    | 3.0  | 0.0181 µg/L               | 0.04180  | 0.0181 ppb  |
|                    |  |                           | 0.04180  | 230.83%     |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |
|                    | 53.6   | 0.1318 µg/L               | 0.11132  | 0.1318 ppb  |
|                    |  |                           | 0.11132  | 84.44%      |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |
|                    | -1.5   | -1.5609 µg/L              | 4.37300  | -1.5609 ppb |
|                    |  |                           | 4.37300  | 280.15%     |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |
|                    | 59.9   | 5.5851 µg/L               | 3.80831  | 5.5851 ppb  |
|                    |  |                           | 3.80831  | 68.19%      |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |
|                    | -27.2  | -0.3380 µg/L              | 0.13912  | -0.3380 ppb |
|                    |  |                           | 0.13912  | 41.16%      |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |
|                    | -7.4   | -0.1859 µg/L              | 0.26628  | -0.1859 ppb |
|                    |  |                           | 0.26628  | 143.21%     |
|                    |  |                           |          |             |

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/15/2010 13:58:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 90651.5          | 90651.5                | 98.8 %                |                       | 13:58:34         |
| 1     | Al 396.153Radial†  | 9583.1           | 9864.5                 | 4818.7 µg/L           | 4818.7 ppb            | 13:58:34         |
| 1     | Ca 317.933Radial†  | 13161.3          | 12983.6                | 4885.8 µg/L           | 4885.8 ppb            | 13:58:34         |
| 1     | Fe 238.204 Radial† | 430.4            | 422.6                  | 5274.6 µg/L           | 5274.6 ppb            | 13:58:55         |
| 1     | K 766.490 Radial†  | 10164.8          | 9885.8                 | 4677.3 µg/L           | 4677.3 ppb            | 13:58:34         |
| 1     | Mg 279.077 IEC†    | 376.8            | 372.4                  | 5041.2 µg/L           | 5041.2 ppb            | 13:58:55         |
| 1     | Na 589.592 Radial† | 21262.3          | 21336.0                | 10791 µg/L            | 10791 ppb             | 13:58:34         |
| 1     | Sr 421.552†        | 82244.7          | 83129.8                | 503.46 µg/L           | 503.46 ppb            | 13:58:34         |
| 1     | Sc 361.383         | 1870086.0        | 1870086.0              | 95.896 %              |                       | 13:59:58         |
| 1     | Y 371.029          | 1276013.5        | 1276013.5              | 95.702 %              |                       | 13:59:58         |
| 1     | Ag 328.068†        | 57278.0          | 60252.8                | 510.90 µg/L           | 510.90 ppb            | 14:00:04         |
| 1     | As 188.979†        | 322.4            | 339.6                  | 528.29 µg/L           | 528.29 ppb            | 14:00:24         |
| 1     | B 249.677†         | 10337.5          | 10502.6                | 503.26 µg/L           | 503.26 ppb            | 14:00:04         |
| 1     | Ba 233.527†        | 21054.1          | 21982.3                | 509.53 µg/L           | 509.53 ppb            | 14:00:04         |
| 1     | Be 313.107†        | 785138.4         | 820298.9               | 509.66 µg/L           | 509.66 ppb            | 13:59:58         |
| 1     | Cd 226.502†        | 19009.7          | 19988.6                | 511.14 µg/L           | 511.14 ppb            | 14:00:04         |
| 1     | Co 228.616†        | 10819.2          | 11247.8                | 510.14 µg/L           | 510.14 ppb            | 14:00:04         |
| 1     | Cr 267.716†        | 21509.4          | 22337.6                | 521.53 µg/L           | 521.53 ppb            | 14:00:04         |
| 1     | Cu 324.752†        | 75903.4          | 74927.9                | 512.42 µg/L           | 512.42 ppb            | 14:00:04         |
| 1     | Mn 257.610†        | 153083.8         | 160374.8               | 520.48 µg/L           | 520.48 ppb            | 13:59:58         |
| 1     | Mo 202.031†        | 4908.9           | 5106.7                 | 536.19 µg/L           | 536.19 ppb            | 14:00:24         |
| 1     | Ni 231.604†        | 8639.7           | 8652.0                 | 511.34 µg/L           | 511.34 ppb            | 14:00:04         |
| 1     | P 214.914†         | 1711.6           | 1496.8                 | 2594.9 µg/L           | 2594.9 ppb            | 14:00:24         |
| 1     | Pb 220.353†        | 1847.6           | 1887.1                 | 525.92 µg/L           | 525.92 ppb            | 14:00:24         |
| 1     | S 181.975 Axial†   | 320.2            | 310.9                  | 1033.8 µg/L           | 1033.8 ppb            | 14:00:24         |
| 1     | Sb 206.836†        | 556.1            | 552.1                  | 528.16 µg/L           | 528.16 ppb            | 14:00:24         |
| 1     | Se 196.026†        | 523.9            | 524.5                  | 538.88 µg/L           | 538.88 ppb            | 14:00:24         |
| 1     | SiO2†              | 29825.1          | 28359.9                | 5372.0 µg/L           | 5372.0 ppb            | 14:00:04         |
| 1     | Si 251.611†        | 34194.8          | 35236.6                | 2510.1 µg/L           | 2510.1 ppb            | 14:00:04         |
| 1     | Sn 189.927†        | 1207.7           | 1264.6                 | 531.70 µg/L           | 531.70 ppb            | 14:00:24         |
| 1     | Ti 334.940†        | 198646.2         | 207839.0               | 509.90 µg/L           | 509.90 ppb            | 13:59:58         |
| 1     | Tl 190.801†        | 446.0            | 499.5                  | 525.73 µg/L           | 525.73 ppb            | 14:00:24         |
| 1     | U 409.014†         | 5244.4           | 5508.7                 | 512.81 µg/L           | 512.81 ppb            | 14:00:04         |
| 1     | V 292.402†         | 39430.0          | 41018.3                | 521.77 µg/L           | 521.77 ppb            | 14:00:04         |
| 1     | Zn 213.857†        | 20974.8          | 21214.2                | 509.49 µg/L           | 509.49 ppb            | 14:00:04         |
| 2     | Sc RADIAL          | 91415.9          | 91415.9                | 99.6 %                |                       | 13:59:00         |
| 2     | Al 396.153Radial†  | 9610.1           | 9810.4                 | 4792.5 µg/L           | 4792.5 ppb            | 13:59:00         |
| 2     | Ca 317.933Radial†  | 13282.9          | 12994.3                | 4889.8 µg/L           | 4889.8 ppb            | 13:59:00         |
| 2     | Fe 238.204 Radial† | 428.7            | 417.3                  | 5208.4 µg/L           | 5208.4 ppb            | 13:59:20         |
| 2     | K 766.490 Radial†  | 10311.0          | 9946.4                 | 4706.0 µg/L           | 4706.0 ppb            | 13:59:00         |
| 2     | Mg 279.077 IEC†    | 376.7            | 369.1                  | 4996.8 µg/L           | 4996.8 ppb            | 13:59:20         |
| 2     | Na 589.592 Radial† | 21336.1          | 21230.0                | 10738 µg/L            | 10738 ppb             | 13:59:00         |
| 2     | Sr 421.552†        | 83000.1          | 83191.9                | 503.84 µg/L           | 503.84 ppb            | 13:59:00         |
| 2     | Sc 361.383         | 1868751.4        | 1868751.4              | 95.827 %              |                       | 14:00:31         |
| 2     | Y 371.029          | 1276965.6        | 1276965.6              | 95.773 %              |                       | 14:00:31         |
| 2     | Ag 328.068†        | 57319.7          | 60339.0                | 511.62 µg/L           | 511.62 ppb            | 14:00:37         |
| 2     | As 188.979†        | 308.5            | 325.3                  | 505.93 µg/L           | 505.93 ppb            | 14:00:57         |
| 2     | B 249.677†         | 10324.5          | 10496.7                | 503.01 µg/L           | 503.01 ppb            | 14:00:37         |
| 2     | Ba 233.527†        | 21083.3          | 22028.4                | 510.60 µg/L           | 510.60 ppb            | 14:00:37         |
| 2     | Be 313.107†        | 785714.1         | 821484.3               | 510.40 µg/L           | 510.40 ppb            | 14:00:31         |
| 2     | Cd 226.502†        | 19084.0          | 20080.2                | 513.49 µg/L           | 513.49 ppb            | 14:00:37         |
| 2     | Co 228.616†        | 10854.1          | 11292.2                | 512.14 µg/L           | 512.14 ppb            | 14:00:37         |
| 2     | Cr 267.716†        | 21503.0          | 22347.0                | 521.75 µg/L           | 521.75 ppb            | 14:00:37         |
| 2     | Cu 324.752†        | 76278.9          | 75376.3                | 515.47 µg/L           | 515.47 ppb            | 14:00:37         |
| 2     | Mn 257.610†        | 153262.3         | 160675.0               | 521.45 µg/L           | 521.45 ppb            | 14:00:31         |
| 2     | Mo 202.031†        | 4759.5           | 4954.3                 | 520.20 µg/L           | 520.20 ppb            | 14:00:57         |
| 2     | Ni 231.604†        | 8673.2           | 8693.5                 | 513.79 µg/L           | 513.79 ppb            | 14:00:37         |
| 2     | P 214.914†         | 1660.1           | 1444.4                 | 2501.9 µg/L           | 2501.9 ppb            | 14:00:57         |
| 2     | Pb 220.353†        | 1789.0           | 1827.3                 | 509.23 µg/L           | 509.23 ppb            | 14:00:57         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 314.9     | 305.7     | 1016.3 µg/L | 1016.3 ppb | 14:00:57 |
| 2 | Sb 206.836†        | 545.2     | 541.1     | 517.44 µg/L | 517.44 ppb | 14:00:57 |
| 2 | Se 196.026†        | 505.5     | 505.7     | 519.91 µg/L | 519.91 ppb | 14:00:57 |
| 2 | SiO2†              | 29964.2   | 28527.2   | 5403.7 µg/L | 5403.7 ppb | 14:00:37 |
| 2 | Si 251.611†        | 34463.9   | 35542.8   | 2531.9 µg/L | 2531.9 ppb | 14:00:37 |
| 2 | Sn 189.927†        | 1180.5    | 1237.1    | 520.14 µg/L | 520.14 ppb | 14:00:57 |
| 2 | Ti 334.940†        | 199024.9  | 208382.2  | 511.24 µg/L | 511.24 ppb | 14:00:31 |
| 2 | Tl 190.801†        | 438.9     | 492.3     | 518.30 µg/L | 518.30 ppb | 14:00:57 |
| 2 | U 409.014†         | 5344.9    | 5617.5    | 522.97 µg/L | 522.97 ppb | 14:00:37 |
| 2 | V 292.402†         | 39402.5   | 41019.0   | 521.67 µg/L | 521.67 ppb | 14:00:37 |
| 2 | Zn 213.857†        | 21058.3   | 21316.9   | 511.97 µg/L | 511.97 ppb | 14:00:37 |
| 3 | Sc RADIAL          | 90930.9   | 90930.9   | 99.1 %      |            | 13:59:26 |
| 3 | Al 396.153Radial†  | 9536.4    | 9787.5    | 4783.1 µg/L | 4783.1 ppb | 13:59:26 |
| 3 | Ca 317.933Radial†  | 13212.2   | 12994.1   | 4889.8 µg/L | 4889.8 ppb | 13:59:26 |
| 3 | Fe 238.204 Radial† | 429.9     | 420.8     | 5251.1 µg/L | 5251.1 ppb | 13:59:46 |
| 3 | K 766.490 Radial†  | 10217.0   | 9906.9    | 4687.2 µg/L | 4687.2 ppb | 13:59:26 |
| 3 | Mg 279.077 IEC†    | 380.7     | 375.1     | 5076.4 µg/L | 5076.4 ppb | 13:59:46 |
| 3 | Na 589.592 Radial† | 21145.6   | 21152.0   | 10698 µg/L  | 10698 ppb  | 13:59:26 |
| 3 | Sr 421.552†        | 82515.2   | 83147.0   | 503.56 µg/L | 503.56 ppb | 13:59:26 |
| 3 | Sc 361.383         | 1858492.0 | 1858492.0 | 95.301 %    |            | 14:01:05 |
| 3 | Y 371.029          | 1268160.0 | 1268160.0 | 95.113 %    |            | 14:01:05 |
| 3 | Ag 328.068†        | 53470.4   | 56630.1   | 480.03 µg/L | 480.03 ppb | 14:01:10 |
| 3 | As 188.979†        | 262.4     | 278.7     | 433.31 µg/L | 433.31 ppb | 14:01:31 |
| 3 | B 249.677†         | 9607.5    | 9803.8    | 469.55 µg/L | 469.55 ppb | 14:01:10 |
| 3 | Ba 233.527†        | 18935.1   | 19895.8   | 461.15 µg/L | 461.15 ppb | 14:01:10 |
| 3 | Be 313.107†        | 712062.0  | 748727.2  | 465.19 µg/L | 465.19 ppb | 14:01:05 |
| 3 | Cd 226.502†        | 17093.6   | 18101.6   | 462.83 µg/L | 462.83 ppb | 14:01:10 |
| 3 | Co 228.616†        | 9639.6    | 10080.4   | 457.14 µg/L | 457.14 ppb | 14:01:10 |
| 3 | Cr 267.716†        | 18553.0   | 19375.4   | 452.37 µg/L | 452.37 ppb | 14:01:10 |
| 3 | Cu 324.752†        | 68317.2   | 67461.4   | 461.45 µg/L | 461.45 ppb | 14:01:10 |
| 3 | Mn 257.610†        | 139287.7  | 146894.4  | 476.72 µg/L | 476.72 ppb | 14:01:05 |
| 3 | Mo 202.031†        | 3931.6    | 4113.1    | 431.90 µg/L | 431.90 ppb | 14:01:31 |
| 3 | Ni 231.604†        | 7771.5    | 7797.2    | 460.83 µg/L | 460.83 ppb | 14:01:10 |
| 3 | P 214.914†         | 1442.9    | 1226.1    | 2120.4 µg/L | 2120.4 ppb | 14:01:31 |
| 3 | Pb 220.353†        | 1535.3    | 1571.4    | 437.88 µg/L | 437.88 ppb | 14:01:31 |
| 3 | S 181.975 Axial†   | 271.5     | 262.0     | 871.00 µg/L | 871.00 ppb | 14:01:31 |
| 3 | Sb 206.836†        | 465.9     | 461.1     | 440.63 µg/L | 440.63 ppb | 14:01:31 |
| 3 | Se 196.026†        | 436.8     | 436.5     | 450.54 µg/L | 450.54 ppb | 14:01:31 |
| 3 | SiO2†              | 27534.7   | 26150.5   | 4953.5 µg/L | 4953.5 ppb | 14:01:10 |
| 3 | Si 251.611†        | 31434.1   | 32562.2   | 2319.6 µg/L | 2319.6 ppb | 14:01:10 |
| 3 | Sn 189.927†        | 951.8     | 1004.0    | 422.21 µg/L | 422.21 ppb | 14:01:31 |
| 3 | Ti 334.940†        | 179147.5  | 188671.3  | 462.84 µg/L | 462.84 ppb | 14:01:05 |
| 3 | Tl 190.801†        | 391.7     | 445.4     | 468.85 µg/L | 468.85 ppb | 14:01:31 |
| 3 | U 409.014†         | 4650.2    | 4919.3    | 457.84 µg/L | 457.84 ppb | 14:01:10 |
| 3 | V 292.402†         | 34847.0   | 36465.9   | 463.42 µg/L | 463.42 ppb | 14:01:10 |
| 3 | Zn 213.857†        | 18815.3   | 19084.7   | 458.29 µg/L | 458.29 ppb | 14:01:10 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383  | 1865776.5                | 95.675 %           | 0.3253   |                    |          | 0.34%  |
| Sc RADIAL   | 90999.4                  | 99.2 %             | 0.42     |                    |          | 0.43%  |
| Y 371.029   | 1273713.0                | 95.529 %           | 0.3624   |                    |          | 0.38%  |
| Ag 328.068†   | 59074.0                  | 500.85 µg/L        | 18.034   | 500.85 ppb         | 18.034   | 3.60%  |
| QC value within limits for Ag 328.068 Recovery = 100.17%      |                          |                    |          |                    |          |        |
| Al 396.153Radial†   | 9820.8                   | 4798.1 µg/L        | 18.41    | 4798.1 ppb         | 18.41    | 0.38%  |
| QC value within limits for Al 396.153Radial Recovery = 95.96% |                          |                    |          |                    |          |        |
| As 188.979†   | 314.5                    | 489.18 µg/L        | 49.657   | 489.18 ppb         | 49.657   | 10.15% |
| QC value within limits for As 188.979 Recovery = 97.84%       |                          |                    |          |                    |          |        |
| B 249.677†  | 10267.7                  | 491.94 µg/L        | 19.391   | 491.94 ppb         | 19.391   | 3.94%  |
| QC value within limits for B 249.677 Recovery = 98.39%        |                          |                    |          |                    |          |        |
| Ba 233.527†   | 21302.2                  | 493.76 µg/L        | 28.244   | 493.76 ppb         | 28.244   | 5.72%  |
| QC value within limits for Ba 233.527 Recovery = 98.75%       |                          |                    |          |                    |          |        |
| Be 313.107†   | 796836.8                 | 495.08 µg/L        | 25.888   | 495.08 ppb         | 25.888   | 5.23%  |
| QC value within limits for Be 313.107 Recovery = 99.02%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†   | 12990.7                  | 4888.5 µg/L        | 2.30     | 4888.5 ppb         | 2.30     | 0.05%  |
| QC value within limits for Ca 317.933Radial Recovery = 97.77% |                          |                    |          |                    |          |        |
| Cd 226.502†   | 19390.2                  | 495.82 µg/L        | 28.595   | 495.82 ppb         | 28.595   | 5.77%  |
| QC value within limits for Cd 226.502 Recovery = 99.16%       |                          |                    |          |                    |          |        |
| Co 228.616†   | 10873.5                  | 493.14 µg/L        | 31.195   | 493.14 ppb         | 31.195   | 6.33%  |



|  |                    |             |        |                          |
|--|--------------------|-------------|--------|--------------------------|
| QC value within limits for Co 228.616        | Recovery = 98.63%  |             |        |                          |
| Cr 267.716†                                  | 21353.3            | 498.55 µg/L | 39.989 | 498.55 ppb 39.989 8.02%  |
| QC value within limits for Cr 267.716        | Recovery = 99.71%  |             |        |                          |
| Cu 324.752†                                  | 72588.5            | 496.45 µg/L | 30.345 | 496.45 ppb 30.345 6.11%  |
| QC value within limits for Cu 324.752        | Recovery = 99.29%  |             |        |                          |
| Fe 238.204 Radial†                           | 420.2              | 5244.7 µg/L | 33.56  | 5244.7 ppb 33.56 0.64%   |
| QC value within limits for Fe 238.204 Radial | Recovery = 104.89% |             |        |                          |
| K 766.490 Radial†                            | 9913.0             | 4690.2 µg/L | 14.57  | 4690.2 ppb 14.57 0.31%   |
| QC value within limits for K 766.490 Radial  | Recovery = 93.80%  |             |        |                          |
| Mg 279.077 IEC†                              | 372.2              | 5038.1 µg/L | 39.90  | 5038.1 ppb 39.90 0.79%   |
| QC value within limits for Mg 279.077 IEC    | Recovery = 100.76% |             |        |                          |
| Mn 257.610†                                  | 155981.4           | 506.22 µg/L | 25.548 | 506.22 ppb 25.548 5.05%  |
| QC value within limits for Mn 257.610        | Recovery = 101.24% |             |        |                          |
| Mo 202.031†                                  | 4724.7             | 496.10 µg/L | 56.167 | 496.10 ppb 56.167 11.32% |
| QC value within limits for Mo 202.031        | Recovery = 99.22%  |             |        |                          |
| Na 589.592 Radial†                           | 21239.3            | 10742 µg/L  | 46.7   | 10742 ppb 46.7 0.43%     |
| QC value within limits for Na 589.592 Radial | Recovery = 107.42% |             |        |                          |
| Ni 231.604†                                  | 8380.9             | 495.32 µg/L | 29.895 | 495.32 ppb 29.895 6.04%  |
| QC value within limits for Ni 231.604        | Recovery = 99.06%  |             |        |                          |
| P 214.914†                                   | 1389.1             | 2405.7 µg/L | 251.45 | 2405.7 ppb 251.45 10.45% |
| QC value within limits for P 214.914         | Recovery = 96.23%  |             |        |                          |
| Pb 220.353†                                  | 1761.9             | 491.01 µg/L | 46.762 | 491.01 ppb 46.762 9.52%  |
| QC value within limits for Pb 220.353        | Recovery = 98.20%  |             |        |                          |
| S 181.975 Axial†                             | 292.9              | 973.72 µg/L | 89.385 | 973.72 ppb 89.385 9.18%  |
| QC value within limits for S 181.975 Axial   | Recovery = 97.37%  |             |        |                          |
| Sb 206.836†                                  | 518.1              | 495.41 µg/L | 47.744 | 495.41 ppb 47.744 9.64%  |
| QC value within limits for Sb 206.836        | Recovery = 99.08%  |             |        |                          |
| Se 196.026†                                  | 488.9              | 503.11 µg/L | 46.501 | 503.11 ppb 46.501 9.24%  |
| QC value within limits for Se 196.026        | Recovery = 100.62% |             |        |                          |
| SiO2†  | 27679.2            | 5243.0 µg/L | 251.27 | 5243.0 ppb 251.27 4.79%  |
| QC value within limits for SiO2              | Recovery = 98.05%  |             |        |                          |
| Si 251.611†                                  | 34447.2            | 2453.8 µg/L | 116.80 | 2453.8 ppb 116.80 4.76%  |
| QC value within limits for Si 251.611        | Recovery = 98.15%  |             |        |                          |
| Sn 189.927†                                  | 1168.6             | 491.35 µg/L | 60.159 | 491.35 ppb 60.159 12.24% |
| QC value within limits for Sn 189.927        | Recovery = 98.27%  |             |        |                          |
| Sr 421.552†                                  | 83156.3            | 503.62 µg/L | 0.194  | 503.62 ppb 0.194 0.04%   |
| QC value within limits for Sr 421.552        | Recovery = 100.72% |             |        |                          |
| Ti 334.940†                                  | 201630.8           | 494.66 µg/L | 27.563 | 494.66 ppb 27.563 5.57%  |
| QC value within limits for Ti 334.940        | Recovery = 98.93%  |             |        |                          |
| Tl 190.801†                                  | 479.1              | 504.30 µg/L | 30.918 | 504.30 ppb 30.918 6.13%  |
| QC value within limits for Tl 190.801        | Recovery = 100.86% |             |        |                          |
| U 409.014†                                   | 5348.5             | 497.87 µg/L | 35.041 | 497.87 ppb 35.041 7.04%  |
| QC value within limits for U 409.014         | Recovery = 99.57%  |             |        |                          |
| V 292.402†                                   | 39501.0            | 502.29 µg/L | 33.659 | 502.29 ppb 33.659 6.70%  |
| QC value within limits for V 292.402         | Recovery = 100.46% |             |        |                          |
| Zn 213.857†                                  | 20538.6            | 493.25 µg/L | 30.301 | 493.25 ppb 30.301 6.14%  |
| QC value within limits for Zn 213.857        | Recovery = 98.65%  |             |        |                          |

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 3/15/2010 14:01:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87345.5          | 87345.5                | 95.2 %                |                       | 14:02:12         |
| 1     | Al 396.153Radial†  | 264.9            | 440.8                  | 215.59 µg/L           | 215.59 ppb            | 14:02:12         |
| 1     | Ca 317.933Radial†  | 825.7            | 526.6                  | 198.18 µg/L           | 198.18 ppb            | 14:02:32         |
| 1     | Fe 238.204 Radial† | 20.6             | 8.6                    | 106.72 µg/L           | 106.72 ppb            | 14:02:32         |
| 1     | K 766.490 Radial†  | 613.5            | 239.4                  | 113.28 µg/L           | 113.28 ppb            | 14:02:12         |
| 1     | Mg 279.077 IEC†    | 32.0             | 24.5                   | 332.13 µg/L           | 332.13 ppb            | 14:02:32         |
| 1     | Na 589.592 Radial† | 886.8            | 741.7                  | 375.11 µg/L           | 375.11 ppb            | 14:02:12         |
| 1     | Sr 421.552†        | 949.9            | 862.8                  | 5.2253 µg/L           | 5.2253 ppb            | 14:02:12         |
| 1     | Sc 361.383         | 1844520.2        | 1844520.2              | 94.585 %              |                       | 14:03:34         |
| 1     | Y 371.029          | 1262706.7        | 1262706.7              | 94.704 %              |                       | 14:03:34         |
| 1     | Ag 328.068†        | 93.4             | 622.2                  | 5.2797 µg/L           | 5.2797 ppb            | 14:03:40         |
| 1     | As 188.979†        | 15.7             | 19.9                   | 31.106 µg/L           | 31.106 ppb            | 14:04:00         |
| 1     | B 249.677†         | 1282.7           | 1078.8                 | 51.844 µg/L           | 51.844 ppb            | 14:03:40         |
| 1     | Ba 233.527†        | 188.9            | 226.9                  | 5.2581 µg/L           | 5.2581 ppb            | 14:04:00         |
| 1     | Be 313.107†        | 6479.6           | 8409.4                 | 5.2247 µg/L           | 5.2247 ppb            | 14:03:40         |
| 1     | Cd 226.502†        | 28.5             | 195.4                  | 4.9931 µg/L           | 4.9931 ppb            | 14:04:00         |
| 1     | Co 228.616†        | 136.7            | 110.2                  | 5.0013 µg/L           | 5.0013 ppb            | 14:04:00         |
| 1     | Cr 267.716†        | 283.4            | 207.3                  | 4.8405 µg/L           | 4.8405 ppb            | 14:03:40         |
| 1     | Cu 324.752†        | 5532.3           | 1625.1                 | 11.112 µg/L           | 11.112 ppb            | 14:03:40         |
| 1     | Mn 257.610†        | 2469.2           | 3349.9                 | 10.856 µg/L           | 10.856 ppb            | 14:03:40         |
| 1     | Mo 202.031†        | 120.2            | 114.7                  | 12.048 µg/L           | 12.048 ppb            | 14:04:00         |
| 1     | Ni 231.604†        | 441.8            | 109.6                  | 6.4811 µg/L           | 6.4811 ppb            | 14:04:00         |
| 1     | P 214.914†         | 363.0            | 95.8                   | 168.24 µg/L           | 168.24 ppb            | 14:04:00         |
| 1     | Pb 220.353†        | 83.0             | 48.2                   | 13.395 µg/L           | 13.395 ppb            | 14:04:00         |
| 1     | S 181.975 Axial†   | 50.8             | 30.7                   | 102.17 µg/L           | 102.17 ppb            | 14:04:00         |
| 1     | Sb 206.836†        | 40.8             | 15.2                   | 14.637 µg/L           | 14.637 ppb            | 14:04:00         |
| 1     | Se 196.026†        | 49.7             | 30.7                   | 30.917 µg/L           | 30.917 ppb            | 14:04:00         |
| 1     | SiO2†              | 3694.5           | 1164.3                 | 220.54 µg/L           | 220.54 ppb            | 14:03:40         |
| 1     | Si 251.611†        | 1731.9           | 1409.3                 | 100.39 µg/L           | 100.39 ppb            | 14:03:40         |
| 1     | Sn 189.927†        | 18.5             | 24.8                   | 10.443 µg/L           | 10.443 ppb            | 14:04:00         |
| 1     | Ti 334.940†        | 1436.2           | 2209.8                 | 5.4016 µg/L           | 5.4016 ppb            | 14:03:40         |
| 1     | Tl 190.801†        | -14.2            | 19.4                   | 20.287 µg/L           | 20.287 ppb            | 14:04:00         |
| 1     | U 409.014†         | 553.3            | 624.9                  | 58.259 µg/L           | 58.259 ppb            | 14:03:40         |
| 1     | V 292.402†         | 491.1            | 420.0                  | 5.4401 µg/L           | 5.4401 ppb            | 14:03:40         |
| 1     | Zn 213.857†        | 1038.7           | 439.9                  | 10.569 µg/L           | 10.569 ppb            | 14:04:00         |
| 2     | Sc RADIAL          | 88258.1          | 88258.1                | 96.2 %                |                       | 14:02:38         |
| 2     | Al 396.153Radial†  | 259.3            | 432.0                  | 211.29 µg/L           | 211.29 ppb            | 14:02:38         |
| 2     | Ca 317.933Radial†  | 815.7            | 507.2                  | 190.87 µg/L           | 190.87 ppb            | 14:02:58         |
| 2     | Fe 238.204 Radial† | 22.0             | 9.8                    | 122.23 µg/L           | 122.23 ppb            | 14:02:58         |
| 2     | K 766.490 Radial†  | 649.9            | 270.7                  | 128.06 µg/L           | 128.06 ppb            | 14:02:38         |
| 2     | Mg 279.077 IEC†    | 29.2             | 21.3                   | 287.65 µg/L           | 287.65 ppb            | 14:02:58         |
| 2     | Na 589.592 Radial† | 869.5            | 714.0                  | 361.11 µg/L           | 361.11 ppb            | 14:02:38         |
| 2     | Sr 421.552†        | 939.2            | 841.3                  | 5.0950 µg/L           | 5.0950 ppb            | 14:02:38         |
| 2     | Sc 361.383         | 1851123.9        | 1851123.9              | 94.924 %              |                       | 14:04:06         |
| 2     | Y 371.029          | 1267057.6        | 1267057.6              | 95.030 %              |                       | 14:04:06         |
| 2     | Ag 328.068†        | 124.3            | 654.4                  | 5.5531 µg/L           | 5.5531 ppb            | 14:04:12         |
| 2     | As 188.979†        | 17.0             | 21.3                   | 33.245 µg/L           | 33.245 ppb            | 14:04:32         |
| 2     | B 249.677†         | 1317.9           | 1111.1                 | 53.386 µg/L           | 53.386 ppb            | 14:04:12         |
| 2     | Ba 233.527†        | 186.1            | 223.2                  | 5.1735 µg/L           | 5.1735 ppb            | 14:04:32         |
| 2     | Be 313.107†        | 6695.3           | 8612.2                 | 5.3508 µg/L           | 5.3508 ppb            | 14:04:12         |
| 2     | Cd 226.502†        | 21.9             | 188.4                  | 4.8096 µg/L           | 4.8096 ppb            | 14:04:32         |
| 2     | Co 228.616†        | 143.9            | 117.2                  | 5.3193 µg/L           | 5.3193 ppb            | 14:04:32         |
| 2     | Cr 267.716†        | 297.2            | 220.7                  | 5.1537 µg/L           | 5.1537 ppb            | 14:04:12         |
| 2     | Cu 324.752†        | 5634.9           | 1712.3                 | 11.711 µg/L           | 11.711 ppb            | 14:04:12         |
| 2     | Mn 257.610†        | 2480.2           | 3352.2                 | 10.868 µg/L           | 10.868 ppb            | 14:04:12         |
| 2     | Mo 202.031†        | 113.5            | 107.2                  | 11.255 µg/L           | 11.255 ppb            | 14:04:32         |
| 2     | Ni 231.604†        | 435.0            | 100.8                  | 5.9575 µg/L           | 5.9575 ppb            | 14:04:32         |
| 2     | P 214.914†         | 359.1            | 90.4                   | 158.51 µg/L           | 158.51 ppb            | 14:04:32         |
| 2     | Pb 220.353†        | 71.7             | 35.9                   | 9.9739 µg/L           | 9.9739 ppb            | 14:04:32         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 46.2      | 25.7      | 85.499 µg/L | 85.499 ppb | 14:04:32 |
| 2 | Sb 206.836†        | 39.5      | 13.8      | 13.245 µg/L | 13.245 ppb | 14:04:32 |
| 2 | Se 196.026†        | 51.6      | 32.6      | 32.831 µg/L | 32.831 ppb | 14:04:32 |
| 2 | SiO2†              | 3682.6    | 1137.8    | 215.53 µg/L | 215.53 ppb | 14:04:12 |
| 2 | Si 251.611†        | 1763.8    | 1436.4    | 102.32 µg/L | 102.32 ppb | 14:04:12 |
| 2 | Sn 189.927†        | 19.6      | 25.9      | 10.897 µg/L | 10.897 ppb | 14:04:32 |
| 2 | Ti 334.940†        | 1442.1    | 2210.6    | 5.4071 µg/L | 5.4071 ppb | 14:04:12 |
| 2 | Tl 190.801†        | -14.1     | 19.5      | 20.408 µg/L | 20.408 ppb | 14:04:32 |
| 2 | U 409.014†         | 558.6     | 628.3     | 58.581 µg/L | 58.581 ppb | 14:04:12 |
| 2 | V 292.402†         | 503.9     | 431.6     | 5.5796 µg/L | 5.5796 ppb | 14:04:12 |
| 2 | Zn 213.857†        | 1028.6    | 425.3     | 10.219 µg/L | 10.219 ppb | 14:04:32 |
| 3 | Sc RADIAL          | 87632.7   | 87632.7   | 95.5 %      |            | 14:03:04 |
| 3 | Al 396.153Radial†  | 224.3     | 397.3     | 194.33 µg/L | 194.33 ppb | 14:03:04 |
| 3 | Ca 317.933Radial†  | 817.5     | 515.2     | 193.88 µg/L | 193.88 ppb | 14:03:24 |
| 3 | Fe 238.204 Radial† | 20.6      | 8.4       | 105.14 µg/L | 105.14 ppb | 14:03:24 |
| 3 | K 766.490 Radial†  | 713.5     | 342.0     | 161.83 µg/L | 161.83 ppb | 14:03:04 |
| 3 | Mg 279.077 IEC†    | 28.3      | 20.6      | 278.88 µg/L | 278.88 ppb | 14:03:24 |
| 3 | Na 589.592 Radial† | 848.2     | 698.2     | 353.12 µg/L | 353.12 ppb | 14:03:04 |
| 3 | Sr 421.552†        | 949.4     | 859.0     | 5.2024 µg/L | 5.2024 ppb | 14:03:04 |
| 3 | Sc 361.383         | 1853842.4 | 1853842.4 | 95.063 %    |            | 14:04:39 |
| 3 | Y 371.029          | 1269742.4 | 1269742.4 | 95.232 %    |            | 14:04:39 |
| 3 | Ag 328.068†        | 60.2      | 586.8     | 4.9791 µg/L | 4.9791 ppb | 14:04:44 |
| 3 | As 188.979†        | 17.3      | 21.6      | 33.685 µg/L | 33.685 ppb | 14:05:05 |
| 3 | B 249.677†         | 1223.8    | 1010.1    | 48.536 µg/L | 48.536 ppb | 14:04:44 |
| 3 | Ba 233.527†        | 157.0     | 192.3     | 4.4578 µg/L | 4.4578 ppb | 14:05:05 |
| 3 | Be 313.107†        | 5890.7    | 7755.4    | 4.8185 µg/L | 4.8185 ppb | 14:04:44 |
| 3 | Cd 226.502†        | 4.3       | 169.9     | 4.3382 µg/L | 4.3382 ppb | 14:05:05 |
| 3 | Co 228.616†        | 115.1     | 86.7      | 3.9353 µg/L | 3.9353 ppb | 14:05:05 |
| 3 | Cr 267.716†        | 263.8     | 185.1     | 4.3229 µg/L | 4.3229 ppb | 14:04:44 |
| 3 | Cu 324.752†        | 5541.6    | 1605.5    | 10.978 µg/L | 10.978 ppb | 14:04:44 |
| 3 | Mn 257.610†        | 2169.9    | 3021.9    | 9.7953 µg/L | 9.7953 ppb | 14:04:44 |
| 3 | Mo 202.031†        | 101.4     | 94.3      | 9.9048 µg/L | 9.9048 ppb | 14:05:05 |
| 3 | Ni 231.604†        | 434.0     | 99.1      | 5.8575 µg/L | 5.8575 ppb | 14:05:05 |
| 3 | P 214.914†         | 349.9     | 80.1      | 140.35 µg/L | 140.35 ppb | 14:05:05 |
| 3 | Pb 220.353†        | 70.4      | 34.4      | 9.5553 µg/L | 9.5553 ppb | 14:05:05 |
| 3 | S 181.975 Axial†   | 49.2      | 28.8      | 95.730 µg/L | 95.730 ppb | 14:05:05 |
| 3 | Sb 206.836†        | 36.2      | 10.2      | 9.8478 µg/L | 9.8478 ppb | 14:05:05 |
| 3 | Se 196.026†        | 51.2      | 32.1      | 32.283 µg/L | 32.283 ppb | 14:05:05 |
| 3 | SiO2†              | 3578.6    | 1022.7    | 193.72 µg/L | 193.72 ppb | 14:04:44 |
| 3 | Si 251.611†        | 1690.5    | 1356.6    | 96.636 µg/L | 96.636 ppb | 14:04:44 |
| 3 | Sn 189.927†        | 13.1      | 19.0      | 8.0090 µg/L | 8.0090 ppb | 14:05:05 |
| 3 | Ti 334.940†        | 1227.6    | 1982.7    | 4.8483 µg/L | 4.8483 ppb | 14:04:44 |
| 3 | Tl 190.801†        | -16.1     | 17.4      | 18.269 µg/L | 18.269 ppb | 14:05:05 |
| 3 | U 409.014†         | 526.1     | 593.3     | 55.319 µg/L | 55.319 ppb | 14:04:44 |
| 3 | V 292.402†         | 465.2     | 390.2     | 5.0445 µg/L | 5.0445 ppb | 14:04:44 |
| 3 | Zn 213.857†        | 994.5     | 387.9     | 9.3172 µg/L | 9.3172 ppb | 14:05:05 |

## Mean Data: PQL

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1849828.8                | 94.857 %           | 0.2458   |                    |          | 0.26%  |
| Sc RADIAL  | 87745.4                  | 95.6 %             | 0.51     |                    |          | 0.53%  |
| Y 371.029  | 1266502.3                | 94.989 %           | 0.2663   |                    |          | 0.28%  |
| Ag 328.068†  | 621.2                    | 5.2706 µg/L        | 0.28707  | 5.2706 ppb         | 0.28707  | 5.45%  |
| QC value within limits for Ag 328.068 Recovery = 105.41%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 423.4                    | 207.07 µg/L        | 11.242   | 207.07 ppb         | 11.242   | 5.43%  |
| QC value within limits for Al 396.153Radial Recovery = 103.53% |                          |                    |          |                    |          |        |
| As 188.979†  | 21.0                     | 32.679 µg/L        | 1.3795   | 32.679 ppb         | 1.3795   | 4.22%  |
| QC value within limits for As 188.979 Recovery = 108.93%       |                          |                    |          |                    |          |        |
| B 249.677†   | 1066.7                   | 51.255 µg/L        | 2.4782   | 51.255 ppb         | 2.4782   | 4.83%  |
| QC value within limits for B 249.677 Recovery = 102.51%        |                          |                    |          |                    |          |        |
| Ba 233.527†  | 214.1                    | 4.9631 µg/L        | 0.43964  | 4.9631 ppb         | 0.43964  | 8.86%  |
| QC value within limits for Ba 233.527 Recovery = 99.26%        |                          |                    |          |                    |          |        |
| Be 313.107†  | 8259.0                   | 5.1313 µg/L        | 0.27816  | 5.1313 ppb         | 0.27816  | 5.42%  |
| QC value within limits for Be 313.107 Recovery = 102.63%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 516.4                    | 194.31 µg/L        | 3.676    | 194.31 ppb         | 3.676    | 1.89%  |
| QC value within limits for Ca 317.933Radial Recovery = 97.15%  |                          |                    |          |                    |          |        |
| Cd 226.502†  | 184.6                    | 4.7137 µg/L        | 0.33782  | 4.7137 ppb         | 0.33782  | 7.17%  |
| QC value within limits for Cd 226.502 Recovery = 94.27%        |                          |                    |          |                    |          |        |
| Co 228.616†  | 104.7                    | 4.7520 µg/L        | 0.72495  | 4.7520 ppb         | 0.72495  | 15.26% |

|   |        |             |         |            |         |        |  |
|---|--------|-------------|---------|------------|---------|--------|--|
| QC value within limits for Co 228.616 Recovery = 95.04%         |        |             |         |            |         |        |  |
| Cr 267.716†   | 204.4  | 4.7724 µg/L | 0.41956 | 4.7724 ppb | 0.41956 | 8.79%  |  |
| QC value within limits for Cr 267.716 Recovery = 95.45%         |        |             |         |            |         |        |  |
| Cu 324.752†   | 1647.6 | 11.267 µg/L | 0.3900  | 11.267 ppb | 0.3900  | 3.46%  |  |
| QC value within limits for Cu 324.752 Recovery = 112.67%        |        |             |         |            |         |        |  |
| Fe 238.204 Radial†  | 8.9    | 111.36 µg/L | 9.443   | 111.36 ppb | 9.443   | 8.48%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = 111.36% |        |             |         |            |         |        |  |
| K 766.490 Radial†   | 284.0  | 134.39 µg/L | 24.884  | 134.39 ppb | 24.884  | 18.52% |  |
| QC value within limits for K 766.490 Radial Recovery = 89.59%   |        |             |         |            |         |        |  |
| Mg 279.077 IEC†   | 22.1   | 299.55 µg/L | 28.551  | 299.55 ppb | 28.551  | 9.53%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 99.85%     |        |             |         |            |         |        |  |
| Mn 257.610†   | 3241.4 | 10.506 µg/L | 0.6159  | 10.506 ppb | 0.6159  | 5.86%  |  |
| QC value within limits for Mn 257.610 Recovery = 105.06%        |        |             |         |            |         |        |  |
| Mo 202.031†   | 105.4  | 11.069 µg/L | 1.0836  | 11.069 ppb | 1.0836  | 9.79%  |  |
| QC value within limits for Mo 202.031 Recovery = 110.69%        |        |             |         |            |         |        |  |
| Na 589.592 Radial†  | 717.9  | 363.12 µg/L | 11.132  | 363.12 ppb | 11.132  | 3.07%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 121.04% |        |             |         |            |         |        |  |
| Ni 231.604†   | 103.2  | 6.0987 µg/L | 0.33495 | 6.0987 ppb | 0.33495 | 5.49%  |  |
| QC value within limits for Ni 231.604 Recovery = 121.97%        |        |             |         |            |         |        |  |
| P 214.914†  | 88.8   | 155.70 µg/L | 14.155  | 155.70 ppb | 14.155  | 9.09%  |  |
| QC value within limits for P 214.914 Recovery = 103.80%         |        |             |         |            |         |        |  |
| Pb 220.353†   | 39.5   | 10.975 µg/L | 2.1066  | 10.975 ppb | 2.1066  | 19.19% |  |
| QC value within limits for Pb 220.353 Recovery = 109.75%        |        |             |         |            |         |        |  |
| S 181.975 Axial†  | 28.4   | 94.468 µg/L | 8.4089  | 94.468 ppb | 8.4089  | 8.90%  |  |
| QC value within limits for S 181.975 Axial Recovery = 94.47%    |        |             |         |            |         |        |  |
| Sb 206.836†   | 13.1   | 12.576 µg/L | 2.4633  | 12.576 ppb | 2.4633  | 19.59% |  |
| QC value within limits for Sb 206.836 Recovery = 125.76%        |        |             |         |            |         |        |  |
| Se 196.026†   | 31.8   | 32.011 µg/L | 0.9856  | 32.011 ppb | 0.9856  | 3.08%  |  |
| QC value within limits for Se 196.026 Recovery = 106.70%        |        |             |         |            |         |        |  |
| SiO2†   | 1108.3 | 209.93 µg/L | 14.259  | 209.93 ppb | 14.259  | 6.79%  |  |
| QC value within limits for SiO2 Recovery = 98.56%               |        |             |         |            |         |        |  |
| Si 251.611†   | 1400.8 | 99.784 µg/L | 2.8923  | 99.784 ppb | 2.8923  | 2.90%  |  |
| QC value within limits for Si 251.611 Recovery = 99.78%         |        |             |         |            |         |        |  |
| Sn 189.927†   | 23.2   | 9.7830 µg/L | 1.55300 | 9.7830 ppb | 1.55300 | 15.87% |  |
| QC value within limits for Sn 189.927 Recovery = 97.83%         |        |             |         |            |         |        |  |
| Sr 421.552†   | 854.4  | 5.1743 µg/L | 0.06959 | 5.1743 ppb | 0.06959 | 1.34%  |  |
| QC value within limits for Sr 421.552 Recovery = 103.49%        |        |             |         |            |         |        |  |
| Ti 334.940†   | 2134.4 | 5.2190 µg/L | 0.32105 | 5.2190 ppb | 0.32105 | 6.15%  |  |
| QC value within limits for Ti 334.940 Recovery = 104.38%        |        |             |         |            |         |        |  |
| Tl 190.801†   | 18.7   | 19.655 µg/L | 1.2019  | 19.655 ppb | 1.2019  | 6.12%  |  |
| QC value within limits for Tl 190.801 Recovery = 98.27%         |        |             |         |            |         |        |  |
| U 409.014†  | 615.5  | 57.386 µg/L | 1.7974  | 57.386 ppb | 1.7974  | 3.13%  |  |
| QC value within limits for U 409.014 Recovery = 114.77%         |        |             |         |            |         |        |  |
| V 292.402†  | 413.9  | 5.3547 µg/L | 0.27756 | 5.3547 ppb | 0.27756 | 5.18%  |  |
| QC value within limits for V 292.402 Recovery = 107.09%         |        |             |         |            |         |        |  |
| Zn 213.857†   | 417.7  | 10.035 µg/L | 0.6459  | 10.035 ppb | 0.6459  | 6.44%  |  |
| QC value within limits for Zn 213.857 Recovery = 100.35%        |        |             |         |            |         |        |  |

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/15/2010 14:05:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Rep# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1    | Sc RADIAL          | 87471.4       | 87471.4             | 95.3 %             |                    | 14:05:46      |
| 1    | Al 396.153Radial†  | -126.3        | 30.0                | 14.693 µg/L        | 14.693 ppb         | 14:05:46      |
| 1    | Ca 317.933Radial†  | 337.0         | 12.6                | 4.7457 µg/L        | 4.7457 ppb         | 14:06:06      |
| 1    | Fe 238.204 Radial† | 13.5          | 1.1                 | 13.724 µg/L        | 13.724 ppb         | 14:06:06      |
| 1    | K 766.490 Radial†  | 356.0         | -31.7               | -14.987 µg/L       | -14.987 ppb        | 14:05:46      |
| 1    | Mg 279.077 IEC†    | 7.3           | -1.4                | -18.638 µg/L       | -18.638 ppb        | 14:06:06      |
| 1    | Na 589.592 Radial† | 232.6         | 53.9                | 27.249 µg/L        | 27.249 ppb         | 14:05:46      |
| 1    | Sr 421.552†        | 162.9         | 35.6                | 0.2155 µg/L        | 0.2155 ppb         | 14:05:46      |
| 1    | Sc 361.383         | 1850658.2     | 1850658.2           | 94.900 %           |                    | 14:07:08      |
| 1    | Y 371.029          | 1267838.2     | 1267838.2           | 95.089 %           |                    | 14:07:08      |
| 1    | Ag 328.068†        | -497.7        | -0.9                | -0.0096 µg/L       | -0.0096 ppb        | 14:07:14      |
| 1    | As 188.979†        | -4.2          | -1.1                | -1.7151 µg/L       | -1.7151 ppb        | 14:07:34      |
| 1    | B 249.677†         | 300.4         | 39.2                | 1.8785 µg/L        | 1.8785 ppb         | 14:07:14      |
| 1    | Ba 233.527†        | -10.9         | 15.6                | 0.3594 µg/L        | 0.3594 ppb         | 14:07:34      |
| 1    | Be 313.107†        | -1184.8       | 310.3               | 0.1929 µg/L        | 0.1929 ppb         | 14:07:14      |
| 1    | Cd 226.502†        | -164.6        | -8.1                | -0.2089 µg/L       | -0.2089 ppb        | 14:07:34      |
| 1    | Co 228.616†        | 20.1          | -13.2               | -0.6023 µg/L       | -0.6023 ppb        | 14:07:34      |
| 1    | Cr 267.716†        | 85.6          | -2.1                | -0.0496 µg/L       | -0.0496 ppb        | 14:07:14      |
| 1    | Cu 324.752†        | 4079.8        | 75.2                | 0.5157 µg/L        | 0.5157 ppb         | 14:07:14      |
| 1    | Mn 257.610†        | -658.7        | 45.3                | 0.1492 µg/L        | 0.1492 ppb         | 14:07:34      |
| 1    | Mo 202.031†        | 4.8           | -7.3                | -0.7681 µg/L       | -0.7681 ppb        | 14:07:34      |
| 1    | Ni 231.604†        | 347.9         | 9.1                 | 0.5401 µg/L        | 0.5401 ppb         | 14:07:34      |
| 1    | P 214.914†         | 279.0         | 6.0                 | 10.548 µg/L        | 10.548 ppb         | 14:07:34      |
| 1    | Pb 220.353†        | 39.0          | 1.5                 | 0.4123 µg/L        | 0.4123 ppb         | 14:07:34      |
| 1    | S 181.975 Axial†   | 26.3          | 4.8                 | 15.798 µg/L        | 15.798 ppb         | 14:07:34      |
| 1    | Sb 206.836†        | 25.0          | -1.5                | -1.4858 µg/L       | -1.4858 ppb        | 14:07:34      |
| 1    | Se 196.026†        | 15.7          | -5.3                | -5.2368 µg/L       | -5.2368 ppb        | 14:07:34      |
| 1    | SiO2†              | 2564.5        | -39.4               | -7.4538 µg/L       | -7.4538 ppb        | 14:07:14      |
| 1    | Si 251.611†        | 360.5         | -41.8               | -2.9790 µg/L       | -2.9790 ppb        | 14:07:34      |
| 1    | Sn 189.927†        | -3.9          | 1.1                 | 0.4746 µg/L        | 0.4746 ppb         | 14:07:34      |
| 1    | Ti 334.940†        | -656.4        | -0.3                | 0.0008 µg/L        | 0.0008 ppb         | 14:07:14      |
| 1    | Tl 190.801†        | -31.3         | 1.4                 | 1.4439 µg/L        | 1.4439 ppb         | 14:07:34      |
| 1    | U 409.014†         | 11.3          | 51.8                | 4.8257 µg/L        | 4.8257 ppb         | 14:07:14      |
| 1    | V 292.402†         | 63.3          | -32.5               | -0.4125 µg/L       | -0.4125 ppb        | 14:07:14      |
| 1    | Zn 213.857†        | 624.7         | -0.0                | -0.0033 µg/L       | -0.0033 ppb        | 14:07:34      |
| 2    | Sc RADIAL          | 87392.0       | 87392.0             | 95.2 %             |                    | 14:06:12      |
| 2    | Al 396.153Radial†  | -129.7        | 26.3                | 12.882 µg/L        | 12.882 ppb         | 14:06:12      |
| 2    | Ca 317.933Radial†  | 337.1         | 13.1                | 4.9298 µg/L        | 4.9298 ppb         | 14:06:32      |
| 2    | Fe 238.204 Radial† | 12.8          | 0.3                 | 3.8316 µg/L        | 3.8316 ppb         | 14:06:32      |
| 2    | K 766.490 Radial†  | 273.0         | -118.5              | -56.046 µg/L       | -56.046 ppb        | 14:06:12      |
| 2    | Mg 279.077 IEC†    | 8.3           | -0.4                | -4.8466 µg/L       | -4.8466 ppb        | 14:06:32      |
| 2    | Na 589.592 Radial† | 214.7         | 35.3                | 17.870 µg/L        | 17.870 ppb         | 14:06:12      |
| 2    | Sr 421.552†        | 139.0         | 10.7                | 0.0647 µg/L        | 0.0647 ppb         | 14:06:12      |
| 2    | Sc 361.383         | 1859559.5     | 1859559.5           | 95.356 %           |                    | 14:07:40      |
| 2    | Y 371.029          | 1273313.2     | 1273313.2           | 95.499 %           |                    | 14:07:40      |
| 2    | Ag 328.068†        | -522.7        | -24.6               | -0.2088 µg/L       | -0.2088 ppb        | 14:07:46      |
| 2    | As 188.979†        | -0.8          | 2.6                 | 4.0284 µg/L        | 4.0284 ppb         | 14:08:06      |
| 2    | B 249.677†         | 289.7         | 26.5                | 1.2715 µg/L        | 1.2715 ppb         | 14:07:46      |
| 2    | Ba 233.527†        | -16.6         | 9.7                 | 0.2231 µg/L        | 0.2231 ppb         | 14:08:06      |
| 2    | Be 313.107†        | -1230.6       | 268.3               | 0.1668 µg/L        | 0.1668 ppb         | 14:07:46      |
| 2    | Cd 226.502†        | -161.2        | -3.7                | -0.0932 µg/L       | -0.0932 ppb        | 14:08:06      |
| 2    | Co 228.616†        | 27.3          | -5.7                | -0.2613 µg/L       | -0.2613 ppb        | 14:08:06      |
| 2    | Cr 267.716†        | 70.1          | -18.8               | -0.4391 µg/L       | -0.4391 ppb        | 14:07:46      |
| 2    | Cu 324.752†        | 4145.5        | 123.5               | 0.8435 µg/L        | 0.8435 ppb         | 14:07:46      |
| 2    | Mn 257.610†        | -670.7        | 36.1                | 0.1177 µg/L        | 0.1177 ppb         | 14:08:06      |
| 2    | Mo 202.031†        | 6.5           | -5.5                | -0.5799 µg/L       | -0.5799 ppb        | 14:08:06      |
| 2    | Ni 231.604†        | 369.8         | 30.4                | 1.8001 µg/L        | 1.8001 ppb         | 14:08:06      |
| 2    | P 214.914†         | 271.2         | -3.6                | -6.3418 µg/L       | -6.3418 ppb        | 14:08:06      |
| 2    | Pb 220.353†        | 40.2          | 2.6                 | 0.7086 µg/L        | 0.7086 ppb         | 14:08:06      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.5      | -2.5      | -8.4141 µg/L | -8.4141 ppb | 14:08:06 |
| 2 | Sb 206.836†        | 21.0      | -5.9      | -5.6021 µg/L | -5.6021 ppb | 14:08:06 |
| 2 | Se 196.026†        | 31.1      | 10.8      | 10.840 µg/L  | 10.840 ppb  | 14:08:06 |
| 2 | SiO2†              | 2556.4    | -60.8     | -11.524 µg/L | -11.524 ppb | 14:07:46 |
| 2 | Si 251.611†        | 373.6     | -29.9     | -2.1275 µg/L | -2.1275 ppb | 14:08:06 |
| 2 | Sn 189.927†        | -1.8      | 3.3       | 1.3908 µg/L  | 1.3908 ppb  | 14:08:06 |
| 2 | Ti 334.940†        | -663.0    | -3.9      | -0.0092 µg/L | -0.0092 ppb | 14:07:46 |
| 2 | Tl 190.801†        | -33.2     | -0.4      | -0.4284 µg/L | -0.4284 ppb | 14:08:06 |
| 2 | U 409.014†         | 14.8      | 55.4      | 5.1678 µg/L  | 5.1678 ppb  | 14:07:46 |
| 2 | V 292.402†         | 71.6      | -24.2     | -0.3049 µg/L | -0.3049 ppb | 14:07:46 |
| 2 | Zn 213.857†        | 622.7     | -5.3      | -0.1377 µg/L | -0.1377 ppb | 14:08:06 |
| 3 | Sc RADIAL          | 87686.7   | 87686.7   | 95.5 %       |             | 14:06:38 |
| 3 | Al 396.153Radial†  | -137.8    | 18.2      | 8.9416 µg/L  | 8.9416 ppb  | 14:06:38 |
| 3 | Ca 317.933Radial†  | 349.8     | 25.2      | 9.4847 µg/L  | 9.4847 ppb  | 14:06:58 |
| 3 | Fe 238.204 Radial† | 15.2      | 2.8       | 35.055 µg/L  | 35.055 ppb  | 14:06:58 |
| 3 | K 766.490 Radial†  | 424.1     | 38.7      | 18.298 µg/L  | 18.298 ppb  | 14:06:38 |
| 3 | Mg 279.077 IEC†    | 8.2       | -0.5      | -7.2415 µg/L | -7.2415 ppb | 14:06:58 |
| 3 | Na 589.592 Radial† | 272.0     | 94.6      | 47.825 µg/L  | 47.825 ppb  | 14:06:38 |
| 3 | Sr 421.552†        | 121.4     | -8.3      | -0.0502 µg/L | -0.0502 ppb | 14:06:38 |
| 3 | Sc 361.383         | 1854331.3 | 1854331.3 | 95.088 %     |             | 14:08:12 |
| 3 | Y 371.029          | 1268743.4 | 1268743.4 | 95.157 %     |             | 14:08:12 |
| 3 | Ag 328.068†        | -482.3    | 16.3      | 0.1375 µg/L  | 0.1375 ppb  | 14:08:18 |
| 3 | As 188.979†        | -5.5      | -2.4      | -3.7018 µg/L | -3.7018 ppb | 14:08:39 |
| 3 | B 249.677†         | 295.3     | 33.3      | 1.5825 µg/L  | 1.5825 ppb  | 14:08:18 |
| 3 | Ba 233.527†        | -16.5     | 9.8       | 0.2255 µg/L  | 0.2255 ppb  | 14:08:39 |
| 3 | Be 313.107†        | -1175.1   | 323.0     | 0.2007 µg/L  | 0.2007 ppb  | 14:08:18 |
| 3 | Cd 226.502†        | -175.2    | -18.9     | -0.4881 µg/L | -0.4881 ppb | 14:08:39 |
| 3 | Co 228.616†        | 30.3      | -2.6      | -0.1164 µg/L | -0.1164 ppb | 14:08:39 |
| 3 | Cr 267.716†        | 78.4      | -9.9      | -0.2306 µg/L | -0.2306 ppb | 14:08:18 |
| 3 | Cu 324.752†        | 4094.1    | 81.7      | 0.5642 µg/L  | 0.5642 ppb  | 14:08:18 |
| 3 | Mn 257.610†        | -667.7    | 37.3      | 0.1235 µg/L  | 0.1235 ppb  | 14:08:39 |
| 3 | Mo 202.031†        | 7.7       | -4.2      | -0.4420 µg/L | -0.4420 ppb | 14:08:39 |
| 3 | Ni 231.604†        | 342.9     | 3.2       | 0.1888 µg/L  | 0.1888 ppb  | 14:08:39 |
| 3 | P 214.914†         | 282.5     | 9.1       | 16.044 µg/L  | 16.044 ppb  | 14:08:39 |
| 3 | Pb 220.353†        | 34.2      | -3.6      | -1.0136 µg/L | -1.0136 ppb | 14:08:39 |
| 3 | S 181.975 Axial†   | 24.1      | 2.4       | 8.0695 µg/L  | 8.0695 ppb  | 14:08:39 |
| 3 | Sb 206.836†        | 29.9      | 3.5       | 3.3562 µg/L  | 3.3562 ppb  | 14:08:39 |
| 3 | Se 196.026†        | 27.2      | 6.8       | 6.9448 µg/L  | 6.9448 ppb  | 14:08:39 |
| 3 | SiO2†              | 2538.4    | -72.2     | -13.682 µg/L | -13.682 ppb | 14:08:18 |
| 3 | Si 251.611†        | 364.1     | -38.8     | -2.7659 µg/L | -2.7659 ppb | 14:08:39 |
| 3 | Sn 189.927†        | -4.0      | 1.0       | 0.4400 µg/L  | 0.4400 ppb  | 14:08:39 |
| 3 | Ti 334.940†        | -625.0    | 34.1      | 0.0845 µg/L  | 0.0845 ppb  | 14:08:18 |
| 3 | Tl 190.801†        | -29.0     | 3.8       | 3.9849 µg/L  | 3.9849 ppb  | 14:08:39 |
| 3 | U 409.014†         | -44.8     | -7.2      | -0.6778 µg/L | -0.6778 ppb | 14:08:18 |
| 3 | V 292.402†         | 67.3      | -28.5     | -0.3676 µg/L | -0.3676 ppb | 14:08:18 |
| 3 | Zn 213.857†        | 632.6     | 7.0       | 0.1659 µg/L  | 0.1659 ppb  | 14:08:39 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1854849.7                | 95.115 %           | 0.2294   |                    |          | 0.24%   |
| Sc RADIAL   | 87516.7                  | 95.4 %             | 0.17     |                    |          | 0.17%   |
| Y 371.029   | 1269964.9                | 95.248 %           | 0.2201   |                    |          | 0.23%   |
| Ag 328.068†   | -3.1                     | -0.0270 µg/L       | 0.17383  | -0.0270 ppb        | 0.17383  | 644.21% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 24.8                     | 12.172 µg/L        | 2.9408   | 12.172 ppb         | 2.9408   | 24.16%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.3                     | -0.4628 µg/L       | 4.01435  | -0.4628 ppb        | 4.01435  | 867.37% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 33.0                     | 1.5775 µg/L        | 0.30352  | 1.5775 ppb         | 0.30352  | 19.24%  |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 11.7                     | 0.2693 µg/L        | 0.07802  | 0.2693 ppb         | 0.07802  | 28.97%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 300.5                    | 0.1868 µg/L        | 0.01779  | 0.1868 ppb         | 0.01779  | 9.52%   |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 17.0                     | 6.3867 µg/L        | 2.68449  | 6.3867 ppb         | 2.68449  | 42.03%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -10.3                    | -0.2634 µg/L       | 0.20301  | -0.2634 ppb        | 0.20301  | 77.07%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -7.2                     | -0.3267 µg/L       | 0.24946  | -0.3267 ppb        | 0.24946  | 76.36%  |

|  |                 |       |              |          |             |          |         |
|--|-----------------|-------|--------------|----------|-------------|----------|---------|
| Cr   | 267.716†        | -10.3 | -0.2398 µg/L | 0.19489  | -0.2398 ppb | 0.19489  | 81.29%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Cu   | 324.752†        | 93.4  | 0.6411 µg/L  | 0.17693  | 0.6411 ppb  | 0.17693  | 27.60%  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Fe   | 238.204 Radial† | 1.4   | 17.537 µg/L  | 15.9573  | 17.537 ppb  | 15.9573  | 90.99%  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| K  | 766.490 Radial† | -37.2 | -17.578 µg/L | 37.2396  | -17.578 ppb | 37.2396  | 211.85% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |          |             |          |         |
| Mg   | 279.077 IEC†    | -0.8  | -10.242 µg/L | 7.3693   | -10.242 ppb | 7.3693   | 71.95%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |          |             |          |         |
| Mn   | 257.610†        | 39.6  | 0.1301 µg/L  | 0.01678  | 0.1301 ppb  | 0.01678  | 12.89%  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Mo   | 202.031†        | -5.7  | -0.5966 µg/L | 0.16370  | -0.5966 ppb | 0.16370  | 27.44%  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Na   | 589.592 Radial† | 61.3  | 30.981 µg/L  | 15.3224  | 30.981 ppb  | 15.3224  | 49.46%  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| Ni   | 231.604†        | 14.2  | 0.8430 µg/L  | 0.84729  | 0.8430 ppb  | 0.84729  | 100.51% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| P  | 214.914†        | 3.9   | 6.7501 µg/L  | 11.66625 | 6.7501 ppb  | 11.66625 | 172.83% |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Pb   | 220.353†        | 0.1   | 0.0358 µg/L  | 0.92078  | 0.0358 ppb  | 0.92078  | >999.9% |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| S  | 181.975 Axial†  | 1.5   | 5.1510 µg/L  | 12.36697 | 5.1510 ppb  | 12.36697 | 240.09% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |          |             |          |         |
| Sb   | 206.836†        | -1.3  | -1.2439 µg/L | 4.48406  | -1.2439 ppb | 4.48406  | 360.49% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Se   | 196.026†        | 4.1   | 4.1826 µg/L  | 8.38661  | 4.1826 ppb  | 8.38661  | 200.51% |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| SiO2†  |                 | -57.5 | -10.887 µg/L | 3.1626   | -10.887 ppb | 3.1626   | 29.05%  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |          |             |          |         |
| Si   | 251.611†        | -36.8 | -2.6241 µg/L | 0.44307  | -2.6241 ppb | 0.44307  | 16.88%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sn   | 189.927†        | 1.8   | 0.7684 µg/L  | 0.53922  | 0.7684 ppb  | 0.53922  | 70.17%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sr   | 421.552†        | 12.7  | 0.0767 µg/L  | 0.13325  | 0.0767 ppb  | 0.13325  | 173.84% |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Ti   | 334.940†        | 10.0  | 0.0253 µg/L  | 0.05143  | 0.0253 ppb  | 0.05143  | 202.91% |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Tl   | 190.801†        | 1.6   | 1.6668 µg/L  | 2.21510  | 1.6668 ppb  | 2.21510  | 132.90% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| U  | 409.014†        | 33.3  | 3.1052 µg/L  | 3.28063  | 3.1052 ppb  | 3.28063  | 105.65% |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| V  | 292.402†        | -28.4 | -0.3617 µg/L | 0.05404  | -0.3617 ppb | 0.05404  | 14.94%  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Zn   | 213.857†        | 0.5   | 0.0083 µg/L  | 0.15213  | 0.0083 ppb  | 0.15213  | >999.9% |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |          |             |          |         |

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: 247188004|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 301

Date Collected: 3/15/2010 14:08:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188004|954676|5

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|-------------|--------------|--------------------|---------------|
| 1     | Sc RADIAL          | 87819.4       | 87819.4             | 95.7        | %            |                    | 14:09:21      |
| 1     | Al 396.153Radial†  | 4359.5        | 4718.4              | 2310.1      | µg/L         | 2310.1 ppb         | 14:09:21      |
| 1     | Ca 317.933Radial†  | 1940.8        | 1687.2              | 634.92      | µg/L         | 634.92 ppb         | 14:09:41      |
| 1     | Fe 238.204 Radial† | 1239.0        | 1281.7              | 15964       | µg/L         | 15964 ppb          | 14:09:41      |
| 1     | K 766.490 Radial†  | 2486.1        | 2192.9              | 1037.5      | µg/L         | 1037.5 ppb         | 14:09:21      |
| 1     | Mg 279.077 IEC†    | 39.6          | 32.3                | 419.75      | µg/L         | 419.75 ppb         | 14:09:41      |
| 1     | Na 589.592 Radial† | 1879.0        | 1773.5              | 897.00      | µg/L         | 897.00 ppb         | 14:09:21      |
| 1     | Sr 421.552†        | 657.3         | 551.6               | 3.3405      | µg/L         | 3.3405 ppb         | 14:09:21      |
| 1     | Sc 361.383         | 1876843.5     | 1876843.5           | 96.242      | %            |                    | 14:10:44      |
| 1     | Y 371.029          | 1300886.3     | 1300886.3           | 97.567      | %            |                    | 14:10:44      |
| 1     | Ag 328.068†        | -640.8        | -142.3              | 0.0820      | µg/L         | 0.0820 ppb         | 14:10:49      |
| 1     | As 188.979†        | -1.6          | 1.7                 | 0.6228      | µg/L         | 0.6228 ppb         | 14:11:10      |
| 1     | B 249.677†         | 344.9         | 81.1                | -4.3807     | µg/L         | -4.3807 ppb        | 14:11:10      |
| 1     | Ba 233.527†        | 1354.0        | 1434.0              | 33.192      | µg/L         | 33.192 ppb         | 14:11:10      |
| 1     | Be 313.107†        | 951.8         | 2547.8              | 1.2737      | µg/L         | 1.2737 ppb         | 14:10:49      |
| 1     | Cd 226.502†        | -80.7         | 81.4                | 0.2952      | µg/L         | 0.2952 ppb         | 14:11:10      |
| 1     | Co 228.616†        | 83.4          | 52.3                | 0.6778      | µg/L         | 0.6778 ppb         | 14:11:10      |
| 1     | Cr 267.716†        | 1371.7        | 1332.9              | 31.107      | µg/L         | 31.107 ppb         | 14:11:10      |
| 1     | Cu 324.752†        | 4154.4        | 92.6                | 3.6335      | µg/L         | 3.6335 ppb         | 14:10:49      |
| 1     | Mn 257.610†        | 162932.6      | 170033.3            | 552.77      | µg/L         | 552.77 ppb         | 14:10:44      |
| 1     | Mo 202.031†        | 30.3          | 19.1                | 2.6095      | µg/L         | 2.6095 ppb         | 14:11:10      |
| 1     | Ni 231.604†        | 606.4         | 272.6               | 16.333      | µg/L         | 16.333 ppb         | 14:11:10      |
| 1     | P 214.914†         | 358.2         | 84.2                | 136.46      | µg/L         | 136.46 ppb         | 14:11:10      |
| 1     | Pb 220.353†        | 51.6          | 14.0                | 4.3826      | µg/L         | 4.3826 ppb         | 14:11:10      |
| 1     | S 181.975 Axial†   | 20.8          | -1.3                | -4.2801     | µg/L         | -4.2801 ppb        | 14:11:10      |
| 1     | Sb 206.836†        | 21.3          | -5.8                | -5.8052     | µg/L         | -5.8052 ppb        | 14:11:10      |
| 1     | Se 196.026†        | 3.5           | -18.2               | 32.127      | µg/L         | 32.127 ppb         | 14:11:10      |
| 1     | SiO2†              | 64657.3       | 64439.9             | 12206       | µg/L         | 12206 ppb          | 14:10:49      |
| 1     | Si 251.611†        | 77234.2       | 79827.9             | 5686.5      | µg/L         | 5686.5 ppb         | 14:10:49      |
| 1     | Sn 189.927†        | 7.5           | 13.1                | 5.4711      | µg/L         | 5.4711 ppb         | 14:11:10      |
| 1     | Ti 334.940†        | 318170.8      | 331284.3            | 813.24      | µg/L         | 813.24 ppb         | 14:10:44      |
| 1     | Tl 190.801†        | -37.9         | -5.0                | 6.2749      | µg/L         | 6.2749 ppb         | 14:11:10      |
| 1     | U 409.014†         | -409.2        | -385.3              | -38.196     | µg/L         | -38.196 ppb        | 14:10:49      |
| 1     | V 292.402†         | 697.6         | 625.6               | 5.8983      | µg/L         | 5.8983 ppb         | 14:10:49      |
| 1     | Zn 213.857†        | 4136.5        | 3639.7              | 87.178      | µg/L         | 87.178 ppb         | 14:11:10      |
| 2     | Sc RADIAL          | 87727.0       | 87727.0             | 95.6        | %            |                    | 14:09:46      |
| 2     | Al 396.153Radial†  | 4396.1        | 4761.4              | 2331.2      | µg/L         | 2331.2 ppb         | 14:09:46      |
| 2     | Ca 317.933Radial†  | 1947.0        | 1695.9              | 638.17      | µg/L         | 638.17 ppb         | 14:10:07      |
| 2     | Fe 238.204 Radial† | 1243.3        | 1287.5              | 16037       | µg/L         | 16037 ppb          | 14:10:07      |
| 2     | K 766.490 Radial†  | 2505.4        | 2215.9              | 1048.4      | µg/L         | 1048.4 ppb         | 14:09:46      |
| 2     | Mg 279.077 IEC†    | 36.3          | 28.9                | 373.71      | µg/L         | 373.71 ppb         | 14:10:07      |
| 2     | Na 589.592 Radial† | 1820.7        | 1714.6              | 867.22      | µg/L         | 867.22 ppb         | 14:09:46      |
| 2     | Sr 421.552†        | 643.6         | 538.0               | 3.2584      | µg/L         | 3.2584 ppb         | 14:09:46      |
| 2     | Sc 361.383         | 1873438.6     | 1873438.6           | 96.068      | %            |                    | 14:11:16      |
| 2     | Y 371.029          | 1297295.4     | 1297295.4           | 97.298      | %            |                    | 14:11:16      |
| 2     | Ag 328.068†        | -692.4        | -197.2              | -0.3766     | µg/L         | -0.3766 ppb        | 14:11:22      |
| 2     | As 188.979†        | 0.1           | 3.5                 | 3.3995      | µg/L         | 3.3995 ppb         | 14:11:43      |
| 2     | B 249.677†         | 354.0         | 91.2                | -3.9326     | µg/L         | -3.9326 ppb        | 14:11:43      |
| 2     | Ba 233.527†        | 1343.7        | 1425.8              | 33.002      | µg/L         | 33.002 ppb         | 14:11:43      |
| 2     | Be 313.107†        | 863.1         | 2457.3              | 1.2163      | µg/L         | 1.2163 ppb         | 14:11:22      |
| 2     | Cd 226.502†        | -86.1         | 75.7                | 0.1404      | µg/L         | 0.1404 ppb         | 14:11:43      |
| 2     | Co 228.616†        | 86.2          | 55.3                | 0.8114      | µg/L         | 0.8114 ppb         | 14:11:43      |
| 2     | Cr 267.716†        | 1341.1        | 1303.7              | 30.424      | µg/L         | 30.424 ppb         | 14:11:43      |
| 2     | Cu 324.752†        | 4159.3        | 105.6               | 3.7356      | µg/L         | 3.7356 ppb         | 14:11:22      |
| 2     | Mn 257.610†        | 163183.6      | 170602.2            | 554.62      | µg/L         | 554.62 ppb         | 14:11:16      |
| 2     | Mo 202.031†        | 34.1          | 23.1                | 3.0360      | µg/L         | 3.0360 ppb         | 14:11:43      |
| 2     | Ni 231.604†        | 609.2         | 276.7               | 16.576      | µg/L         | 16.576 ppb         | 14:11:43      |
| 2     | P 214.914†         | 362.6         | 89.5                | 145.59      | µg/L         | 145.59 ppb         | 14:11:43      |
| 2     | Pb 220.353†        | 70.2          | 33.5                | 9.8000      | µg/L         | 9.8000 ppb         | 14:11:43      |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.1      | -3.1      | -10.212 µg/L | -10.212 ppb | 14:11:43 |
| 2 | Sb 206.836†        | 25.4      | -1.5      | -1.7217 µg/L | -1.7217 ppb | 14:11:43 |
| 2 | Se 196.026†        | 7.6       | -13.9     | 36.666 µg/L  | 36.666 ppb  | 14:11:43 |
| 2 | SiO2†              | 65286.8   | 65217.3   | 12354 µg/L   | 12354 ppb   | 14:11:22 |
| 2 | Si 251.611†        | 77936.4   | 80704.7   | 5749.0 µg/L  | 5749.0 ppb  | 14:11:22 |
| 2 | Sn 189.927†        | -3.3      | 1.8       | 0.7365 µg/L  | 0.7365 ppb  | 14:11:43 |
| 2 | Ti 334.940†        | 318784.7  | 332524.2  | 816.29 µg/L  | 816.29 ppb  | 14:11:16 |
| 2 | Tl 190.801†        | -47.9     | -15.5     | -4.6403 µg/L | -4.6403 ppb | 14:11:43 |
| 2 | U 409.014†         | -396.4    | -372.7    | -37.033 µg/L | -37.033 ppb | 14:11:22 |
| 2 | V 292.402†         | 671.4     | 599.7     | 5.5658 µg/L  | 5.5658 ppb  | 14:11:22 |
| 2 | Zn 213.857†        | 4112.4    | 3622.4    | 86.759 µg/L  | 86.759 ppb  | 14:11:43 |
| 3 | Sc RADIAL          | 87920.3   | 87920.3   | 95.8 %       |             | 14:10:12 |
| 3 | Al 396.153Radial†  | 4394.9    | 4750.1    | 2325.6 µg/L  | 2325.6 ppb  | 14:10:12 |
| 3 | Ca 317.933Radial†  | 1939.4    | 1683.5    | 633.53 µg/L  | 633.53 ppb  | 14:10:33 |
| 3 | Fe 238.204 Radial† | 1243.7    | 1285.2    | 16007 µg/L   | 16007 ppb   | 14:10:33 |
| 3 | K 766.490 Radial†  | 2549.5    | 2256.1    | 1067.4 µg/L  | 1067.4 ppb  | 14:10:12 |
| 3 | Mg 279.077 IEC†    | 36.5      | 29.0      | 375.33 µg/L  | 375.33 ppb  | 14:10:33 |
| 3 | Na 589.592 Radial† | 1793.8    | 1682.3    | 850.87 µg/L  | 850.87 ppb  | 14:10:12 |
| 3 | Sr 421.552†        | 634.7     | 527.2     | 3.1928 µg/L  | 3.1928 ppb  | 14:10:12 |
| 3 | Sc 361.383         | 1865561.9 | 1865561.9 | 95.664 %     |             | 14:11:49 |
| 3 | Y 371.029          | 1289616.9 | 1289616.9 | 96.722 %     |             | 14:11:49 |
| 3 | Ag 328.068†        | -610.6    | -114.7    | 0.3075 µg/L  | 0.3075 ppb  | 14:11:55 |
| 3 | As 188.979†        | 1.1       | 4.6       | 5.0708 µg/L  | 5.0708 ppb  | 14:12:15 |
| 3 | B 249.677†         | 339.3     | 77.4      | -4.5899 µg/L | -4.5899 ppb | 14:12:15 |
| 3 | Ba 233.527†        | 1124.7    | 1202.7    | 27.839 µg/L  | 27.839 ppb  | 14:12:15 |
| 3 | Be 313.107†        | 640.5     | 2228.3    | 1.0972 µg/L  | 1.0972 ppb  | 14:11:55 |
| 3 | Cd 226.502†        | -108.4    | 52.0      | -0.4638 µg/L | -0.4638 ppb | 14:12:15 |
| 3 | Co 228.616†        | 79.1      | 48.2      | 0.6148 µg/L  | 0.6148 ppb  | 14:12:15 |
| 3 | Cr 267.716†        | 1105.6    | 1063.4    | 24.816 µg/L  | 24.816 ppb  | 14:12:15 |
| 3 | Cu 324.752†        | 4183.8    | 149.5     | 4.0300 µg/L  | 4.0300 ppb  | 14:11:55 |
| 3 | Mn 257.610†        | 151639.6  | 159252.2  | 517.78 µg/L  | 517.78 ppb  | 14:11:49 |
| 3 | Mo 202.031†        | 31.0      | 20.0      | 2.7076 µg/L  | 2.7076 ppb  | 14:12:15 |
| 3 | Ni 231.604†        | 565.0     | 233.2     | 14.002 µg/L  | 14.002 ppb  | 14:12:15 |
| 3 | P 214.914†         | 358.0     | 86.2      | 139.90 µg/L  | 139.90 ppb  | 14:12:15 |
| 3 | Pb 220.353†        | 63.0      | 26.3      | 7.7891 µg/L  | 7.7891 ppb  | 14:12:15 |
| 3 | S 181.975 Axial†   | 20.9      | -1.1      | -3.4950 µg/L | -3.4950 ppb | 14:12:15 |
| 3 | Sb 206.836†        | 23.1      | -3.8      | -3.8463 µg/L | -3.8463 ppb | 14:12:15 |
| 3 | Se 196.026†        | 9.9       | -11.5     | 39.050 µg/L  | 39.050 ppb  | 14:12:15 |
| 3 | SiO2†              | 59773.8   | 59741.4   | 11316 µg/L   | 11316 ppb   | 14:11:55 |
| 3 | Si 251.611†        | 71191.3   | 73996.4   | 5271.1 µg/L  | 5271.1 ppb  | 14:11:55 |
| 3 | Sn 189.927†        | 0.7       | 5.9       | 2.4742 µg/L  | 2.4742 ppb  | 14:12:15 |
| 3 | Ti 334.940†        | 293730.6  | 307735.6  | 755.43 µg/L  | 755.43 ppb  | 14:11:49 |
| 3 | Tl 190.801†        | -42.7     | -10.3     | 0.1393 µg/L  | 0.1393 ppb  | 14:12:15 |
| 3 | U 409.014†         | -344.3    | -320.0    | -32.112 µg/L | -32.112 ppb | 14:11:55 |
| 3 | V 292.402†         | 580.4     | 507.5     | 4.3984 µg/L  | 4.3984 ppb  | 14:11:55 |
| 3 | Zn 213.857†        | 3509.7    | 3010.5    | 71.969 µg/L  | 71.969 ppb  | 14:12:15 |

## Mean Data: 247188004|954676|5

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1871948.0                | 95.991 %     | %            | 0.2967   |                    |          | 0.31%   |
| Sc RADIAL          | 87822.3                  | 95.7 %       | %            | 0.11     |                    |          | 0.11%   |
| Y 371.029          | 1295932.9                | 97.196 %     | %            | 0.4318   |                    |          | 0.44%   |
| Ag 328.068†        | -151.4                   | 0.0043 µg/L  | µg/L         | 0.34859  | 0.0043 ppb         | 0.34859  | >999.9% |
| Al 396.153Radial†  | 4743.3                   | 2322.3 µg/L  | µg/L         | 10.92    | 2322.3 ppb         | 10.92    | 0.47%   |
| As 188.979†        | 3.3                      | 3.0310 µg/L  | µg/L         | 2.24676  | 3.0310 ppb         | 2.24676  | 74.13%  |
| B 249.677†         | 83.2                     | -4.3011 µg/L | µg/L         | 0.33580  | -4.3011 ppb        | 0.33580  | 7.81%   |
| Ba 233.527†        | 1354.2                   | 31.344 µg/L  | µg/L         | 3.0371   | 31.344 ppb         | 3.0371   | 9.69%   |
| Be 313.107†        | 2411.1                   | 1.1957 µg/L  | µg/L         | 0.09006  | 1.1957 ppb         | 0.09006  | 7.53%   |
| Ca 317.933Radial†  | 1688.9                   | 635.54 µg/L  | µg/L         | 2.382    | 635.54 ppb         | 2.382    | 0.37%   |
| Cd 226.502†        | 69.7                     | -0.0094 µg/L | µg/L         | 0.40107  | -0.0094 ppb        | 0.40107  | >999.9% |
| Co 228.616†        | 51.9                     | 0.7013 µg/L  | µg/L         | 0.10037  | 0.7013 ppb         | 0.10037  | 14.31%  |
| Cr 267.716†        | 1233.3                   | 28.782 µg/L  | µg/L         | 3.4518   | 28.782 ppb         | 3.4518   | 11.99%  |
| Cu 324.752†        | 115.9                    | 3.7997 µg/L  | µg/L         | 0.20587  | 3.7997 ppb         | 0.20587  | 5.42%   |
| Fe 238.204 Radial† | 1284.8                   | 16003 µg/L   | µg/L         | 36.4     | 16003 ppb          | 36.4     | 0.23%   |
| K 766.490 Radial†  | 2221.6                   | 1051.1 µg/L  | µg/L         | 15.13    | 1051.1 ppb         | 15.13    | 1.44%   |
| Mg 279.077 IEC†    | 30.1                     | 389.60 µg/L  | µg/L         | 26.125   | 389.60 ppb         | 26.125   | 6.71%   |
| Mn 257.610†        | 166629.3                 | 541.72 µg/L  | µg/L         | 20.755   | 541.72 ppb         | 20.755   | 3.83%   |
| Mo 202.031†        | 20.7                     | 2.7844 µg/L  | µg/L         | 0.22339  | 2.7844 ppb         | 0.22339  | 8.02%   |
| Na 589.592 Radial† | 1723.5                   | 871.70 µg/L  | µg/L         | 23.385   | 871.70 ppb         | 23.385   | 2.68%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 260.8    | 15.637 µg/L  | 1.4212  | 15.637 ppb  | 1.4212  | 9.09%   |
| P 214.914†       | 86.6     | 140.65 µg/L  | 4.609   | 140.65 ppb  | 4.609   | 3.28%   |
| Pb 220.353†      | 24.6     | 7.3239 µg/L  | 2.73851 | 7.3239 ppb  | 2.73851 | 37.39%  |
| S 181.975 Axial† | -1.8     | -5.9957 µg/L | 3.67255 | -5.9957 ppb | 3.67255 | 61.25%  |
| Sb 206.836†      | -3.7     | -3.7911 µg/L | 2.04234 | -3.7911 ppb | 2.04234 | 53.87%  |
| Se 196.026†      | -14.5    | 35.948 µg/L  | 3.5169  | 35.948 ppb  | 3.5169  | 9.78%   |
| SiO2†            | 63132.9  | 11959 µg/L   | 561.2   | 11959 ppb   | 561.2   | 4.69%   |
| Si 251.611†      | 78176.3  | 5568.9 µg/L  | 259.75  | 5568.9 ppb  | 259.75  | 4.66%   |
| Sn 189.927†      | 6.9      | 2.8939 µg/L  | 2.39506 | 2.8939 ppb  | 2.39506 | 82.76%  |
| Sr 421.552†      | 538.9    | 3.2639 µg/L  | 0.07402 | 3.2639 ppb  | 0.07402 | 2.27%   |
| Ti 334.940†      | 323848.0 | 794.99 µg/L  | 34.288  | 794.99 ppb  | 34.288  | 4.31%   |
| Tl 190.801†      | -10.3    | 0.5913 µg/L  | 5.47163 | 0.5913 ppb  | 5.47163 | 925.38% |
| U 409.014†       | -359.3   | -35.781 µg/L | 3.2296  | -35.781 ppb | 3.2296  | 9.03%   |
| V 292.402†       | 577.6    | 5.2875 µg/L  | 0.78770 | 5.2875 ppb  | 0.78770 | 14.90%  |
| Zn 213.857†      | 3424.2   | 81.969 µg/L  | 8.6624  | 81.969 ppb  | 8.6624  | 10.57%  |

Sequence No.: 6

Sample ID: 247188006|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 302

Date Collected: 3/15/2010 14:12:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188006|954676|5

| Rep# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|------|--------------------|---------------|---------------------|-------------|--------------|--------------------|---------------|
| 1    | Sc RADIAL          | 87474.5       | 87474.5             | 95.3        | %            |                    | 14:12:56      |
| 1    | Al 396.153Radial†  | 3681.1        | 4024.6              | 1970.4      | µg/L         | 1970.4 ppb         | 14:12:56      |
| 1    | Ca 317.933Radial†  | 1564.8        | 1300.8              | 489.50      | µg/L         | 489.50 ppb         | 14:13:16      |
| 1    | Fe 238.204 Radial† | 931.4         | 964.1               | 12008       | µg/L         | 12008 ppb          | 14:13:16      |
| 1    | K 766.490 Radial†  | 1942.9        | 1633.3              | 772.75      | µg/L         | 772.75 ppb         | 14:12:56      |
| 1    | Mg 279.077 IEC†    | 31.7          | 24.2                | 314.29      | µg/L         | 314.29 ppb         | 14:13:16      |
| 1    | Na 589.592 Radial† | 1475.2        | 1357.6              | 686.63      | µg/L         | 686.63 ppb         | 14:12:56      |
| 1    | Sr 421.552†        | 646.6         | 543.1               | 3.2890      | µg/L         | 3.2890 ppb         | 14:12:56      |
| 1    | Sc 361.383         | 1861737.8     | 1861737.8           | 95.468      | %            |                    | 14:14:18      |
| 1    | Y 371.029          | 1288398.5     | 1288398.5           | 96.631      | %            |                    | 14:14:18      |
| 1    | Ag 328.068†        | -641.3        | -148.2              | -0.2853     | µg/L         | -0.2853 ppb        | 14:14:24      |
| 1    | As 188.979†        | 0.3           | 3.7                 | 4.3002      | µg/L         | 4.3002 ppb         | 14:14:44      |
| 1    | B 249.677†         | 325.6         | 63.8                | -3.1826     | µg/L         | -3.1826 ppb        | 14:14:24      |
| 1    | Ba 233.527†        | 1029.8        | 1105.7              | 25.594      | µg/L         | 25.594 ppb         | 14:14:44      |
| 1    | Be 313.107†        | 26.7          | 1586.8              | 0.7637      | µg/L         | 0.7637 ppb         | 14:14:24      |
| 1    | Cd 226.502†        | -108.4        | 51.8                | -0.0267     | µg/L         | -0.0267 ppb        | 14:14:44      |
| 1    | Co 228.616†        | 58.1          | 26.5                | -0.0162     | µg/L         | -0.0162 ppb        | 14:14:44      |
| 1    | Cr 267.716†        | 483.7         | 414.4               | 9.6723      | µg/L         | 9.6723 ppb         | 14:14:24      |
| 1    | Cu 324.752†        | 4106.4        | 77.4                | 2.7860      | µg/L         | 2.7860 ppb         | 14:14:24      |
| 1    | Mn 257.610†        | 111710.2      | 117752.9            | 382.86      | µg/L         | 382.86 ppb         | 14:14:24      |
| 1    | Mo 202.031†        | 18.9          | 7.4                 | 1.2346      | µg/L         | 1.2346 ppb         | 14:14:44      |
| 1    | Ni 231.604†        | 437.7         | 101.1               | 6.1347      | µg/L         | 6.1347 ppb         | 14:14:44      |
| 1    | P 214.914†         | 339.7         | 67.9                | 110.64      | µg/L         | 110.64 ppb         | 14:14:44      |
| 1    | Pb 220.353†        | 49.1          | 11.8                | 3.6765      | µg/L         | 3.6765 ppb         | 14:14:44      |
| 1    | S 181.975 Axial†   | 20.1          | -1.9                | -6.2449     | µg/L         | -6.2449 ppb        | 14:14:44      |
| 1    | Sb 206.836†        | 20.6          | -6.3                | -6.1315     | µg/L         | -6.1315 ppb        | 14:14:44      |
| 1    | Se 196.026†        | 15.9          | -5.2                | 32.698      | µg/L         | 32.698 ppb         | 14:14:44      |
| 1    | SiO2†              | 53938.2       | 53757.1             | 10183       | µg/L         | 10183 ppb          | 14:14:24      |
| 1    | Si 251.611†        | 64016.9       | 66634.3             | 4746.7      | µg/L         | 4746.7 ppb         | 14:14:24      |
| 1    | Sn 189.927†        | -7.8          | -2.9                | -1.2359     | µg/L         | -1.2359 ppb        | 14:14:44      |
| 1    | Ti 334.940†        | 226491.6      | 237935.2            | 584.08      | µg/L         | 584.08 ppb         | 14:14:18      |
| 1    | Tl 190.801†        | -38.0         | -5.4                | 2.6048      | µg/L         | 2.6048 ppb         | 14:14:44      |
| 1    | U 409.014†         | -355.2        | -332.2              | -32.682     | µg/L         | -32.682 ppb        | 14:14:24      |
| 1    | V 292.402†         | 536.1         | 462.3               | 4.2940      | µg/L         | 4.2940 ppb         | 14:14:24      |
| 1    | Zn 213.857†        | 3469.7        | 2976.1              | 71.367      | µg/L         | 71.367 ppb         | 14:14:24      |
| 2    | Sc RADIAL          | 87183.8       | 87183.8             | 95.0        | %            |                    | 14:13:22      |
| 2    | Al 396.153Radial†  | 3658.0        | 4013.1              | 1964.8      | µg/L         | 1964.8 ppb         | 14:13:22      |
| 2    | Ca 317.933Radial†  | 1572.0        | 1313.9              | 494.41      | µg/L         | 494.41 ppb         | 14:13:42      |
| 2    | Fe 238.204 Radial† | 923.7         | 959.2               | 11947       | µg/L         | 11947 ppb          | 14:13:42      |
| 2    | K 766.490 Radial†  | 1889.0        | 1583.4              | 749.14      | µg/L         | 749.14 ppb         | 14:13:22      |
| 2    | Mg 279.077 IEC†    | 26.5          | 18.8                | 241.84      | µg/L         | 241.84 ppb         | 14:13:42      |
| 2    | Na 589.592 Radial† | 1458.1        | 1344.8              | 680.16      | µg/L         | 680.16 ppb         | 14:13:22      |
| 2    | Sr 421.552†        | 612.9         | 509.9               | 3.0879      | µg/L         | 3.0879 ppb         | 14:13:22      |
| 2    | Sc 361.383         | 1860104.9     | 1860104.9           | 95.384      | %            |                    | 14:14:51      |
| 2    | Y 371.029          | 1288428.4     | 1288428.4           | 96.633      | %            |                    | 14:14:51      |
| 2    | Ag 328.068†        | -594.0        | -99.2               | 0.1196      | µg/L         | 0.1196 ppb         | 14:14:56      |
| 2    | As 188.979†        | -3.0          | 0.3                 | -1.1147     | µg/L         | -1.1147 ppb        | 14:15:17      |
| 2    | B 249.677†         | 316.4         | 54.4                | -3.6039     | µg/L         | -3.6039 ppb        | 14:14:56      |
| 2    | Ba 233.527†        | 1027.3        | 1104.1              | 25.556      | µg/L         | 25.556 ppb         | 14:15:17      |
| 2    | Be 313.107†        | 87.1          | 1650.2              | 0.8026      | µg/L         | 0.8026 ppb         | 14:14:56      |
| 2    | Cd 226.502†        | -111.6        | 48.3                | -0.1085     | µg/L         | -0.1085 ppb        | 14:15:17      |
| 2    | Co 228.616†        | 68.8          | 37.7                | 0.4898      | µg/L         | 0.4898 ppb         | 14:15:17      |
| 2    | Cr 267.716†        | 479.5         | 410.4               | 9.5797      | µg/L         | 9.5797 ppb         | 14:14:56      |
| 2    | Cu 324.752†        | 4136.2        | 112.4               | 3.0136      | µg/L         | 3.0136 ppb         | 14:14:56      |
| 2    | Mn 257.610†        | 111892.3      | 118046.5            | 383.82      | µg/L         | 383.82 ppb         | 14:14:56      |
| 2    | Mo 202.031†        | 14.5          | 2.9                 | 0.7581      | µg/L         | 0.7581 ppb         | 14:15:17      |
| 2    | Ni 231.604†        | 437.8         | 101.6               | 6.1613      | µg/L         | 6.1613 ppb         | 14:15:17      |
| 2    | P 214.914†         | 334.6         | 62.8                | 101.78      | µg/L         | 101.78 ppb         | 14:15:17      |
| 2    | Pb 220.353†        | 54.3          | 17.3                | 5.1942      | µg/L         | 5.1942 ppb         | 14:15:17      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.2      | -0.7      | -2.1676 µg/L | -2.1676 ppb | 14:15:17 |
| 2 | Sb 206.836†        | 24.6      | -2.1      | -2.0911 µg/L | -2.0911 ppb | 14:15:17 |
| 2 | Se 196.026†        | 14.8      | -6.3      | 31.457 µg/L  | 31.457 ppb  | 14:15:17 |
| 2 | SiO2†              | 53934.1   | 53802.4   | 10191 µg/L   | 10191 ppb   | 14:14:56 |
| 2 | Si 251.611†        | 64040.6   | 66717.9   | 4752.6 µg/L  | 4752.6 ppb  | 14:14:56 |
| 2 | Sn 189.927†        | 0.0       | 5.3       | 2.2015 µg/L  | 2.2015 ppb  | 14:15:17 |
| 2 | Ti 334.940†        | 226792.1  | 238458.5  | 585.38 µg/L  | 585.38 ppb  | 14:14:51 |
| 2 | Tl 190.801†        | -35.8     | -3.2      | 4.9115 µg/L  | 4.9115 ppb  | 14:15:17 |
| 2 | U 409.014†         | -305.8    | -280.8    | -27.879 µg/L | -27.879 ppb | 14:14:56 |
| 2 | V 292.402†         | 504.2     | 429.4     | 3.8882 µg/L  | 3.8882 ppb  | 14:14:56 |
| 2 | Zn 213.857†        | 3474.9    | 2984.8    | 71.584 µg/L  | 71.584 ppb  | 14:14:56 |
| 3 | Sc RADIAL          | 87557.6   | 87557.6   | 95.4 %       |             | 14:13:47 |
| 3 | Al 396.153Radial†  | 3710.6    | 4051.9    | 1983.8 µg/L  | 1983.8 ppb  | 14:13:47 |
| 3 | Ca 317.933Radial†  | 1572.3    | 1307.1    | 491.88 µg/L  | 491.88 ppb  | 14:14:08 |
| 3 | Fe 238.204 Radial† | 932.5     | 964.3     | 12011 µg/L   | 12011 ppb   | 14:14:08 |
| 3 | K 766.490 Radial†  | 2006.4    | 1697.9    | 803.33 µg/L  | 803.33 ppb  | 14:13:47 |
| 3 | Mg 279.077 IEC†    | 31.2      | 23.6      | 307.00 µg/L  | 307.00 ppb  | 14:14:08 |
| 3 | Na 589.592 Radial† | 1508.1    | 1390.6    | 703.35 µg/L  | 703.35 ppb  | 14:13:47 |
| 3 | Sr 421.552†        | 648.1     | 543.9     | 3.2943 µg/L  | 3.2943 ppb  | 14:13:47 |
| 3 | Sc 361.383         | 1875246.7 | 1875246.7 | 96.161 %     |             | 14:15:23 |
| 3 | Y 371.029          | 1296711.0 | 1296711.0 | 97.254 %     |             | 14:15:23 |
| 3 | Ag 328.068†        | -612.3    | -113.3    | 0.0035 µg/L  | 0.0035 ppb  | 14:15:29 |
| 3 | As 188.979†        | -0.5      | 2.9       | 2.9647 µg/L  | 2.9647 ppb  | 14:15:50 |
| 3 | B 249.677†         | 321.2     | 56.7      | -3.5256 µg/L | -3.5256 ppb | 14:15:29 |
| 3 | Ba 233.527†        | 872.7     | 934.6     | 21.632 µg/L  | 21.632 ppb  | 14:15:50 |
| 3 | Be 313.107†        | 81.0      | 1643.1    | 0.8150 µg/L  | 0.8150 ppb  | 14:15:29 |
| 3 | Cd 226.502†        | -114.7    | 46.1      | -0.1734 µg/L | -0.1734 ppb | 14:15:50 |
| 3 | Co 228.616†        | 50.0      | 17.6      | -0.3300 µg/L | -0.3300 ppb | 14:15:50 |
| 3 | Cr 267.716†        | 452.6     | 378.4     | 8.8323 µg/L  | 8.8323 ppb  | 14:15:29 |
| 3 | Cu 324.752†        | 4208.2    | 152.3     | 3.2973 µg/L  | 3.2973 ppb  | 14:15:29 |
| 3 | Mn 257.610†        | 100767.4  | 105530.1  | 343.19 µg/L  | 343.19 ppb  | 14:15:29 |
| 3 | Mo 202.031†        | 15.5      | 3.7       | 0.8485 µg/L  | 0.8485 ppb  | 14:15:50 |
| 3 | Ni 231.604†        | 431.1     | 90.9      | 5.5303 µg/L  | 5.5303 ppb  | 14:15:50 |
| 3 | P 214.914†         | 329.2     | 54.4      | 86.742 µg/L  | 86.742 ppb  | 14:15:50 |
| 3 | Pb 220.353†        | 53.8      | 16.3      | 4.9211 µg/L  | 4.9211 ppb  | 14:15:50 |
| 3 | S 181.975 Axial†   | 22.7      | 0.7       | 2.2741 µg/L  | 2.2741 ppb  | 14:15:50 |
| 3 | Sb 206.836†        | 22.7      | -4.2      | -4.1448 µg/L | -4.1448 ppb | 14:15:50 |
| 3 | Se 196.026†        | 19.9      | -1.2      | 36.753 µg/L  | 36.753 ppb  | 14:15:50 |
| 3 | SiO2†              | 50098.8   | 49357.4   | 9349.4 µg/L  | 9349.4 ppb  | 14:15:29 |
| 3 | Si 251.611†        | 59142.7   | 61082.4   | 4351.2 µg/L  | 4351.2 ppb  | 14:15:29 |
| 3 | Sn 189.927†        | -1.3      | 3.8       | 1.6089 µg/L  | 1.6089 ppb  | 14:15:50 |
| 3 | Ti 334.940†        | 211422.4  | 220555.3  | 541.42 µg/L  | 541.42 ppb  | 14:15:23 |
| 3 | Tl 190.801†        | -35.6     | -2.6      | 4.9944 µg/L  | 4.9944 ppb  | 14:15:50 |
| 3 | U 409.014†         | -323.0    | -296.0    | -29.309 µg/L | -29.309 ppb | 14:15:29 |
| 3 | V 292.402†         | 479.6     | 399.5     | 3.5009 µg/L  | 3.5009 ppb  | 14:15:29 |
| 3 | Zn 213.857†        | 3197.2    | 2666.6    | 63.883 µg/L  | 63.883 ppb  | 14:15:29 |

## Mean Data: 247188006|954676|5

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1865696.5                | 95.671 %     | %            | 0.4262   |                    |          | 0.45%   |
| Sc RADIAL          | 87405.3                  | 95.2 %       | %            | 0.21     |                    |          | 0.22%   |
| Y 371.029          | 1291179.3                | 96.839 %     | %            | 0.3593   |                    |          | 0.37%   |
| Ag 328.068†        | -120.2                   | -0.0541 µg/L | µg/L         | 0.20849  | -0.0541 ppb        | 0.20849  | 385.62% |
| Al 396.153Radial†  | 4029.9                   | 1973.0 µg/L  | µg/L         | 9.74     | 1973.0 ppb         | 9.74     | 0.49%   |
| As 188.979†        | 2.3                      | 2.0501 µg/L  | µg/L         | 2.82094  | 2.0501 ppb         | 2.82094  | 137.60% |
| B 249.677†         | 58.3                     | -3.4374 µg/L | µg/L         | 0.22408  | -3.4374 ppb        | 0.22408  | 6.52%   |
| Ba 233.527†        | 1048.2                   | 24.261 µg/L  | µg/L         | 2.2762   | 24.261 ppb         | 2.2762   | 9.38%   |
| Be 313.107†        | 1626.7                   | 0.7938 µg/L  | µg/L         | 0.02675  | 0.7938 ppb         | 0.02675  | 3.37%   |
| Ca 317.933Radial†  | 1307.3                   | 491.93 µg/L  | µg/L         | 2.456    | 491.93 ppb         | 2.456    | 0.50%   |
| Cd 226.502†        | 48.7                     | -0.1029 µg/L | µg/L         | 0.07350  | -0.1029 ppb        | 0.07350  | 71.46%  |
| Co 228.616†        | 27.3                     | 0.0479 µg/L  | µg/L         | 0.41364  | 0.0479 ppb         | 0.41364  | 864.31% |
| Cr 267.716†        | 401.1                    | 9.3614 µg/L  | µg/L         | 0.46059  | 9.3614 ppb         | 0.46059  | 4.92%   |
| Cu 324.752†        | 114.1                    | 3.0323 µg/L  | µg/L         | 0.25616  | 3.0323 ppb         | 0.25616  | 8.45%   |
| Fe 238.204 Radial† | 962.5                    | 11989 µg/L   | µg/L         | 35.8     | 11989 ppb          | 35.8     | 0.30%   |
| K 766.490 Radial†  | 1638.2                   | 775.07 µg/L  | µg/L         | 27.167   | 775.07 ppb         | 27.167   | 3.51%   |
| Mg 279.077 IEC†    | 22.2                     | 287.71 µg/L  | µg/L         | 39.889   | 287.71 ppb         | 39.889   | 13.86%  |
| Mn 257.610†        | 113776.5                 | 369.96 µg/L  | µg/L         | 23.183   | 369.96 ppb         | 23.183   | 6.27%   |
| Mo 202.031†        | 4.7                      | 0.9471 µg/L  | µg/L         | 0.25307  | 0.9471 ppb         | 0.25307  | 26.72%  |
| Na 589.592 Radial† | 1364.3                   | 690.04 µg/L  | µg/L         | 11.966   | 690.04 ppb         | 11.966   | 1.73%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 97.8     | 5.9421 µg/L  | 0.35692 | 5.9421 ppb  | 0.35692 | 6.01%   |
| P 214.914†       | 61.7     | 99.720 µg/L  | 12.0814 | 99.720 ppb  | 12.0814 | 12.12%  |
| Pb 220.353†      | 15.2     | 4.5973 µg/L  | 0.80900 | 4.5973 ppb  | 0.80900 | 17.60%  |
| S 181.975 Axial† | -0.6     | -2.0461 µg/L | 4.26082 | -2.0461 ppb | 4.26082 | 208.24% |
| Sb 206.836†      | -4.2     | -4.1225 µg/L | 2.02027 | -4.1225 ppb | 2.02027 | 49.01%  |
| Se 196.026†      | -4.2     | 33.636 µg/L  | 2.7697  | 33.636 ppb  | 2.7697  | 8.23%   |
| SiO2†            | 52305.6  | 9907.8 µg/L  | 483.66  | 9907.8 ppb  | 483.66  | 4.88%   |
| Si 251.611†      | 64811.5  | 4616.8 µg/L  | 230.07  | 4616.8 ppb  | 230.07  | 4.98%   |
| Sn 189.927†      | 2.1      | 0.8582 µg/L  | 1.83755 | 0.8582 ppb  | 1.83755 | 214.12% |
| Sr 421.552†      | 532.3    | 3.2238 µg/L  | 0.11765 | 3.2238 ppb  | 0.11765 | 3.65%   |
| Ti 334.940†      | 232316.3 | 570.29 µg/L  | 25.014  | 570.29 ppb  | 25.014  | 4.39%   |
| Tl 190.801†      | -3.8     | 4.1702 µg/L  | 1.35632 | 4.1702 ppb  | 1.35632 | 32.52%  |
| U 409.014†       | -303.0   | -29.957 µg/L | 2.4659  | -29.957 ppb | 2.4659  | 8.23%   |
| V 292.402†       | 430.4    | 3.8944 µg/L  | 0.39659 | 3.8944 ppb  | 0.39659 | 10.18%  |
| Zn 213.857†      | 2875.8   | 68.945 µg/L  | 4.3848  | 68.945 ppb  | 4.3848  | 6.36%   |

Sequence No.: 7

Sample ID: 247188007|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 303

Date Collected: 3/15/2010 14:16:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188007|954676|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 88303.5          | 88303.5                | 96.2 %                |                       | 14:16:30         |
| 1     | Al 396.153Radial†  | 3632.6           | 3937.9                 | 1928.0 µg/L           | 1928.0 ppb            | 14:16:30         |
| 1     | Ca 317.933Radial†  | 3346.6           | 3137.2                 | 1180.6 µg/L           | 1180.6 ppb            | 14:16:30         |
| 1     | Fe 238.204 Radial† | 1003.8           | 1030.2                 | 12831 µg/L            | 12831 ppb             | 14:16:50         |
| 1     | K 766.490 Radial†  | 2677.3           | 2377.4                 | 1124.8 µg/L           | 1124.8 ppb            | 14:16:30         |
| 1     | Mg 279.077 IEC†    | 28.9             | 21.0                   | 269.77 µg/L           | 269.77 ppb            | 14:16:50         |
| 1     | Na 589.592 Radial† | 1865.3           | 1748.5                 | 884.37 µg/L           | 884.37 ppb            | 14:16:30         |
| 1     | Sr 421.552†        | 556.9            | 443.4                  | 2.6856 µg/L           | 2.6856 ppb            | 14:16:30         |
| 1     | Sc 361.383         | 1867963.9        | 1867963.9              | 95.787 %              |                       | 14:17:53         |
| 1     | Y 371.029          | 1303982.7        | 1303982.7              | 97.800 %              |                       | 14:17:53         |
| 1     | Ag 328.068†        | -670.8           | -176.8                 | -0.4622 µg/L          | -0.4622 ppb           | 14:17:59         |
| 1     | As 188.979†        | -1.5             | 1.8                    | 1.0704 µg/L           | 1.0704 ppb            | 14:18:19         |
| 1     | B 249.677†         | 327.6            | 64.7                   | -3.5763 µg/L          | -3.5763 ppb           | 14:17:59         |
| 1     | Ba 233.527†        | 976.5            | 1046.5                 | 24.223 µg/L           | 24.223 ppb            | 14:18:19         |
| 1     | Be 313.107†        | 710.8            | 2300.9                 | 1.1873 µg/L           | 1.1873 ppb            | 14:17:59         |
| 1     | Cd 226.502†        | -100.1           | 60.8                   | 0.1079 µg/L           | 0.1079 ppb            | 14:18:19         |
| 1     | Co 228.616†        | 74.4             | 43.3                   | 0.6355 µg/L           | 0.6355 ppb            | 14:18:19         |
| 1     | Cr 267.716†        | 205.1            | 121.8                  | 2.8465 µg/L           | 2.8465 ppb            | 14:17:59         |
| 1     | Cu 324.752†        | 4300.9           | 266.2                  | 4.2290 µg/L           | 4.2290 ppb            | 14:17:59         |
| 1     | Mn 257.610†        | 173458.7         | 181827.1               | 590.87 µg/L           | 590.87 ppb            | 14:17:53         |
| 1     | Mo 202.031†        | 18.8             | 7.3                    | 1.2520 µg/L           | 1.2520 ppb            | 14:18:19         |
| 1     | Ni 231.604†        | 375.3            | 34.4                   | 2.2003 µg/L           | 2.2003 ppb            | 14:18:19         |
| 1     | P 214.914†         | 323.8            | 50.1                   | 78.382 µg/L           | 78.382 ppb            | 14:18:19         |
| 1     | Pb 220.353†        | 63.2             | 26.4                   | 7.7472 µg/L           | 7.7472 ppb            | 14:18:19         |
| 1     | S 181.975 Axial†   | 19.1             | -3.0                   | -10.086 µg/L          | -10.086 ppb           | 14:18:19         |
| 1     | Sb 206.836†        | 22.3             | -4.6                   | -4.4535 µg/L          | -4.4535 ppb           | 14:18:19         |
| 1     | Se 196.026†        | 14.0             | -7.2                   | 33.212 µg/L           | 33.212 ppb            | 14:18:19         |
| 1     | SiO2†              | 64018.3          | 64092.3                | 12140 µg/L            | 12140 ppb             | 14:17:59         |
| 1     | Si 251.611†        | 76406.9          | 79345.7                | 5652.2 µg/L           | 5652.2 ppb            | 14:17:59         |
| 1     | Sn 189.927†        | -0.3             | 5.0                    | 2.1413 µg/L           | 2.1413 ppb            | 14:18:19         |
| 1     | Ti 334.940†        | 247985.2         | 259583.3               | 637.24 µg/L           | 637.24 ppb            | 14:17:53         |
| 1     | Tl 190.801†        | -38.3            | -5.6                   | 3.7260 µg/L           | 3.7260 ppb            | 14:18:19         |
| 1     | U 409.014†         | -291.1           | -264.0                 | -26.485 µg/L          | -26.485 ppb           | 14:17:59         |
| 1     | V 292.402†         | 541.8            | 466.4                  | 4.2326 µg/L           | 4.2326 ppb            | 14:17:59         |
| 1     | Zn 213.857†        | 4685.7           | 4233.5                 | 101.76 µg/L           | 101.76 ppb            | 14:17:59         |
| 2     | Sc RADIAL          | 88287.5          | 88287.5                | 96.2 %                |                       | 14:16:56         |
| 2     | Al 396.153Radial†  | 3635.4           | 3941.5                 | 1929.8 µg/L           | 1929.8 ppb            | 14:16:56         |
| 2     | Ca 317.933Radial†  | 3362.0           | 3153.9                 | 1186.8 µg/L           | 1186.8 ppb            | 14:16:56         |
| 2     | Fe 238.204 Radial† | 1008.2           | 1035.0                 | 12891 µg/L            | 12891 ppb             | 14:17:16         |
| 2     | K 766.490 Radial†  | 2718.0           | 2420.2                 | 1145.1 µg/L           | 1145.1 ppb            | 14:16:56         |
| 2     | Mg 279.077 IEC†    | 29.0             | 21.1                   | 271.27 µg/L           | 271.27 ppb            | 14:17:16         |
| 2     | Na 589.592 Radial† | 1876.7           | 1760.7                 | 890.53 µg/L           | 890.53 ppb            | 14:16:56         |
| 2     | Sr 421.552†        | 524.6            | 410.0                  | 2.4830 µg/L           | 2.4830 ppb            | 14:16:56         |
| 2     | Sc 361.383         | 1868631.9        | 1868631.9              | 95.821 %              |                       | 14:18:26         |
| 2     | Y 371.029          | 1304704.2        | 1304704.2              | 97.854 %              |                       | 14:18:26         |
| 2     | Ag 328.068†        | -659.2           | -164.5                 | -0.3533 µg/L          | -0.3533 ppb           | 14:18:32         |
| 2     | As 188.979†        | -3.0             | 0.2                    | -1.3504 µg/L          | -1.3504 ppb           | 14:18:52         |
| 2     | B 249.677†         | 345.9            | 83.7                   | -2.6954 µg/L          | -2.6954 ppb           | 14:18:32         |
| 2     | Ba 233.527†        | 967.3            | 1036.5                 | 23.993 µg/L           | 23.993 ppb            | 14:18:52         |
| 2     | Be 313.107†        | 710.7            | 2300.5                 | 1.1866 µg/L           | 1.1866 ppb            | 14:18:32         |
| 2     | Cd 226.502†        | -102.2           | 58.6                   | 0.0440 µg/L           | 0.0440 ppb            | 14:18:52         |
| 2     | Co 228.616†        | 74.3             | 43.1                   | 0.6238 µg/L           | 0.6238 ppb            | 14:18:52         |
| 2     | Cr 267.716†        | 233.6            | 151.4                  | 3.5372 µg/L           | 3.5372 ppb            | 14:18:32         |
| 2     | Cu 324.752†        | 4280.2           | 243.0                  | 4.0819 µg/L           | 4.0819 ppb            | 14:18:32         |
| 2     | Mn 257.610†        | 173773.4         | 182090.8               | 591.73 µg/L           | 591.73 ppb            | 14:18:26         |
| 2     | Mo 202.031†        | 16.4             | 4.7                    | 0.9882 µg/L           | 0.9882 ppb            | 14:18:52         |
| 2     | Ni 231.604†        | 368.2            | 26.8                   | 1.7499 µg/L           | 1.7499 ppb            | 14:18:52         |
| 2     | P 214.914†         | 331.7            | 58.2                   | 92.724 µg/L           | 92.724 ppb            | 14:18:52         |
| 2     | Pb 220.353†        | 79.2             | 43.0                   | 12.370 µg/L           | 12.370 ppb            | 14:18:52         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 18.5      | -3.7      | -12.173 µg/L | -12.173 ppb | 14:18:52 |
| 2 | Sb 206.836†        | 20.4      | -6.6      | -6.3541 µg/L | -6.3541 ppb | 14:18:52 |
| 2 | Se 196.026†        | 9.9       | -11.5     | 29.146 µg/L  | 29.146 ppb  | 14:18:52 |
| 2 | SiO2†              | 63654.8   | 63689.0   | 12064 µg/L   | 12064 ppb   | 14:18:32 |
| 2 | Si 251.611†        | 76005.5   | 78898.3   | 5620.3 µg/L  | 5620.3 ppb  | 14:18:32 |
| 2 | Sn 189.927†        | -9.3      | -4.4      | -1.8029 µg/L | -1.8029 ppb | 14:18:52 |
| 2 | Ti 334.940†        | 248554.8  | 260085.2  | 638.47 µg/L  | 638.47 ppb  | 14:18:26 |
| 2 | Tl 190.801†        | -42.2     | -9.7      | -0.5084 µg/L | -0.5084 ppb | 14:18:52 |
| 2 | U 409.014†         | -333.2    | -307.8    | -30.576 µg/L | -30.576 ppb | 14:18:32 |
| 2 | V 292.402†         | 550.8     | 475.6     | 4.3360 µg/L  | 4.3360 ppb  | 14:18:32 |
| 2 | Zn 213.857†        | 4652.3    | 4196.8    | 100.87 µg/L  | 100.87 ppb  | 14:18:32 |
| 3 | Sc RADIAL          | 88315.9   | 88315.9   | 96.2 %       |             | 14:17:22 |
| 3 | Al 396.153Radial†  | 3655.9    | 3961.6    | 1939.6 µg/L  | 1939.6 ppb  | 14:17:22 |
| 3 | Ca 317.933Radial†  | 3383.2    | 3174.8    | 1194.7 µg/L  | 1194.7 ppb  | 14:17:22 |
| 3 | Fe 238.204 Radial† | 1014.1    | 1040.7    | 12962 µg/L   | 12962 ppb   | 14:17:42 |
| 3 | K 766.490 Radial†  | 2639.5    | 2337.7    | 1106.1 µg/L  | 1106.1 ppb  | 14:17:22 |
| 3 | Mg 279.077 IEC†    | 24.7      | 16.6      | 211.00 µg/L  | 211.00 ppb  | 14:17:42 |
| 3 | Na 589.592 Radial† | 1818.8    | 1699.9    | 859.78 µg/L  | 859.78 ppb  | 14:17:22 |
| 3 | Sr 421.552†        | 531.6     | 417.1     | 2.5259 µg/L  | 2.5259 ppb  | 14:17:22 |
| 3 | Sc 361.383         | 1879245.1 | 1879245.1 | 96.366 %     |             | 14:18:59 |
| 3 | Y 371.029          | 1310908.0 | 1310908.0 | 98.319 %     |             | 14:18:59 |
| 3 | Ag 328.068†        | -620.5    | -120.4    | 0.0237 µg/L  | 0.0237 ppb  | 14:19:04 |
| 3 | As 188.979†        | -3.6      | -0.3      | -2.2934 µg/L | -2.2934 ppb | 14:19:25 |
| 3 | B 249.677†         | 322.4     | 57.3      | -4.0058 µg/L | -4.0058 ppb | 14:19:04 |
| 3 | Ba 233.527†        | 807.6     | 865.1     | 20.027 µg/L  | 20.027 ppb  | 14:19:25 |
| 3 | Be 313.107†        | 519.1     | 2097.5    | 1.0795 µg/L  | 1.0795 ppb  | 14:19:04 |
| 3 | Cd 226.502†        | -124.4    | 36.2      | -0.5380 µg/L | -0.5380 ppb | 14:19:25 |
| 3 | Co 228.616†        | 65.5      | 33.5      | 0.2941 µg/L  | 0.2941 ppb  | 14:19:25 |
| 3 | Cr 267.716†        | 195.4     | 110.5     | 2.5811 µg/L  | 2.5811 ppb  | 14:19:04 |
| 3 | Cu 324.752†        | 4247.6    | 183.9     | 3.6922 µg/L  | 3.6922 ppb  | 14:19:04 |
| 3 | Mn 257.610†        | 162987.3  | 169873.7  | 552.09 µg/L  | 552.09 ppb  | 14:18:59 |
| 3 | Mo 202.031†        | 17.9      | 6.2       | 1.1473 µg/L  | 1.1473 ppb  | 14:19:25 |
| 3 | Ni 231.604†        | 367.1     | 23.5      | 1.5578 µg/L  | 1.5578 ppb  | 14:19:25 |
| 3 | P 214.914†         | 321.6     | 45.8      | 70.809 µg/L  | 70.809 ppb  | 14:19:25 |
| 3 | Pb 220.353†        | 71.6      | 34.8      | 10.071 µg/L  | 10.071 ppb  | 14:19:25 |
| 3 | S 181.975 Axial†   | 21.6      | -0.5      | -1.7393 µg/L | -1.7393 ppb | 14:19:25 |
| 3 | Sb 206.836†        | 18.5      | -8.7      | -8.2828 µg/L | -8.2828 ppb | 14:19:25 |
| 3 | Se 196.026†        | 15.6      | -5.6      | 35.313 µg/L  | 35.313 ppb  | 14:19:25 |
| 3 | SiO2†              | 58825.0   | 58301.9   | 11044 µg/L   | 11044 ppb   | 14:19:04 |
| 3 | Si 251.611†        | 70011.3   | 72230.0   | 5145.3 µg/L  | 5145.3 ppb  | 14:19:04 |
| 3 | Sn 189.927†        | -2.9      | 2.2       | 0.9794 µg/L  | 0.9794 ppb  | 14:19:25 |
| 3 | Ti 334.940†        | 230382.6  | 239762.7  | 588.59 µg/L  | 588.59 ppb  | 14:18:59 |
| 3 | Tl 190.801†        | -36.1     | -3.1      | 5.7752 µg/L  | 5.7752 ppb  | 14:19:25 |
| 3 | U 409.014†         | -368.6    | -342.6    | -33.833 µg/L | -33.833 ppb | 14:19:04 |
| 3 | V 292.402†         | 561.0     | 483.0     | 4.4160 µg/L  | 4.4160 ppb  | 14:19:04 |
| 3 | Zn 213.857†        | 4259.3    | 3761.7    | 90.347 µg/L  | 90.347 ppb  | 14:19:04 |

## Mean Data: 247188007|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1871947.0                | 95.991 %           | 0.3246   |                    |          | 0.34%   |
| Sc RADIAL          | 88302.3                  | 96.2 %             | 0.02     |                    |          | 0.02%   |
| Y 371.029          | 1306531.6                | 97.991 %           | 0.2855   |                    |          | 0.29%   |
| Ag 328.068†        | -153.9                   | -0.2639 µg/L       | 0.25499  | -0.2639 ppb        | 0.25499  | 96.62%  |
| Al 396.153Radial†  | 3947.0                   | 1932.5 µg/L        | 6.24     | 1932.5 ppb         | 6.24     | 0.32%   |
| As 188.979†        | 0.6                      | -0.8578 µg/L       | 1.73517  | -0.8578 ppb        | 1.73517  | 202.28% |
| B 249.677†         | 68.6                     | -3.4258 µg/L       | 0.66807  | -3.4258 ppb        | 0.66807  | 19.50%  |
| Ba 233.527†        | 982.7                    | 22.748 µg/L        | 2.3587   | 22.748 ppb         | 2.3587   | 10.37%  |
| Be 313.107†        | 2233.0                   | 1.1511 µg/L        | 0.06208  | 1.1511 ppb         | 0.06208  | 5.39%   |
| Ca 317.933Radial†  | 3155.3                   | 1187.4 µg/L        | 7.08     | 1187.4 ppb         | 7.08     | 0.60%   |
| Cd 226.502†        | 51.9                     | -0.1287 µg/L       | 0.35590  | -0.1287 ppb        | 0.35590  | 276.55% |
| Co 228.616†        | 40.0                     | 0.5178 µg/L        | 0.19379  | 0.5178 ppb         | 0.19379  | 37.43%  |
| Cr 267.716†        | 127.9                    | 2.9883 µg/L        | 0.49359  | 2.9883 ppb         | 0.49359  | 16.52%  |
| Cu 324.752†        | 231.0                    | 4.0010 µg/L        | 0.27739  | 4.0010 ppb         | 0.27739  | 6.93%   |
| Fe 238.204 Radial† | 1035.3                   | 12895 µg/L         | 65.8     | 12895 ppb          | 65.8     | 0.51%   |
| K 766.490 Radial†  | 2378.4                   | 1125.3 µg/L        | 19.52    | 1125.3 ppb         | 19.52    | 1.73%   |
| Mg 279.077 IEC†    | 19.6                     | 250.68 µg/L        | 34.370   | 250.68 ppb         | 34.370   | 13.71%  |
| Mn 257.610†        | 177930.5                 | 578.23 µg/L        | 22.644   | 578.23 ppb         | 22.644   | 3.92%   |
| Mo 202.031†        | 6.1                      | 1.1292 µg/L        | 0.13285  | 1.1292 ppb         | 0.13285  | 11.77%  |
| Na 589.592 Radial† | 1736.4                   | 878.23 µg/L        | 16.269   | 878.23 ppb         | 16.269   | 1.85%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 28.2     | 1.8360 µg/L  | 0.32981 | 1.8360 ppb  | 0.32981 | 17.96%  |
| P 214.914†       | 51.4     | 80.639 µg/L  | 11.1305 | 80.639 ppb  | 11.1305 | 13.80%  |
| Pb 220.353†      | 34.7     | 10.063 µg/L  | 2.3115  | 10.063 ppb  | 2.3115  | 22.97%  |
| S 181.975 Axial† | -2.4     | -7.9997 µg/L | 5.52112 | -7.9997 ppb | 5.52112 | 69.02%  |
| Sb 206.836†      | -6.6     | -6.3635 µg/L | 1.91466 | -6.3635 ppb | 1.91466 | 30.09%  |
| Se 196.026†      | -8.1     | 32.557 µg/L  | 3.1351  | 32.557 ppb  | 3.1351  | 9.63%   |
| SiO2†            | 62027.7  | 11749 µg/L   | 612.4   | 11749 ppb   | 612.4   | 5.21%   |
| Si 251.611†      | 76824.7  | 5472.6 µg/L  | 283.90  | 5472.6 ppb  | 283.90  | 5.19%   |
| Sn 189.927†      | 0.9      | 0.4392 µg/L  | 2.02681 | 0.4392 ppb  | 2.02681 | 461.43% |
| Sr 421.552†      | 423.5    | 2.5648 µg/L  | 0.10677 | 2.5648 ppb  | 0.10677 | 4.16%   |
| Ti 334.940†      | 253143.8 | 621.44 µg/L  | 28.452  | 621.44 ppb  | 28.452  | 4.58%   |
| Tl 190.801†      | -6.1     | 2.9976 µg/L  | 3.20448 | 2.9976 ppb  | 3.20448 | 106.90% |
| U 409.014†       | -304.8   | -30.298 µg/L | 3.6820  | -30.298 ppb | 3.6820  | 12.15%  |
| V 292.402†       | 475.0    | 4.3282 µg/L  | 0.09190 | 4.3282 ppb  | 0.09190 | 2.12%   |
| Zn 213.857†      | 4064.0   | 97.659 µg/L  | 6.3473  | 97.659 ppb  | 6.3473  | 6.50%   |



Sequence No.: 8

Sample ID: 247188008|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 304

Date Collected: 3/15/2010 14:19:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188008|954676|5

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 88043.2       | 88043.2             | 95.9 %       |                    |                    | 14:20:05      |
| 1     | Al 396.153Radial†  | 3564.5        | 3878.1              | 1898.7 µg/L  |                    | 1898.7 ppb         | 14:20:05      |
| 1     | Ca 317.933Radial†  | 1520.1        | 1243.6              | 467.96 µg/L  |                    | 467.96 ppb         | 14:20:25      |
| 1     | Fe 238.204 Radial† | 1018.0        | 1048.1              | 13054 µg/L   |                    | 13054 ppb          | 14:20:25      |
| 1     | K 766.490 Radial†  | 2437.6        | 2135.8              | 1010.5 µg/L  |                    | 1010.5 ppb         | 14:20:05      |
| 1     | Mg 279.077 IEC†    | 28.1          | 20.3                | 260.10 µg/L  |                    | 260.10 ppb         | 14:20:25      |
| 1     | Na 589.592 Radial† | 1707.7        | 1590.0              | 804.17 µg/L  |                    | 804.17 ppb         | 14:20:05      |
| 1     | Sr 421.552†        | 467.1         | 351.6               | 2.1291 µg/L  |                    | 2.1291 ppb         | 14:20:05      |
| 1     | Sc 361.383         | 1869547.8     | 1869547.8           | 95.868 %     |                    |                    | 14:21:27      |
| 1     | Y 371.029          | 1291927.4     | 1291927.4           | 96.895 %     |                    |                    | 14:21:27      |
| 1     | Ag 328.068†        | -641.1        | -145.2              | -0.1794 µg/L |                    | -0.1794 ppb        | 14:21:33      |
| 1     | As 188.979†        | -3.1          | 0.1                 | -1.4804 µg/L |                    | -1.4804 ppb        | 14:21:53      |
| 1     | B 249.677†         | 341.9         | 79.3                | -2.9898 µg/L |                    | -2.9898 ppb        | 14:21:53      |
| 1     | Ba 233.527†        | 754.4         | 814.0               | 18.843 µg/L  |                    | 18.843 ppb         | 14:21:53      |
| 1     | Be 313.107†        | 150.6         | 1716.0              | 0.8223 µg/L  |                    | 0.8223 ppb         | 14:21:33      |
| 1     | Cd 226.502†        | -102.0        | 58.9                | 0.0341 µg/L  |                    | 0.0341 ppb         | 14:21:53      |
| 1     | Co 228.616†        | 72.3          | 41.0                | 0.5250 µg/L  |                    | 0.5250 ppb         | 14:21:53      |
| 1     | Cr 267.716†        | 268.0         | 187.2               | 4.3724 µg/L  |                    | 4.3724 ppb         | 14:21:53      |
| 1     | Cu 324.752†        | 4102.8        | 55.7                | 2.8344 µg/L  |                    | 2.8344 ppb         | 14:21:33      |
| 1     | Mn 257.610†        | 113764.7      | 119407.0            | 388.30 µg/L  |                    | 388.30 ppb         | 14:21:33      |
| 1     | Mo 202.031†        | 22.9          | 11.6                | 1.7099 µg/L  |                    | 1.7099 ppb         | 14:21:53      |
| 1     | Ni 231.604†        | 386.0         | 45.2                | 2.8441 µg/L  |                    | 2.8441 ppb         | 14:21:53      |
| 1     | P 214.914†         | 334.7         | 61.2                | 97.991 µg/L  |                    | 97.991 ppb         | 14:21:53      |
| 1     | Pb 220.353†        | 62.2          | 25.3                | 7.4423 µg/L  |                    | 7.4423 ppb         | 14:21:53      |
| 1     | S 181.975 Axial†   | 19.5          | -2.6                | -8.4916 µg/L |                    | -8.4916 ppb        | 14:21:53      |
| 1     | Sb 206.836†        | 24.0          | -2.8                | -2.6872 µg/L |                    | -2.6872 ppb        | 14:21:53      |
| 1     | Se 196.026†        | 12.1          | -9.1                | 32.086 µg/L  |                    | 32.086 ppb         | 14:21:53      |
| 1     | SiO2†              | 59670.1       | 59500.0             | 11271 µg/L   |                    | 11271 ppb          | 14:21:33      |
| 1     | Si 251.611†        | 71093.5       | 73735.8             | 5252.6 µg/L  |                    | 5252.6 ppb         | 14:21:33      |
| 1     | Sn 189.927†        | -0.1          | 5.1                 | 2.1400 µg/L  |                    | 2.1400 ppb         | 14:21:53      |
| 1     | Ti 334.940†        | 249739.4      | 261193.8            | 641.19 µg/L  |                    | 641.19 ppb         | 14:21:27      |
| 1     | Tl 190.801†        | -38.1         | -5.4                | 3.3416 µg/L  |                    | 3.3416 ppb         | 14:21:53      |
| 1     | U 409.014†         | -303.5        | -276.7              | -27.657 µg/L |                    | -27.657 ppb        | 14:21:33      |
| 1     | V 292.402†         | 543.8         | 468.1               | 4.2308 µg/L  |                    | 4.2308 ppb         | 14:21:33      |
| 1     | Zn 213.857†        | 3600.3        | 3097.2              | 74.265 µg/L  |                    | 74.265 ppb         | 14:21:53      |
| 2     | Sc RADIAL          | 88420.4       | 88420.4             | 96.3 %       |                    |                    | 14:20:30      |
| 2     | Al 396.153Radial†  | 3533.7        | 3830.3              | 1875.3 µg/L  |                    | 1875.3 ppb         | 14:20:30      |
| 2     | Ca 317.933Radial†  | 1517.1        | 1233.8              | 464.27 µg/L  |                    | 464.27 ppb         | 14:20:51      |
| 2     | Fe 238.204 Radial† | 1016.6        | 1042.1              | 12979 µg/L   |                    | 12979 ppb          | 14:20:51      |
| 2     | K 766.490 Radial†  | 2511.8        | 2202.0              | 1041.8 µg/L  |                    | 1041.8 ppb         | 14:20:30      |
| 2     | Mg 279.077 IEC†    | 25.8          | 17.7                | 225.27 µg/L  |                    | 225.27 ppb         | 14:20:51      |
| 2     | Na 589.592 Radial† | 1666.4        | 1539.4              | 778.62 µg/L  |                    | 778.62 ppb         | 14:20:30      |
| 2     | Sr 421.552†        | 449.5         | 331.3               | 2.0063 µg/L  |                    | 2.0063 ppb         | 14:20:30      |
| 2     | Sc 361.383         | 1869508.3     | 1869508.3           | 95.866 %     |                    |                    | 14:22:00      |
| 2     | Y 371.029          | 1293005.1     | 1293005.1           | 96.976 %     |                    |                    | 14:22:00      |
| 2     | Ag 328.068†        | -666.6        | -171.8              | -0.4078 µg/L |                    | -0.4078 ppb        | 14:22:05      |
| 2     | As 188.979†        | -3.0          | 0.2                 | -1.2755 µg/L |                    | -1.2755 ppb        | 14:22:26      |
| 2     | B 249.677†         | 322.4         | 59.0                | -3.9268 µg/L |                    | -3.9268 ppb        | 14:22:26      |
| 2     | Ba 233.527†        | 760.7         | 820.6               | 18.997 µg/L  |                    | 18.997 ppb         | 14:22:26      |
| 2     | Be 313.107†        | 238.0         | 1807.0              | 0.8786 µg/L  |                    | 0.8786 ppb         | 14:22:05      |
| 2     | Cd 226.502†        | -107.3        | 53.4                | -0.0984 µg/L |                    | -0.0984 ppb        | 14:22:26      |
| 2     | Co 228.616†        | 77.2          | 46.1                | 0.7528 µg/L  |                    | 0.7528 ppb         | 14:22:26      |
| 2     | Cr 267.716†        | 264.6         | 183.7               | 4.2896 µg/L  |                    | 4.2896 ppb         | 14:22:26      |
| 2     | Cu 324.752†        | 4090.3        | 42.8                | 2.7319 µg/L  |                    | 2.7319 ppb         | 14:22:05      |
| 2     | Mn 257.610†        | 113643.9      | 119283.5            | 387.89 µg/L  |                    | 387.89 ppb         | 14:22:05      |
| 2     | Mo 202.031†        | 18.9          | 7.4                 | 1.2663 µg/L  |                    | 1.2663 ppb         | 14:22:26      |
| 2     | Ni 231.604†        | 381.3         | 40.3                | 2.5526 µg/L  |                    | 2.5526 ppb         | 14:22:26      |
| 2     | P 214.914†         | 338.8         | 65.4                | 105.47 µg/L  |                    | 105.47 ppb         | 14:22:26      |
| 2     | Pb 220.353†        | 72.9          | 36.5                | 10.549 µg/L  |                    | 10.549 ppb         | 14:22:26      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 26.2      | 4.4       | 14.686 µg/L  | 14.686 ppb  | 14:22:26 |
| 2 | Sb 206.836†        | 18.6      | -8.5      | -8.0890 µg/L | -8.0890 ppb | 14:22:26 |
| 2 | Se 196.026†        | 13.4      | -7.8      | 33.196 µg/L  | 33.196 ppb  | 14:22:26 |
| 2 | SiO2†              | 59790.6   | 59627.0   | 11295 µg/L   | 11295 ppb   | 14:22:05 |
| 2 | Si 251.611†        | 71216.1   | 73865.2   | 5261.8 µg/L  | 5261.8 ppb  | 14:22:05 |
| 2 | Sn 189.927†        | -7.4      | -2.4      | -1.0378 µg/L | -1.0378 ppb | 14:22:26 |
| 2 | Ti 334.940†        | 249996.2  | 261467.3  | 641.86 µg/L  | 641.86 ppb  | 14:22:00 |
| 2 | Tl 190.801†        | -40.0     | -7.4      | 1.2062 µg/L  | 1.2062 ppb  | 14:22:26 |
| 2 | U 409.014†         | -331.3    | -305.7    | -30.346 µg/L | -30.346 ppb | 14:22:05 |
| 2 | V 292.402†         | 555.7     | 480.5     | 4.3906 µg/L  | 4.3906 ppb  | 14:22:05 |
| 2 | Zn 213.857†        | 3564.9    | 3060.4    | 73.380 µg/L  | 73.380 ppb  | 14:22:26 |
| 3 | Sc RADIAL          | 88738.0   | 88738.0   | 96.7 %       |             | 14:20:56 |
| 3 | Al 396.153Radial†  | 3559.4    | 3843.7    | 1881.9 µg/L  | 1881.9 ppb  | 14:20:56 |
| 3 | Ca 317.933Radial†  | 1506.5    | 1217.1    | 458.00 µg/L  | 458.00 ppb  | 14:21:17 |
| 3 | Fe 238.204 Radial† | 1015.9    | 1037.6    | 12923 µg/L   | 12923 ppb   | 14:21:17 |
| 3 | K 766.490 Radial†  | 2493.7    | 2174.0    | 1028.6 µg/L  | 1028.6 ppb  | 14:20:56 |
| 3 | Mg 279.077 IEC†    | 30.2      | 22.2      | 286.73 µg/L  | 286.73 ppb  | 14:21:17 |
| 3 | Na 589.592 Radial† | 1680.7    | 1548.1    | 783.02 µg/L  | 783.02 ppb  | 14:20:56 |
| 3 | Sr 421.552†        | 492.3     | 373.9     | 2.2643 µg/L  | 2.2643 ppb  | 14:20:56 |
| 3 | Sc 361.383         | 1865786.0 | 1865786.0 | 95.675 %     |             | 14:22:32 |
| 3 | Y 371.029          | 1287913.5 | 1287913.5 | 96.594 %     |             | 14:22:32 |
| 3 | Ag 328.068†        | -577.7    | -80.3     | 0.3481 µg/L  | 0.3481 ppb  | 14:22:38 |
| 3 | As 188.979†        | -2.8      | 0.5       | -0.8637 µg/L | -0.8637 ppb | 14:22:59 |
| 3 | B 249.677†         | 318.5     | 55.6      | -4.0644 µg/L | -4.0644 ppb | 14:22:59 |
| 3 | Ba 233.527†        | 635.0     | 690.8     | 15.990 µg/L  | 15.990 ppb  | 14:22:59 |
| 3 | Be 313.107†        | -50.4     | 1506.2    | 0.7097 µg/L  | 0.7097 ppb  | 14:22:38 |
| 3 | Cd 226.502†        | -127.2    | 32.3      | -0.6319 µg/L | -0.6319 ppb | 14:22:59 |
| 3 | Co 228.616†        | 61.0      | 29.4      | 0.0933 µg/L  | 0.0933 ppb  | 14:22:59 |
| 3 | Cr 267.716†        | 221.8     | 139.5     | 3.2587 µg/L  | 3.2587 ppb  | 14:22:59 |
| 3 | Cu 324.752†        | 4180.1    | 145.1     | 3.4201 µg/L  | 3.4201 ppb  | 14:22:38 |
| 3 | Mn 257.610†        | 102306.0  | 107669.7  | 350.19 µg/L  | 350.19 ppb  | 14:22:38 |
| 3 | Mo 202.031†        | 21.0      | 9.6       | 1.4936 µg/L  | 1.4936 ppb  | 14:22:59 |
| 3 | Ni 231.604†        | 375.0     | 34.5      | 2.2087 µg/L  | 2.2087 ppb  | 14:22:59 |
| 3 | P 214.914†         | 324.6     | 51.3      | 80.583 µg/L  | 80.583 ppb  | 14:22:59 |
| 3 | Pb 220.353†        | 67.4      | 30.9      | 8.9794 µg/L  | 8.9794 ppb  | 14:22:59 |
| 3 | S 181.975 Axial†   | 19.2      | -2.9      | -9.6529 µg/L | -9.6529 ppb | 14:22:59 |
| 3 | Sb 206.836†        | 21.9      | -4.9      | -4.7357 µg/L | -4.7357 ppb | 14:22:59 |
| 3 | Se 196.026†        | 11.0      | -10.3     | 30.526 µg/L  | 30.526 ppb  | 14:22:59 |
| 3 | SiO2†              | 55441.0   | 55205.2   | 10457 µg/L   | 10457 ppb   | 14:22:38 |
| 3 | Si 251.611†        | 65704.4   | 68252.6   | 4862.0 µg/L  | 4862.0 ppb  | 14:22:38 |
| 3 | Sn 189.927†        | -8.2      | -3.3      | -1.3958 µg/L | -1.3958 ppb | 14:22:59 |
| 3 | Ti 334.940†        | 231023.0  | 242156.7  | 594.45 µg/L  | 594.45 ppb  | 14:22:32 |
| 3 | Tl 190.801†        | -46.0     | -13.7     | -5.9660 µg/L | -5.9660 ppb | 14:22:59 |
| 3 | U 409.014†         | -346.5    | -322.3    | -31.883 µg/L | -31.883 ppb | 14:22:38 |
| 3 | V 292.402†         | 438.3     | 358.9     | 2.8641 µg/L  | 2.8641 ppb  | 14:22:38 |
| 3 | Zn 213.857†        | 3063.7    | 2543.9    | 60.888 µg/L  | 60.888 ppb  | 14:22:59 |

Mean Data: 247188008|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1868280.7                | 95.803 %           | 0.1108   |                    |          | 0.12%   |
| Sc RADIAL          | 88400.5                  | 96.3 %             | 0.38     |                    |          | 0.39%   |
| Y 371.029          | 1290948.7                | 96.822 %           | 0.2012   |                    |          | 0.21%   |
| Ag 328.068†        | -132.4                   | -0.0797 µg/L       | 0.38770  | -0.0797 ppb        | 0.38770  | 486.36% |
| Al 396.153Radial†  | 3850.7                   | 1885.3 µg/L        | 12.07    | 1885.3 ppb         | 12.07    | 0.64%   |
| As 188.979†        | 0.3                      | -1.2065 µg/L       | 0.31411  | -1.2065 ppb        | 0.31411  | 26.03%  |
| B 249.677†         | 64.6                     | -3.6603 µg/L       | 0.58476  | -3.6603 ppb        | 0.58476  | 15.98%  |
| Ba 233.527†        | 775.1                    | 17.943 µg/L        | 1.6933   | 17.943 ppb         | 1.6933   | 9.44%   |
| Be 313.107†        | 1676.4                   | 0.8035 µg/L        | 0.08602  | 0.8035 ppb         | 0.08602  | 10.71%  |
| Ca 317.933Radial†  | 1231.5                   | 463.41 µg/L        | 5.035    | 463.41 ppb         | 5.035    | 1.09%   |
| Cd 226.502†        | 48.2                     | -0.2321 µg/L       | 0.35256  | -0.2321 ppb        | 0.35256  | 151.92% |
| Co 228.616†        | 38.8                     | 0.4570 µg/L        | 0.33496  | 0.4570 ppb         | 0.33496  | 73.29%  |
| Cr 267.716†        | 170.2                    | 3.9736 µg/L        | 0.62046  | 3.9736 ppb         | 0.62046  | 15.61%  |
| Cu 324.752†        | 81.2                     | 2.9955 µg/L        | 0.37126  | 2.9955 ppb         | 0.37126  | 12.39%  |
| Fe 238.204 Radial† | 1042.6                   | 12986 µg/L         | 65.6     | 12986 ppb          | 65.6     | 0.51%   |
| K 766.490 Radial†  | 2170.6                   | 1027.0 µg/L        | 15.70    | 1027.0 ppb         | 15.70    | 1.53%   |
| Mg 279.077 IEC†    | 20.1                     | 257.37 µg/L        | 30.820   | 257.37 ppb         | 30.820   | 11.98%  |
| Mn 257.610†        | 115453.4                 | 375.46 µg/L        | 21.884   | 375.46 ppb         | 21.884   | 5.83%   |
| Mo 202.031†        | 9.5                      | 1.4899 µg/L        | 0.22185  | 1.4899 ppb         | 0.22185  | 14.89%  |
| Na 589.592 Radial† | 1559.2                   | 788.61 µg/L        | 13.658   | 788.61 ppb         | 13.658   | 1.73%   |

|                  |          |              |          |             |          |         |
|------------------|----------|--------------|----------|-------------|----------|---------|
| Ni 231.604†      | 40.0     | 2.5351 µg/L  | 0.31806  | 2.5351 ppb  | 0.31806  | 12.55%  |
| P 214.914†       | 59.3     | 94.681 µg/L  | 12.7691  | 94.681 ppb  | 12.7691  | 13.49%  |
| Pb 220.353†      | 30.9     | 8.9903 µg/L  | 1.55346  | 8.9903 ppb  | 1.55346  | 17.28%  |
| S 181.975 Axial† | -0.3     | -1.1529 µg/L | 13.72903 | -1.1529 ppb | 13.72903 | >999.9% |
| Sb 206.836†      | -5.4     | -5.1706 µg/L | 2.72704  | -5.1706 ppb | 2.72704  | 52.74%  |
| Se 196.026†      | -9.1     | 31.936 µg/L  | 1.3413   | 31.936 ppb  | 1.3413   | 4.20%   |
| SiO2†            | 58110.7  | 11007 µg/L   | 476.8    | 11007 ppb   | 476.8    | 4.33%   |
| Si 251.611†      | 71951.2  | 5125.4 µg/L  | 228.22   | 5125.4 ppb  | 228.22   | 4.45%   |
| Sn 189.927†      | -0.2     | -0.0979 µg/L | 1.94631  | -0.0979 ppb | 1.94631  | >999.9% |
| Sr 421.552†      | 352.2    | 2.1332 µg/L  | 0.12905  | 2.1332 ppb  | 0.12905  | 6.05%   |
| Ti 334.940†      | 254939.3 | 625.83 µg/L  | 27.180   | 625.83 ppb  | 27.180   | 4.34%   |
| Tl 190.801†      | -8.8     | -0.4728 µg/L | 4.87565  | -0.4728 ppb | 4.87565  | >999.9% |
| U 409.014†       | -301.6   | -29.962 µg/L | 2.1392   | -29.962 ppb | 2.1392   | 7.14%   |
| V 292.402†       | 435.8    | 3.8285 µg/L  | 0.83902  | 3.8285 ppb  | 0.83902  | 21.91%  |
| Zn 213.857†      | 2900.5   | 69.511 µg/L  | 7.4808   | 69.511 ppb  | 7.4808   | 10.76%  |

Sequence No.: 9

Sample ID: 247188010|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 305

Date Collected: 3/15/2010 14:23:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188010|954676|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87628.3          | 87628.3                | 95.5 %                |                       | 14:23:39         |
| 1     | Al 396.153Radial†  | 3044.7           | 3351.3                 | 1640.8 µg/L           | 1640.8 ppb            | 14:23:39         |
| 1     | Ca 317.933Radial†  | 1564.6           | 1297.8                 | 488.35 µg/L           | 488.35 ppb            | 14:23:59         |
| 1     | Fe 238.204 Radial† | 1105.7           | 1144.9                 | 14260 µg/L            | 14260 ppb             | 14:23:59         |
| 1     | K 766.490 Radial†  | 2101.4           | 1795.8                 | 849.63 µg/L           | 849.63 ppb            | 14:23:39         |
| 1     | Mg 279.077 IEC†    | 29.7             | 22.1                   | 283.42 µg/L           | 283.42 ppb            | 14:23:59         |
| 1     | Na 589.592 Radial† | 1455.0           | 1333.8                 | 674.60 µg/L           | 674.60 ppb            | 14:23:39         |
| 1     | Sr 421.552†        | 464.9            | 351.6                  | 2.1294 µg/L           | 2.1294 ppb            | 14:23:39         |
| 1     | Sc 361.383         | 1861066.9        | 1861066.9              | 95.433 %              |                       | 14:25:02         |
| 1     | Y 371.029          | 1284002.8        | 1284002.8              | 96.301 %              |                       | 14:25:02         |
| 1     | Ag 328.068†        | -655.7           | -163.5                 | -0.2330 µg/L          | -0.2330 ppb           | 14:25:07         |
| 1     | As 188.979†        | -0.7             | 2.7                    | 2.3527 µg/L           | 2.3527 ppb            | 14:25:28         |
| 1     | B 249.677†         | 331.6            | 70.2                   | -4.0586 µg/L          | -4.0586 ppb           | 14:25:28         |
| 1     | Ba 233.527†        | 902.1            | 972.3                  | 22.509 µg/L           | 22.509 ppb            | 14:25:28         |
| 1     | Be 313.107†        | 181.3            | 1748.9                 | 0.8263 µg/L           | 0.8263 ppb            | 14:25:07         |
| 1     | Cd 226.502†        | -91.3            | 69.6                   | 0.1717 µg/L           | 0.1717 ppb            | 14:25:28         |
| 1     | Co 228.616†        | 72.0             | 41.0                   | 0.4365 µg/L           | 0.4365 ppb            | 14:25:28         |
| 1     | Cr 267.716†        | 260.1            | 180.2                  | 4.2095 µg/L           | 4.2095 ppb            | 14:25:28         |
| 1     | Cu 324.752†        | 4098.7           | 70.9                   | 3.1646 µg/L           | 3.1646 ppb            | 14:25:07         |
| 1     | Mn 257.610†        | 130136.6         | 137103.2               | 445.80 µg/L           | 445.80 ppb            | 14:25:07         |
| 1     | Mo 202.031†        | 26.4             | 15.3                   | 2.1463 µg/L           | 2.1463 ppb            | 14:25:28         |
| 1     | Ni 231.604†        | 386.2            | 47.2                   | 2.9760 µg/L           | 2.9760 ppb            | 14:25:28         |
| 1     | P 214.914†         | 348.0            | 76.7                   | 124.29 µg/L           | 124.29 ppb            | 14:25:28         |
| 1     | Pb 220.353†        | 66.0             | 29.6                   | 8.6254 µg/L           | 8.6254 ppb            | 14:25:28         |
| 1     | S 181.975 Axial†   | 19.0             | -3.0                   | -10.137 µg/L          | -10.137 ppb           | 14:25:28         |
| 1     | Sb 206.836†        | 25.5             | -1.2                   | -1.1468 µg/L          | -1.1468 ppb           | 14:25:28         |
| 1     | Se 196.026†        | 4.9              | -16.7                  | 28.352 µg/L           | 28.352 ppb            | 14:25:28         |
| 1     | SiO2†              | 54402.3          | 54263.7                | 10279 µg/L            | 10279 ppb             | 14:25:07         |
| 1     | Si 251.611†        | 64506.0          | 67170.9                | 4784.9 µg/L           | 4784.9 ppb            | 14:25:07         |
| 1     | Sn 189.927†        | -5.0             | 0.0                    | -0.0163 µg/L          | -0.0163 ppb           | 14:25:28         |
| 1     | Ti 334.940†        | 265287.9         | 278673.5               | 684.09 µg/L           | 684.09 ppb            | 14:25:02         |
| 1     | Tl 190.801†        | -38.3            | -5.7                   | 3.7096 µg/L           | 3.7096 ppb            | 14:25:28         |
| 1     | U 409.014†         | -276.3           | -249.7                 | -25.299 µg/L          | -25.299 ppb           | 14:25:07         |
| 1     | V 292.402†         | 629.9            | 560.9                  | 5.2522 µg/L           | 5.2522 ppb            | 14:25:07         |
| 1     | Zn 213.857†        | 4351.3           | 3901.2                 | 93.653 µg/L           | 93.653 ppb            | 14:25:28         |
| 2     | Sc RADIAL          | 87692.8          | 87692.8                | 95.6 %                |                       | 14:24:05         |
| 2     | Al 396.153Radial†  | 3054.2           | 3358.8                 | 1644.5 µg/L           | 1644.5 ppb            | 14:24:05         |
| 2     | Ca 317.933Radial†  | 1582.4           | 1315.2                 | 494.91 µg/L           | 494.91 ppb            | 14:24:25         |
| 2     | Fe 238.204 Radial† | 1118.7           | 1157.7                 | 14419 µg/L            | 14419 ppb             | 14:24:25         |
| 2     | K 766.490 Radial†  | 2139.5           | 1834.0                 | 867.73 µg/L           | 867.73 ppb            | 14:24:05         |
| 2     | Mg 279.077 IEC†    | 31.7             | 24.1                   | 310.55 µg/L           | 310.55 ppb            | 14:24:25         |
| 2     | Na 589.592 Radial† | 1442.2           | 1319.2                 | 667.24 µg/L           | 667.24 ppb            | 14:24:05         |
| 2     | Sr 421.552†        | 464.7            | 351.0                  | 2.1259 µg/L           | 2.1259 ppb            | 14:24:05         |
| 2     | Sc 361.383         | 1866363.7        | 1866363.7              | 95.705 %              |                       | 14:25:34         |
| 2     | Y 371.029          | 1285764.7        | 1285764.7              | 96.433 %              |                       | 14:25:34         |
| 2     | Ag 328.068†        | -711.9           | -220.3                 | -0.6987 µg/L          | -0.6987 ppb           | 14:25:39         |
| 2     | As 188.979†        | 0.1              | 3.5                    | 3.6422 µg/L           | 3.6422 ppb            | 14:26:00         |
| 2     | B 249.677†         | 312.0            | 48.6                   | -5.1768 µg/L          | -5.1768 ppb           | 14:26:00         |
| 2     | Ba 233.527†        | 905.1            | 972.8                  | 22.520 µg/L           | 22.520 ppb            | 14:26:00         |
| 2     | Be 313.107†        | 186.7            | 1753.9                 | 0.8286 µg/L           | 0.8286 ppb            | 14:25:39         |
| 2     | Cd 226.502†        | -93.9            | 67.2                   | 0.0910 µg/L           | 0.0910 ppb            | 14:26:00         |
| 2     | Co 228.616†        | 82.3             | 51.6                   | 0.9118 µg/L           | 0.9118 ppb            | 14:26:00         |
| 2     | Cr 267.716†        | 268.2            | 187.9                  | 4.3885 µg/L           | 4.3885 ppb            | 14:26:00         |
| 2     | Cu 324.752†        | 4113.7           | 74.4                   | 3.2185 µg/L           | 3.2185 ppb            | 14:25:39         |
| 2     | Mn 257.610†        | 131157.6         | 137783.0               | 448.01 µg/L           | 448.01 ppb            | 14:25:39         |
| 2     | Mo 202.031†        | 25.5             | 14.3                   | 2.0465 µg/L           | 2.0465 ppb            | 14:26:00         |
| 2     | Ni 231.604†        | 380.4            | 40.0                   | 2.5521 µg/L           | 2.5521 ppb            | 14:26:00         |
| 2     | P 214.914†         | 352.9            | 80.8                   | 131.39 µg/L           | 131.39 ppb            | 14:26:00         |
| 2     | Pb 220.353†        | 59.4             | 22.5                   | 6.6450 µg/L           | 6.6450 ppb            | 14:26:00         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 19.7      | -2.3      | -7.6587 µg/L | -7.6587 ppb | 14:26:00 |
| 2 | Sb 206.836†        | 26.0      | -0.7      | -0.7267 µg/L | -0.7267 ppb | 14:26:00 |
| 2 | Se 196.026†        | 8.1       | -13.3     | 32.225 µg/L  | 32.225 ppb  | 14:26:00 |
| 2 | SiO2†              | 54817.2   | 54535.6   | 10330 µg/L   | 10330 ppb   | 14:25:39 |
| 2 | Si 251.611†        | 64908.2   | 67399.4   | 4801.2 µg/L  | 4801.2 ppb  | 14:25:39 |
| 2 | Sn 189.927†        | -10.3     | -5.5      | -2.3448 µg/L | -2.3448 ppb | 14:26:00 |
| 2 | Ti 334.940†        | 266993.8  | 279667.0  | 686.53 µg/L  | 686.53 ppb  | 14:25:34 |
| 2 | Tl 190.801†        | -44.5     | -12.2     | -2.9124 µg/L | -2.9124 ppb | 14:26:00 |
| 2 | U 409.014†         | -227.1    | -197.4    | -20.447 µg/L | -20.447 ppb | 14:25:39 |
| 2 | V 292.402†         | 632.4     | 561.6     | 5.2457 µg/L  | 5.2457 ppb  | 14:25:39 |
| 2 | Zn 213.857†        | 4300.0    | 3834.7    | 92.035 µg/L  | 92.035 ppb  | 14:26:00 |
| 3 | Sc RADIAL          | 87330.2   | 87330.2   | 95.2 %       |             | 14:24:30 |
| 3 | Al 396.153Radial†  | 3034.4    | 3351.3    | 1640.8 µg/L  | 1640.8 ppb  | 14:24:30 |
| 3 | Ca 317.933Radial†  | 1575.1    | 1314.4    | 494.61 µg/L  | 494.61 ppb  | 14:24:51 |
| 3 | Fe 238.204 Radial† | 1114.0    | 1157.6    | 14418 µg/L   | 14418 ppb   | 14:24:51 |
| 3 | K 766.490 Radial†  | 1986.4    | 1682.4    | 796.00 µg/L  | 796.00 ppb  | 14:24:30 |
| 3 | Mg 279.077 IEC†    | 28.5      | 20.8      | 266.38 µg/L  | 266.38 ppb  | 14:24:51 |
| 3 | Na 589.592 Radial† | 1441.5    | 1324.7    | 670.02 µg/L  | 670.02 ppb  | 14:24:30 |
| 3 | Sr 421.552†        | 439.5     | 326.5     | 1.9776 µg/L  | 1.9776 ppb  | 14:24:30 |
| 3 | Sc 361.383         | 1855444.3 | 1855444.3 | 95.145 %     |             | 14:26:06 |
| 3 | Y 371.029          | 1279463.4 | 1279463.4 | 95.961 %     |             | 14:26:06 |
| 3 | Ag 328.068†        | -672.2    | -183.0    | -0.3848 µg/L | -0.3848 ppb | 14:26:12 |
| 3 | As 188.979†        | -2.2      | 1.1       | -0.1975 µg/L | -0.1975 ppb | 14:26:32 |
| 3 | B 249.677†         | 326.1     | 65.4      | -4.3713 µg/L | -4.3713 ppb | 14:26:32 |
| 3 | Ba 233.527†        | 756.8     | 822.5     | 19.042 µg/L  | 19.042 ppb  | 14:26:32 |
| 3 | Be 313.107†        | 17.7      | 1577.5    | 0.7365 µg/L  | 0.7365 ppb  | 14:26:12 |
| 3 | Cd 226.502†        | -113.0    | 46.5      | -0.4372 µg/L | -0.4372 ppb | 14:26:32 |
| 3 | Co 228.616†        | 71.6      | 40.8      | 0.5181 µg/L  | 0.5181 ppb  | 14:26:32 |
| 3 | Cr 267.716†        | 234.1     | 153.7     | 3.5911 µg/L  | 3.5911 ppb  | 14:26:32 |
| 3 | Cu 324.752†        | 4118.0    | 104.2     | 3.4218 µg/L  | 3.4218 ppb  | 14:26:12 |
| 3 | Mn 257.610†        | 118923.6  | 125731.2  | 408.90 µg/L  | 408.90 ppb  | 14:26:12 |
| 3 | Mo 202.031†        | 12.4      | 0.7       | 0.6185 µg/L  | 0.6185 ppb  | 14:26:32 |
| 3 | Ni 231.604†        | 380.4     | 42.4      | 2.6937 µg/L  | 2.6937 ppb  | 14:26:32 |
| 3 | P 214.914†         | 337.3     | 66.5      | 106.20 µg/L  | 106.20 ppb  | 14:26:32 |
| 3 | Pb 220.353†        | 63.5      | 27.2      | 7.9491 µg/L  | 7.9491 ppb  | 14:26:32 |
| 3 | S 181.975 Axial†   | 17.8      | -4.2      | -14.086 µg/L | -14.086 ppb | 14:26:32 |
| 3 | Sb 206.836†        | 23.2      | -3.5      | -3.3800 µg/L | -3.3800 ppb | 14:26:32 |
| 3 | Se 196.026†        | 14.1      | -7.0      | 38.578 µg/L  | 38.578 ppb  | 14:26:32 |
| 3 | SiO2†              | 51093.2   | 50958.5   | 9652.7 µg/L  | 9652.7 ppb  | 14:26:12 |
| 3 | Si 251.611†        | 60299.1   | 62954.2   | 4484.5 µg/L  | 4484.5 ppb  | 14:26:12 |
| 3 | Sn 189.927†        | -10.1     | -5.4      | -2.2966 µg/L | -2.2966 ppb | 14:26:32 |
| 3 | Ti 334.940†        | 247562.0  | 260885.5  | 640.43 µg/L  | 640.43 ppb  | 14:26:06 |
| 3 | Tl 190.801†        | -38.5     | -6.1      | 2.8428 µg/L  | 2.8428 ppb  | 14:26:32 |
| 3 | U 409.014†         | -274.4    | -248.6    | -25.220 µg/L | -25.220 ppb | 14:26:12 |
| 3 | V 292.402†         | 627.3     | 560.1     | 5.2092 µg/L  | 5.2092 ppb  | 14:26:12 |
| 3 | Zn 213.857†        | 3720.2    | 3251.8    | 77.938 µg/L  | 77.938 ppb  | 14:26:32 |

Mean Data: 247188010|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1860958.3                | 95.428 %           | 0.2800   |                    |          | 0.29%   |
| Sc RADIAL          | 87550.4                  | 95.4 %             | 0.21     |                    |          | 0.22%   |
| Y 371.029          | 1283077.0                | 96.232 %           | 0.2438   |                    |          | 0.25%   |
| Ag 328.068†        | -188.9                   | -0.4388 µg/L       | 0.23751  | -0.4388 ppb        | 0.23751  | 54.12%  |
| Al 396.153Radial†  | 3353.8                   | 1642.0 µg/L        | 2.11     | 1642.0 ppb         | 2.11     | 0.13%   |
| As 188.979†        | 2.4                      | 1.9325 µg/L        | 1.95407  | 1.9325 ppb         | 1.95407  | 101.12% |
| B 249.677†         | 61.4                     | -4.5356 µg/L       | 0.57693  | -4.5356 ppb        | 0.57693  | 12.72%  |
| Ba 233.527†        | 922.5                    | 21.357 µg/L        | 2.0050   | 21.357 ppb         | 2.0050   | 9.39%   |
| Be 313.107†        | 1693.4                   | 0.7971 µg/L        | 0.05255  | 0.7971 ppb         | 0.05255  | 6.59%   |
| Ca 317.933Radial†  | 1309.1                   | 492.62 µg/L        | 3.701    | 492.62 ppb         | 3.701    | 0.75%   |
| Cd 226.502†        | 61.1                     | -0.0582 µg/L       | 0.33074  | -0.0582 ppb        | 0.33074  | 568.55% |
| Co 228.616†        | 44.5                     | 0.6221 µg/L        | 0.25416  | 0.6221 ppb         | 0.25416  | 40.85%  |
| Cr 267.716†        | 173.9                    | 4.0630 µg/L        | 0.41837  | 4.0630 ppb         | 0.41837  | 10.30%  |
| Cu 324.752†        | 83.1                     | 3.2683 µg/L        | 0.13564  | 3.2683 ppb         | 0.13564  | 4.15%   |
| Fe 238.204 Radial† | 1153.4                   | 14366 µg/L         | 91.4     | 14366 ppb          | 91.4     | 0.64%   |
| K 766.490 Radial†  | 1770.7                   | 837.79 µg/L        | 37.304   | 837.79 ppb         | 37.304   | 4.45%   |
| Mg 279.077 IEC†    | 22.3                     | 286.79 µg/L        | 22.275   | 286.79 ppb         | 22.275   | 7.77%   |
| Mn 257.610†        | 133539.1                 | 434.24 µg/L        | 21.970   | 434.24 ppb         | 21.970   | 5.06%   |
| Mo 202.031†        | 10.1                     | 1.6038 µg/L        | 0.85476  | 1.6038 ppb         | 0.85476  | 53.30%  |
| Na 589.592 Radial† | 1325.9                   | 670.62 µg/L        | 3.715    | 670.62 ppb         | 3.715    | 0.55%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 43.2     | 2.7406 µg/L  | 0.21582 | 2.7406 ppb  | 0.21582 | 7.87%   |
| P 214.914†       | 74.7     | 120.63 µg/L  | 12.992  | 120.63 ppb  | 12.992  | 10.77%  |
| Pb 220.353†      | 26.4     | 7.7398 µg/L  | 1.00667 | 7.7398 ppb  | 1.00667 | 13.01%  |
| S 181.975 Axial† | -3.2     | -10.627 µg/L | 3.2417  | -10.627 ppb | 3.2417  | 30.50%  |
| Sb 206.836†      | -1.8     | -1.7512 µg/L | 1.42614 | -1.7512 ppb | 1.42614 | 81.44%  |
| Se 196.026†      | -12.3    | 33.052 µg/L  | 5.1630  | 33.052 ppb  | 5.1630  | 15.62%  |
| SiO2†            | 53252.6  | 10087 µg/L   | 377.2   | 10087 ppb   | 377.2   | 3.74%   |
| Si 251.611†      | 65841.5  | 4690.2 µg/L  | 178.31  | 4690.2 ppb  | 178.31  | 3.80%   |
| Sn 189.927†      | -3.7     | -1.5526 µg/L | 1.33069 | -1.5526 ppb | 1.33069 | 85.71%  |
| Sr 421.552†      | 343.1    | 2.0776 µg/L  | 0.08663 | 2.0776 ppb  | 0.08663 | 4.17%   |
| Ti 334.940†      | 273075.3 | 670.35 µg/L  | 25.943  | 670.35 ppb  | 25.943  | 3.87%   |
| Tl 190.801†      | -8.0     | 1.2133 µg/L  | 3.59919 | 1.2133 ppb  | 3.59919 | 296.64% |
| U 409.014†       | -231.9   | -23.655 µg/L | 2.7787  | -23.655 ppb | 2.7787  | 11.75%  |
| V 292.402†       | 560.9    | 5.2357 µg/L  | 0.02315 | 5.2357 ppb  | 0.02315 | 0.44%   |
| Zn 213.857†      | 3662.6   | 87.875 µg/L  | 8.6439  | 87.875 ppb  | 8.6439  | 9.84%   |

Sequence No.: 10

Sample ID: 247188011|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 306

Date Collected: 3/15/2010 14:26:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188011|954676|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87941.8          | 87941.8                | 95.8 %                |                       | 14:27:12         |
| 1     | Al 396.153Radial†  | 2697.5           | 2977.6                 | 1457.8 µg/L           | 1457.8 ppb            | 14:27:12         |
| 1     | Ca 317.933Radial†  | 1372.5           | 1091.4                 | 410.69 µg/L           | 410.69 ppb            | 14:27:32         |
| 1     | Fe 238.204 Radial† | 1016.0           | 1047.2                 | 13044 µg/L            | 13044 ppb             | 14:27:32         |
| 1     | K 766.490 Radial†  | 2035.9           | 1719.5                 | 813.54 µg/L           | 813.54 ppb            | 14:27:12         |
| 1     | Mg 279.077 IEC†    | 27.6             | 19.7                   | 252.33 µg/L           | 252.33 ppb            | 14:27:32         |
| 1     | Na 589.592 Radial† | 1421.7           | 1293.5                 | 654.23 µg/L           | 654.23 ppb            | 14:27:12         |
| 1     | Sr 421.552†        | 410.9            | 293.4                  | 1.7772 µg/L           | 1.7772 ppb            | 14:27:12         |
| 1     | Sc 361.383         | 1853750.3        | 1853750.3              | 95.058 %              |                       | 14:28:34         |
| 1     | Y 371.029          | 1279265.6        | 1279265.6              | 95.946 %              |                       | 14:28:34         |
| 1     | Ag 328.068†        | -617.9           | -126.5                 | -0.0248 µg/L          | -0.0248 ppb           | 14:28:40         |
| 1     | As 188.979†        | 0.1              | 3.5                    | 3.7537 µg/L           | 3.7537 ppb            | 14:29:00         |
| 1     | B 249.677†         | 321.7            | 61.1                   | -3.8600 µg/L          | -3.8600 ppb           | 14:28:40         |
| 1     | Ba 233.527†        | 722.3            | 787.0                  | 18.218 µg/L           | 18.218 ppb            | 14:29:00         |
| 1     | Be 313.107†        | 44.4             | 1605.6                 | 0.7609 µg/L           | 0.7609 ppb            | 14:28:40         |
| 1     | Cd 226.502†        | -87.7            | 73.0                   | 0.3949 µg/L           | 0.3949 ppb            | 14:29:00         |
| 1     | Co 228.616†        | 72.8             | 42.1                   | 0.6162 µg/L           | 0.6162 ppb            | 14:29:00         |
| 1     | Cr 267.716†        | 267.8            | 189.4                  | 4.4234 µg/L           | 4.4234 ppb            | 14:28:40         |
| 1     | Cu 324.752†        | 4176.3           | 169.5                  | 3.6089 µg/L           | 3.6089 ppb            | 14:28:40         |
| 1     | Mn 257.610†        | 120879.5         | 127903.0               | 415.87 µg/L           | 415.87 ppb            | 14:28:40         |
| 1     | Mo 202.031†        | 24.1             | 13.0                   | 1.8582 µg/L           | 1.8582 ppb            | 14:29:00         |
| 1     | Ni 231.604†        | 366.6            | 28.2                   | 1.8368 µg/L           | 1.8368 ppb            | 14:29:00         |
| 1     | P 214.914†         | 339.5            | 69.2                   | 111.95 µg/L           | 111.95 ppb            | 14:29:00         |
| 1     | Pb 220.353†        | 66.4             | 30.3                   | 8.7796 µg/L           | 8.7796 ppb            | 14:29:00         |
| 1     | S 181.975 Axial†   | 17.3             | -4.7                   | -15.606 µg/L          | -15.606 ppb           | 14:29:00         |
| 1     | Sb 206.836†        | 26.5             | -0.0                   | -0.0688 µg/L          | -0.0688 ppb           | 14:29:00         |
| 1     | Se 196.026†        | 12.5             | -8.6                   | 32.599 µg/L           | 32.599 ppb            | 14:29:00         |
| 1     | SiO2†              | 50993.5          | 50902.7                | 9642.1 µg/L           | 9642.1 ppb            | 14:28:40         |
| 1     | Si 251.611†        | 60335.1          | 63049.9                | 4491.4 µg/L           | 4491.4 ppb            | 14:28:40         |
| 1     | Sn 189.927†        | -9.0             | -4.2                   | -1.7884 µg/L          | -1.7884 ppb           | 14:29:00         |
| 1     | Ti 334.940†        | 240260.1         | 253441.7               | 622.15 µg/L           | 622.15 ppb            | 14:28:34         |
| 1     | Tl 190.801†        | -43.3            | -11.2                  | -2.7665 µg/L          | -2.7665 ppb           | 14:29:00         |
| 1     | U 409.014†         | -281.8           | -256.5                 | -25.768 µg/L          | -25.768 ppb           | 14:28:40         |
| 1     | V 292.402†         | 510.9            | 438.3                  | 3.8601 µg/L           | 3.8601 ppb            | 14:28:40         |
| 1     | Zn 213.857†        | 4084.6           | 3638.7                 | 87.366 µg/L           | 87.366 ppb            | 14:28:40         |
| 2     | Sc RADIAL          | 87550.6          | 87550.6                | 95.4 %                |                       | 14:27:38         |
| 2     | Al 396.153Radial†  | 2714.8           | 3008.3                 | 1472.9 µg/L           | 1472.9 ppb            | 14:27:38         |
| 2     | Ca 317.933Radial†  | 1362.9           | 1087.8                 | 409.33 µg/L           | 409.33 ppb            | 14:27:58         |
| 2     | Fe 238.204 Radial† | 1027.6           | 1064.1                 | 13254 µg/L            | 13254 ppb             | 14:27:58         |
| 2     | K 766.490 Radial†  | 2005.4           | 1697.0                 | 802.92 µg/L           | 802.92 ppb            | 14:27:38         |
| 2     | Mg 279.077 IEC†    | 18.6             | 10.4                   | 126.97 µg/L           | 126.97 ppb            | 14:27:58         |
| 2     | Na 589.592 Radial† | 1384.9           | 1261.5                 | 638.07 µg/L           | 638.07 ppb            | 14:27:38         |
| 2     | Sr 421.552†        | 349.9            | 231.5                  | 1.4020 µg/L           | 1.4020 ppb            | 14:27:38         |
| 2     | Sc 361.383         | 1856117.5        | 1856117.5              | 95.180 %              |                       | 14:29:07         |
| 2     | Y 371.029          | 1279400.2        | 1279400.2              | 95.956 %              |                       | 14:29:07         |
| 2     | Ag 328.068†        | -677.3           | -188.1                 | -0.5246 µg/L          | -0.5246 ppb           | 14:29:12         |
| 2     | As 188.979†        | 0.1              | 3.5                    | 3.8062 µg/L           | 3.8062 ppb            | 14:29:33         |
| 2     | B 249.677†         | 310.6            | 49.1                   | -4.5498 µg/L          | -4.5498 ppb           | 14:29:12         |
| 2     | Ba 233.527†        | 706.7            | 769.6                  | 17.817 µg/L           | 17.817 ppb            | 14:29:33         |
| 2     | Be 313.107†        | -23.9            | 1533.7                 | 0.7158 µg/L           | 0.7158 ppb            | 14:29:12         |
| 2     | Cd 226.502†        | -91.4            | 69.3                   | 0.2759 µg/L           | 0.2759 ppb            | 14:29:33         |
| 2     | Co 228.616†        | 69.9             | 39.0                   | 0.4704 µg/L           | 0.4704 ppb            | 14:29:33         |
| 2     | Cr 267.716†        | 235.2            | 154.8                  | 3.6163 µg/L           | 3.6163 ppb            | 14:29:12         |
| 2     | Cu 324.752†        | 4196.6           | 185.2                  | 3.7561 µg/L           | 3.7561 ppb            | 14:29:12         |
| 2     | Mn 257.610†        | 122185.7         | 129113.2               | 419.82 µg/L           | 419.82 ppb            | 14:29:12         |
| 2     | Mo 202.031†        | 14.6             | 3.0                    | 0.8199 µg/L           | 0.8199 ppb            | 14:29:33         |
| 2     | Ni 231.604†        | 370.8            | 32.2                   | 2.0724 µg/L           | 2.0724 ppb            | 14:29:33         |
| 2     | P 214.914†         | 331.1            | 59.9                   | 95.270 µg/L           | 95.270 ppb            | 14:29:33         |
| 2     | Pb 220.353†        | 64.8             | 28.5                   | 8.2749 µg/L           | 8.2749 ppb            | 14:29:33         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 21.6      | -0.2      | -0.6316 µg/L | -0.6316 ppb | 14:29:33 |
| 2 | Sb 206.836†        | 26.9      | 0.4       | 0.3618 µg/L  | 0.3618 ppb  | 14:29:33 |
| 2 | Se 196.026†        | 10.8      | -10.4     | 31.535 µg/L  | 31.535 ppb  | 14:29:33 |
| 2 | SiO2†              | 51522.7   | 51390.4   | 9734.4 µg/L  | 9734.4 ppb  | 14:29:12 |
| 2 | Si 251.611†        | 61005.0   | 63672.8   | 4535.7 µg/L  | 4535.7 ppb  | 14:29:12 |
| 2 | Sn 189.927†        | -7.7      | -2.8      | -1.2048 µg/L | -1.2048 ppb | 14:29:33 |
| 2 | Ti 334.940†        | 240979.3  | 253875.0  | 623.23 µg/L  | 623.23 ppb  | 14:29:07 |
| 2 | Tl 190.801†        | -44.9     | -12.8     | -4.3596 µg/L | -4.3596 ppb | 14:29:33 |
| 2 | U 409.014†         | -246.7    | -219.3    | -22.325 µg/L | -22.325 ppb | 14:29:12 |
| 2 | V 292.402†         | 543.4     | 471.8     | 4.2492 µg/L  | 4.2492 ppb  | 14:29:12 |
| 2 | Zn 213.857†        | 4133.1    | 3684.2    | 88.462 µg/L  | 88.462 ppb  | 14:29:12 |
| 3 | Sc RADIAL          | 87196.5   | 87196.5   | 95.0 %       |             | 14:28:03 |
| 3 | Al 396.153Radial†  | 2692.5    | 2996.4    | 1467.0 µg/L  | 1467.0 ppb  | 14:28:03 |
| 3 | Ca 317.933Radial†  | 1368.6    | 1099.5    | 413.75 µg/L  | 413.75 ppb  | 14:28:24 |
| 3 | Fe 238.204 Radial† | 1026.7    | 1067.5    | 13296 µg/L   | 13296 ppb   | 14:28:24 |
| 3 | K 766.490 Radial†  | 1997.2    | 1697.0    | 802.89 µg/L  | 802.89 ppb  | 14:28:03 |
| 3 | Mg 279.077 IEC†    | 22.3      | 14.4      | 179.92 µg/L  | 179.92 ppb  | 14:28:24 |
| 3 | Na 589.592 Radial† | 1365.5    | 1247.0    | 630.73 µg/L  | 630.73 ppb  | 14:28:03 |
| 3 | Sr 421.552†        | 382.0     | 266.7     | 1.6152 µg/L  | 1.6152 ppb  | 14:28:03 |
| 3 | Sc 361.383         | 1851577.3 | 1851577.3 | 94.947 %     |             | 14:29:39 |
| 3 | Y 371.029          | 1274451.5 | 1274451.5 | 95.585 %     |             | 14:29:39 |
| 3 | Ag 328.068†        | -586.0    | -93.7     | 0.2613 µg/L  | 0.2613 ppb  | 14:29:45 |
| 3 | As 188.979†        | -3.3      | -0.1      | -1.8662 µg/L | -1.8662 ppb | 14:30:06 |
| 3 | B 249.677†         | 338.5     | 79.2      | -3.1210 µg/L | -3.1210 ppb | 14:29:45 |
| 3 | Ba 233.527†        | 593.8     | 652.5     | 15.103 µg/L  | 15.103 ppb  | 14:30:06 |
| 3 | Be 313.107†        | -229.6    | 1317.0    | 0.5981 µg/L  | 0.5981 ppb  | 14:29:45 |
| 3 | Cd 226.502†        | -122.4    | 36.4      | -0.5686 µg/L | -0.5686 ppb | 14:30:06 |
| 3 | Co 228.616†        | 62.1      | 31.0      | 0.2015 µg/L  | 0.2015 ppb  | 14:30:06 |
| 3 | Cr 267.716†        | 265.5     | 187.3     | 4.3719 µg/L  | 4.3719 ppb  | 14:29:45 |
| 3 | Cu 324.752†        | 4182.8    | 181.5     | 3.7384 µg/L  | 3.7384 ppb  | 14:29:45 |
| 3 | Mn 257.610†        | 109828.7  | 116413.3  | 378.60 µg/L  | 378.60 ppb  | 14:29:45 |
| 3 | Mo 202.031†        | 19.1      | 7.8       | 1.3214 µg/L  | 1.3214 ppb  | 14:30:06 |
| 3 | Ni 231.604†        | 368.0     | 30.2      | 1.9578 µg/L  | 1.9578 ppb  | 14:30:06 |
| 3 | P 214.914†         | 320.0     | 49.1      | 76.221 µg/L  | 76.221 ppb  | 14:30:06 |
| 3 | Pb 220.353†        | 67.6      | 31.7      | 9.1661 µg/L  | 9.1661 ppb  | 14:30:06 |
| 3 | S 181.975 Axial†   | 18.9      | -3.0      | -10.024 µg/L | -10.024 ppb | 14:30:06 |
| 3 | Sb 206.836†        | 21.3      | -5.4      | -5.1909 µg/L | -5.1909 ppb | 14:30:06 |
| 3 | Se 196.026†        | 2.9       | -18.7     | 23.320 µg/L  | 23.320 ppb  | 14:30:06 |
| 3 | SiO2†              | 47545.3   | 47334.0   | 8966.1 µg/L  | 8966.1 ppb  | 14:29:45 |
| 3 | Si 251.611†        | 56213.9   | 58784.0   | 4187.5 µg/L  | 4187.5 ppb  | 14:29:45 |
| 3 | Sn 189.927†        | -6.3      | -1.4      | -0.5901 µg/L | -0.5901 ppb | 14:30:06 |
| 3 | Ti 334.940†        | 223191.4  | 235761.3  | 578.76 µg/L  | 578.76 ppb  | 14:29:39 |
| 3 | Tl 190.801†        | -38.4     | -6.1      | 2.0133 µg/L  | 2.0133 ppb  | 14:30:06 |
| 3 | U 409.014†         | -234.1    | -206.6    | -21.147 µg/L | -21.147 ppb | 14:29:45 |
| 3 | V 292.402†         | 408.3     | 330.8     | 2.4747 µg/L  | 2.4747 ppb  | 14:29:45 |
| 3 | Zn 213.857†        | 3758.3    | 3300.0    | 79.166 µg/L  | 79.166 ppb  | 14:29:45 |

Mean Data: 247188011|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1853815.0                | 95.062 %           | 0.1164   |                    |          | 0.12%   |
| Sc RADIAL          | 87563.0                  | 95.4 %             | 0.41     |                    |          | 0.43%   |
| Y 371.029          | 1277705.8                | 95.829 %           | 0.2114   |                    |          | 0.22%   |
| Ag 328.068†        | -136.1                   | -0.0960 µg/L       | 0.39775  | -0.0960 ppb        | 0.39775  | 414.13% |
| Al 396.153Radial†  | 2994.1                   | 1465.9 µg/L        | 7.60     | 1465.9 ppb         | 7.60     | 0.52%   |
| As 188.979†        | 2.3                      | 1.8979 µg/L        | 3.25995  | 1.8979 ppb         | 3.25995  | 171.77% |
| B 249.677†         | 63.1                     | -3.8436 µg/L       | 0.71451  | -3.8436 ppb        | 0.71451  | 18.59%  |
| Ba 233.527†        | 736.4                    | 1.6946 µg/L        | 1.6946   | 1.6946 ppb         | 1.6946   | 9.94%   |
| Be 313.107†        | 1485.4                   | 0.6916 µg/L        | 0.08408  | 0.6916 ppb         | 0.08408  | 12.16%  |
| Ca 317.933Radial†  | 1092.9                   | 411.26 µg/L        | 2.262    | 411.26 ppb         | 2.262    | 0.55%   |
| Cd 226.502†        | 59.6                     | 0.0340 µg/L        | 0.52532  | 0.0340 ppb         | 0.52532  | >999.9% |
| Co 228.616†        | 37.4                     | 0.4293 µg/L        | 0.21037  | 0.4293 ppb         | 0.21037  | 49.00%  |
| Cr 267.716†        | 177.2                    | 4.1372 µg/L        | 0.45186  | 4.1372 ppb         | 0.45186  | 10.92%  |
| Cu 324.752†        | 178.7                    | 3.7011 µg/L        | 0.08035  | 3.7011 ppb         | 0.08035  | 2.17%   |
| Fe 238.204 Radial† | 1059.6                   | 13198 µg/L         | 135.2    | 13198 ppb          | 135.2    | 1.02%   |
| K 766.490 Radial†  | 1704.5                   | 806.45 µg/L        | 6.144    | 806.45 ppb         | 6.144    | 0.76%   |
| Mg 279.077 IEC†    | 14.8                     | 186.41 µg/L        | 62.935   | 186.41 ppb         | 62.935   | 33.76%  |
| Mn 257.610†        | 124476.5                 | 404.76 µg/L        | 22.744   | 404.76 ppb         | 22.744   | 5.62%   |
| Mo 202.031†        | 7.9                      | 1.3331 µg/L        | 0.51922  | 1.3331 ppb         | 0.51922  | 38.95%  |
| Na 589.592 Radial† | 1267.4                   | 641.01 µg/L        | 12.024   | 641.01 ppb         | 12.024   | 1.88%   |



|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 30.2     | 1.9557 µg/L  | 0.11784 | 1.9557 ppb  | 0.11784 | 6.03%   |
| P 214.914†       | 59.4     | 94.479 µg/L  | 17.8765 | 94.479 ppb  | 17.8765 | 18.92%  |
| Pb 220.353†      | 30.1     | 8.7402 µg/L  | 0.44687 | 8.7402 ppb  | 0.44687 | 5.11%   |
| S 181.975 Axial† | -2.6     | -8.7539 µg/L | 7.56768 | -8.7539 ppb | 7.56768 | 86.45%  |
| Sb 206.836†      | -1.7     | -1.6326 µg/L | 3.08907 | -1.6326 ppb | 3.08907 | 189.21% |
| Se 196.026†      | -12.6    | 29.152 µg/L  | 5.0780  | 29.152 ppb  | 5.0780  | 17.42%  |
| SiO2†            | 49875.7  | 9447.5 µg/L  | 419.50  | 9447.5 ppb  | 419.50  | 4.44%   |
| Si 251.611†      | 61835.6  | 4404.9 µg/L  | 189.56  | 4404.9 ppb  | 189.56  | 4.30%   |
| Sn 189.927†      | -2.8     | -1.1944 µg/L | 0.59921 | -1.1944 ppb | 0.59921 | 50.17%  |
| Sr 421.552†      | 263.9    | 1.5981 µg/L  | 0.18817 | 1.5981 ppb  | 0.18817 | 11.77%  |
| Ti 334.940†      | 247692.6 | 608.05 µg/L  | 25.371  | 608.05 ppb  | 25.371  | 4.17%   |
| Tl 190.801†      | -10.0    | -1.7043 µg/L | 3.31660 | -1.7043 ppb | 3.31660 | 194.61% |
| U 409.014†       | -227.5   | -23.080 µg/L | 2.4011  | -23.080 ppb | 2.4011  | 10.40%  |
| V 292.402†       | 413.6    | 3.5280 µg/L  | 0.93269 | 3.5280 ppb  | 0.93269 | 26.44%  |
| Zn 213.857†      | 3541.0   | 84.998 µg/L  | 5.0800  | 84.998 ppb  | 5.0800  | 5.98%   |

Sequence No.: 11  
 Sample ID: 247188012|954676|5  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 307  
 Date Collected: 3/15/2010 14:30:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 247188012|954676|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86717.0          | 86717.0                | 94.5 %                |                       | 14:30:46         |
| 1     | Al 396.153Radial†  | 3841.6           | 4228.2                 | 2070.1 µg/L           | 2070.1 ppb            | 14:30:46         |
| 1     | Ca 317.933Radial†  | 3402.1           | 3259.6                 | 1226.6 µg/L           | 1226.6 ppb            | 14:30:46         |
| 1     | Fe 238.204 Radial† | 888.8            | 927.5                  | 11552 µg/L            | 11552 ppb             | 14:31:06         |
| 1     | K 766.490 Radial†  | 2719.8           | 2473.3                 | 1170.2 µg/L           | 1170.2 ppb            | 14:30:46         |
| 1     | Mg 279.077 IEC†    | 25.2             | 17.6                   | 226.27 µg/L           | 226.27 ppb            | 14:31:06         |
| 1     | Na 589.592 Radial† | 1911.9           | 1833.2                 | 927.22 µg/L           | 927.22 ppb            | 14:30:46         |
| 1     | Sr 421.552†        | 549.7            | 446.4                  | 2.7037 µg/L           | 2.7037 ppb            | 14:30:46         |
| 1     | Sc 361.383         | 1859377.1        | 1859377.1              | 95.347 %              |                       | 14:32:09         |
| 1     | Y 371.029          | 1298045.4        | 1298045.4              | 97.354 %              |                       | 14:32:09         |
| 1     | Ag 328.068†        | -688.0           | -198.1                 | -0.7462 µg/L          | -0.7462 ppb           | 14:32:15         |
| 1     | As 188.979†        | -3.1             | 0.1                    | -1.3663 µg/L          | -1.3663 ppb           | 14:32:35         |
| 1     | B 249.677†         | 345.5            | 85.0                   | -1.9224 µg/L          | -1.9224 ppb           | 14:32:15         |
| 1     | Ba 233.527†        | 1088.6           | 1168.8                 | 27.050 µg/L           | 27.050 ppb            | 14:32:35         |
| 1     | Be 313.107†        | 484.0            | 2066.5                 | 1.0886 µg/L           | 1.0886 ppb            | 14:32:15         |
| 1     | Cd 226.502†        | -103.9           | 56.3                   | 0.1400 µg/L           | 0.1400 ppb            | 14:32:35         |
| 1     | Co 228.616†        | 71.7             | 40.8                   | 0.7819 µg/L           | 0.7819 ppb            | 14:32:35         |
| 1     | Cr 267.716†        | 488.7            | 420.3                  | 9.8090 µg/L           | 9.8090 ppb            | 14:32:15         |
| 1     | Cu 324.752†        | 4160.4           | 139.5                  | 3.1241 µg/L           | 3.1241 ppb            | 14:32:15         |
| 1     | Mn 257.610†        | 164128.1         | 172877.5               | 561.75 µg/L           | 561.75 ppb            | 14:32:09         |
| 1     | Mo 202.031†        | 24.6             | 13.5                   | 1.8538 µg/L           | 1.8538 ppb            | 14:32:35         |
| 1     | Ni 231.604†        | 421.2            | 84.3                   | 5.1374 µg/L           | 5.1374 ppb            | 14:32:35         |
| 1     | P 214.914†         | 330.6            | 58.8                   | 94.912 µg/L           | 94.912 ppb            | 14:32:35         |
| 1     | Pb 220.353†        | 69.5             | 33.3                   | 9.6663 µg/L           | 9.6663 ppb            | 14:32:35         |
| 1     | S 181.975 Axial†   | 20.3             | -1.6                   | -5.4192 µg/L          | -5.4192 ppb           | 14:32:35         |
| 1     | Sb 206.836†        | 21.4             | -5.4                   | -5.2472 µg/L          | -5.2472 ppb           | 14:32:35         |
| 1     | Se 196.026†        | 22.6             | 1.9                    | 38.330 µg/L           | 38.330 ppb            | 14:32:35         |
| 1     | SiO2†              | 61010.3          | 61246.0                | 11601 µg/L            | 11601 ppb             | 14:32:15         |
| 1     | Si 251.611†        | 72783.3          | 75913.6                | 5407.7 µg/L           | 5407.7 ppb            | 14:32:15         |
| 1     | Sn 189.927†        | -8.7             | -3.9                   | -1.5754 µg/L          | -1.5754 ppb           | 14:32:35         |
| 1     | Ti 334.940†        | 198936.7         | 209336.7               | 513.90 µg/L           | 513.90 ppb            | 14:32:09         |
| 1     | Tl 190.801†        | -40.8            | -8.4                   | -0.6182 µg/L          | -0.6182 ppb           | 14:32:35         |
| 1     | U 409.014†         | -341.8           | -318.6                 | -31.396 µg/L          | -31.396 ppb           | 14:32:15         |
| 1     | V 292.402†         | 469.0            | 392.7                  | 3.4811 µg/L           | 3.4811 ppb            | 14:32:15         |
| 1     | Zn 213.857†        | 4116.4           | 3658.9                 | 87.914 µg/L           | 87.914 ppb            | 14:32:15         |
| 2     | Sc RADIAL          | 87413.7          | 87413.7                | 95.2 %                |                       | 14:31:12         |
| 2     | Al 396.153Radial†  | 3877.3           | 4233.3                 | 2072.6 µg/L           | 2072.6 ppb            | 14:31:12         |
| 2     | Ca 317.933Radial†  | 3440.4           | 3271.1                 | 1230.9 µg/L           | 1230.9 ppb            | 14:31:12         |
| 2     | Fe 238.204 Radial† | 883.3            | 914.3                  | 11388 µg/L            | 11388 ppb             | 14:31:32         |
| 2     | K 766.490 Radial†  | 2747.6           | 2479.6                 | 1173.2 µg/L           | 1173.2 ppb            | 14:31:12         |
| 2     | Mg 279.077 IEC†    | 22.9             | 15.0                   | 191.05 µg/L           | 191.05 ppb            | 14:31:32         |
| 2     | Na 589.592 Radial† | 1891.8           | 1796.1                 | 908.43 µg/L           | 908.43 ppb            | 14:31:12         |
| 2     | Sr 421.552†        | 553.0            | 445.3                  | 2.6968 µg/L           | 2.6968 ppb            | 14:31:12         |
| 2     | Sc 361.383         | 1840354.5        | 1840354.5              | 94.371 %              |                       | 14:32:42         |
| 2     | Y 371.029          | 1280946.4        | 1280946.4              | 96.072 %              |                       | 14:32:42         |
| 2     | Ag 328.068†        | -673.4           | -190.0                 | -0.6928 µg/L          | -0.6928 ppb           | 14:32:48         |
| 2     | As 188.979†        | 2.7              | 6.2                    | 8.1572 µg/L           | 8.1572 ppb            | 14:33:08         |
| 2     | B 249.677†         | 318.4            | 60.1                   | -3.0336 µg/L          | -3.0336 ppb           | 14:32:48         |
| 2     | Ba 233.527†        | 1068.6           | 1159.4                 | 26.833 µg/L           | 26.833 ppb            | 14:33:08         |
| 2     | Be 313.107†        | 529.9            | 2120.3                 | 1.1217 µg/L           | 1.1217 ppb            | 14:32:48         |
| 2     | Cd 226.502†        | -111.2           | 47.5                   | -0.0662 µg/L          | -0.0662 ppb           | 14:33:08         |
| 2     | Co 228.616†        | 62.0             | 31.3                   | 0.3479 µg/L           | 0.3479 ppb            | 14:33:08         |
| 2     | Cr 267.716†        | 513.4            | 451.7                  | 10.542 µg/L           | 10.542 ppb            | 14:32:48         |
| 2     | Cu 324.752†        | 4136.2           | 159.0                  | 3.2262 µg/L           | 3.2262 ppb            | 14:32:48         |
| 2     | Mn 257.610†        | 162444.1         | 172872.3               | 561.73 µg/L           | 561.73 ppb            | 14:32:42         |
| 2     | Mo 202.031†        | 16.9             | 5.6                    | 1.0174 µg/L           | 1.0174 ppb            | 14:33:08         |
| 2     | Ni 231.604†        | 418.8            | 86.4                   | 5.2567 µg/L           | 5.2567 ppb            | 14:33:08         |
| 2     | P 214.914†         | 323.5            | 54.9                   | 88.101 µg/L           | 88.101 ppb            | 14:33:08         |
| 2     | Pb 220.353†        | 65.7             | 30.0                   | 8.7432 µg/L           | 8.7432 ppb            | 14:33:08         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 20.4      | -1.4      | -4.5181 µg/L | -4.5181 ppb | 14:33:08 |
| 2 | Sb 206.836†        | 24.5      | -1.9      | -1.9507 µg/L | -1.9507 ppb | 14:33:08 |
| 2 | Se 196.026†        | 18.3      | -2.5      | 33.467 µg/L  | 33.467 ppb  | 14:33:08 |
| 2 | SiO2†              | 60729.5   | 61609.9   | 11670 µg/L   | 11670 ppb   | 14:32:48 |
| 2 | Si 251.611†        | 72374.9   | 76269.9   | 5433.1 µg/L  | 5433.1 ppb  | 14:32:48 |
| 2 | Sn 189.927†        | -11.8     | -7.3      | -2.9858 µg/L | -2.9858 ppb | 14:33:08 |
| 2 | Ti 334.940†        | 197270.2  | 209727.5  | 514.86 µg/L  | 514.86 ppb  | 14:32:42 |
| 2 | Tl 190.801†        | -43.5     | -11.8     | -4.1366 µg/L | -4.1366 ppb | 14:33:08 |
| 2 | U 409.014†         | -397.7    | -381.5    | -37.247 µg/L | -37.247 ppb | 14:32:48 |
| 2 | V 292.402†         | 440.2     | 367.3     | 3.1712 µg/L  | 3.1712 ppb  | 14:32:48 |
| 2 | Zn 213.857†        | 4096.8    | 3682.8    | 88.500 µg/L  | 88.500 ppb  | 14:32:48 |
| 3 | Sc RADIAL          | 87037.5   | 87037.5   | 94.8 %       |             | 14:31:38 |
| 3 | Al 396.153Radial†  | 3902.1    | 4277.0    | 2094.0 µg/L  | 2094.0 ppb  | 14:31:38 |
| 3 | Ca 317.933Radial†  | 3399.5    | 3243.7    | 1220.6 µg/L  | 1220.6 ppb  | 14:31:38 |
| 3 | Fe 238.204 Radial† | 892.6     | 928.1     | 11560 µg/L   | 11560 ppb   | 14:31:58 |
| 3 | K 766.490 Radial†  | 2779.8    | 2526.0    | 1195.1 µg/L  | 1195.1 ppb  | 14:31:38 |
| 3 | Mg 279.077 IEC†    | 24.3      | 16.6      | 212.21 µg/L  | 212.21 ppb  | 14:31:58 |
| 3 | Na 589.592 Radial† | 1915.4    | 1829.5    | 925.34 µg/L  | 925.34 ppb  | 14:31:38 |
| 3 | Sr 421.552†        | 517.9     | 410.7     | 2.4875 µg/L  | 2.4875 ppb  | 14:31:38 |
| 3 | Sc 361.383         | 1834182.6 | 1834182.6 | 94.055 %     |             | 14:33:15 |
| 3 | Y 371.029          | 1275845.5 | 1275845.5 | 95.689 %     |             | 14:33:15 |
| 3 | Ag 328.068†        | -658.5    | -176.6    | -0.5681 µg/L | -0.5681 ppb | 14:33:21 |
| 3 | As 188.979†        | -1.2      | 2.1       | 1.6417 µg/L  | 1.6417 ppb  | 14:33:41 |
| 3 | B 249.677†         | 314.2     | 56.7      | -3.2899 µg/L | -3.2899 ppb | 14:33:21 |
| 3 | Ba 233.527†        | 883.0     | 965.9     | 22.355 µg/L  | 22.355 ppb  | 14:33:41 |
| 3 | Be 313.107†        | 233.4     | 1807.0    | 0.9425 µg/L  | 0.9425 ppb  | 14:33:21 |
| 3 | Cd 226.502†        | -126.6    | 30.7      | -0.5161 µg/L | -0.5161 ppb | 14:33:41 |
| 3 | Co 228.616†        | 60.5      | 29.9      | 0.3680 µg/L  | 0.3680 ppb  | 14:33:41 |
| 3 | Cr 267.716†        | 417.9     | 352.0     | 8.2164 µg/L  | 8.2164 ppb  | 14:33:21 |
| 3 | Cu 324.752†        | 4176.3    | 216.4     | 3.6502 µg/L  | 3.6502 ppb  | 14:33:21 |
| 3 | Mn 257.610†        | 150554.7  | 160810.6  | 522.59 µg/L  | 522.59 ppb  | 14:33:15 |
| 3 | Mo 202.031†        | 20.9      | 9.8       | 1.4702 µg/L  | 1.4702 ppb  | 14:33:41 |
| 3 | Ni 231.604†        | 399.8     | 67.6      | 4.1475 µg/L  | 4.1475 ppb  | 14:33:41 |
| 3 | P 214.914†         | 313.5     | 45.3      | 71.118 µg/L  | 71.118 ppb  | 14:33:41 |
| 3 | Pb 220.353†        | 67.6      | 32.3      | 9.3762 µg/L  | 9.3762 ppb  | 14:33:41 |
| 3 | S 181.975 Axial†   | 21.2      | -0.4      | -1.4003 µg/L | -1.4003 ppb | 14:33:41 |
| 3 | Sb 206.836†        | 27.2      | 1.0       | 0.8653 µg/L  | 0.8653 ppb  | 14:33:41 |
| 3 | Se 196.026†        | 9.4       | -11.8     | 24.626 µg/L  | 24.626 ppb  | 14:33:41 |
| 3 | SiO2†              | 55720.4   | 56500.7   | 10702 µg/L   | 10702 ppb   | 14:33:21 |
| 3 | Si 251.611†        | 66127.5   | 69885.7   | 4978.3 µg/L  | 4978.3 ppb  | 14:33:21 |
| 3 | Sn 189.927†        | -4.9      | 0.0       | 0.0686 µg/L  | 0.0686 ppb  | 14:33:41 |
| 3 | Ti 334.940†        | 181001.7  | 193134.1  | 474.12 µg/L  | 474.12 ppb  | 14:33:15 |
| 3 | Tl 190.801†        | -41.2     | -9.5      | -2.2032 µg/L | -2.2032 ppb | 14:33:41 |
| 3 | U 409.014†         | -250.8    | -226.8    | -22.832 µg/L | -22.832 ppb | 14:33:21 |
| 3 | V 292.402†         | 423.8     | 351.4     | 2.9625 µg/L  | 2.9625 ppb  | 14:33:21 |
| 3 | Zn 213.857†        | 3736.9    | 3314.8    | 79.593 µg/L  | 79.593 ppb  | 14:33:21 |

Mean Data: 247188012|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1844638.1                | 94.591 %           | 0.6734   |                    |          | 0.71%   |
| Sc RADIAL          | 87056.1                  | 94.9 %             | 0.38     |                    |          | 0.40%   |
| Y 371.029          | 1284945.8                | 96.372 %           | 0.8721   |                    |          | 0.90%   |
| Ag 328.068†        | -188.2                   | -0.6690 µg/L       | 0.09140  | -0.6690 ppb        | 0.09140  | 13.66%  |
| Al 396.153Radial†  | 4246.2                   | 2078.9 µg/L        | 13.13    | 2078.9 ppb         | 13.13    | 0.63%   |
| As 188.979†        | 2.8                      | 2.8109 µg/L        | 4.86822  | 2.8109 ppb         | 4.86822  | 173.19% |
| B 249.677†         | 67.3                     | -2.7486 µg/L       | 0.72693  | -2.7486 ppb        | 0.72693  | 26.45%  |
| Ba 233.527†        | 1098.0                   | 25.413 µg/L        | 2.6502   | 25.413 ppb         | 2.6502   | 10.43%  |
| Be 313.107†        | 1998.0                   | 1.0510 µg/L        | 0.09536  | 1.0510 ppb         | 0.09536  | 9.07%   |
| Ca 317.933Radial†  | 3258.1                   | 1226.1 µg/L        | 5.18     | 1226.1 ppb         | 5.18     | 0.42%   |
| Cd 226.502†        | 44.9                     | -0.1475 µg/L       | 0.33553  | -0.1475 ppb        | 0.33553  | 227.56% |
| Co 228.616†        | 34.0                     | 0.4993 µg/L        | 0.24499  | 0.4993 ppb         | 0.24499  | 49.07%  |
| Cr 267.716†        | 408.0                    | 9.5225 µg/L        | 1.18901  | 9.5225 ppb         | 1.18901  | 12.49%  |
| Cu 324.752†        | 171.6                    | 3.3335 µg/L        | 0.27898  | 3.3335 ppb         | 0.27898  | 8.37%   |
| Fe 238.204 Radial† | 923.3                    | 11500 µg/L         | 97.4     | 11500 ppb          | 97.4     | 0.85%   |
| K 766.490 Radial†  | 2493.0                   | 1179.5 µg/L        | 13.61    | 1179.5 ppb         | 13.61    | 1.15%   |
| Mg 279.077 IEC†    | 16.4                     | 209.85 µg/L        | 17.730   | 209.85 ppb         | 17.730   | 8.45%   |
| Mn 257.610†        | 168853.4                 | 548.69 µg/L        | 22.603   | 548.69 ppb         | 22.603   | 4.12%   |
| Mo 202.031†        | 9.6                      | 1.4471 µg/L        | 0.41872  | 1.4471 ppb         | 0.41872  | 28.93%  |
| Na 589.592 Radial† | 1819.6                   | 920.33 µg/L        | 10.353   | 920.33 ppb         | 10.353   | 1.12%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 79.4     | 4.8472 µg/L  | 0.60893 | 4.8472 ppb  | 0.60893 | 12.56%  |
| P 214.914†       | 53.0     | 84.710 µg/L  | 12.2538 | 84.710 ppb  | 12.2538 | 14.47%  |
| Pb 220.353†      | 31.9     | 9.2619 µg/L  | 0.47204 | 9.2619 ppb  | 0.47204 | 5.10%   |
| S 181.975 Axial† | -1.1     | -3.7792 µg/L | 2.10885 | -3.7792 ppb | 2.10885 | 55.80%  |
| Sb 206.836†      | -2.1     | -2.1109 µg/L | 3.05938 | -2.1109 ppb | 3.05938 | 144.93% |
| Se 196.026†      | -4.1     | 32.141 µg/L  | 6.9471  | 32.141 ppb  | 6.9471  | 21.61%  |
| SiO2†            | 59785.5  | 11325 µg/L   | 540.0   | 11325 ppb   | 540.0   | 4.77%   |
| Si 251.611†      | 74023.1  | 5273.0 µg/L  | 255.55  | 5273.0 ppb  | 255.55  | 4.85%   |
| Sn 189.927†      | -3.7     | -1.4975 µg/L | 1.52868 | -1.4975 ppb | 1.52868 | 102.08% |
| Sr 421.552†      | 434.1    | 2.6293 µg/L  | 0.12291 | 2.6293 ppb  | 0.12291 | 4.67%   |
| Ti 334.940†      | 204066.1 | 500.96 µg/L  | 23.247  | 500.96 ppb  | 23.247  | 4.64%   |
| Tl 190.801†      | -9.9     | -2.3193 µg/L | 1.76207 | -2.3193 ppb | 1.76207 | 75.97%  |
| U 409.014†       | -309.0   | -30.492 µg/L | 7.2499  | -30.492 ppb | 7.2499  | 23.78%  |
| V 292.402†       | 370.5    | 3.2049 µg/L  | 0.26094 | 3.2049 ppb  | 0.26094 | 8.14%   |
| Zn 213.857†      | 3552.2   | 85.336 µg/L  | 4.9816  | 85.336 ppb  | 4.9816  | 5.84%   |

Sequence No.: 12

Sample ID: 247188013|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 308

Date Collected: 3/15/2010 14:33:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188013|954676|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 84324.6          | 84324.6                | 91.9 %                |                       | 14:34:21         |
| 1     | Al 396.153Radial†  | 3690.1           | 4178.6                 | 2045.8 µg/L           | 2045.8 ppb            | 14:34:21         |
| 1     | Ca 317.933Radial†  | 1642.3           | 1446.5                 | 544.32 µg/L           | 544.32 ppb            | 14:34:41         |
| 1     | Fe 238.204 Radial† | 1045.7           | 1125.0                 | 14012 µg/L            | 14012 ppb             | 14:34:41         |
| 1     | K 766.490 Radial†  | 2173.1           | 1960.0                 | 927.32 µg/L           | 927.32 ppb            | 14:34:21         |
| 1     | Mg 279.077 IEC†    | 33.3             | 27.2                   | 353.21 µg/L           | 353.21 ppb            | 14:34:41         |
| 1     | Na 589.592 Radial† | 1707.7           | 1668.5                 | 843.88 µg/L           | 843.88 ppb            | 14:34:21         |
| 1     | Sr 421.552†        | 608.7            | 527.2                  | 3.1927 µg/L           | 3.1927 ppb            | 14:34:21         |
| 1     | Sc 361.383         | 1837005.3        | 1837005.3              | 94.200 %              |                       | 14:35:44         |
| 1     | Y 371.029          | 1274731.2        | 1274731.2              | 95.606 %              |                       | 14:35:44         |
| 1     | Ag 328.068†        | -663.1           | -180.4                 | -0.3985 µg/L          | -0.3985 ppb           | 14:35:50         |
| 1     | As 188.979†        | -3.8             | -0.7                   | -2.8460 µg/L          | -2.8460 ppb           | 14:36:10         |
| 1     | B 249.677†         | 338.8            | 82.4                   | -3.3328 µg/L          | -3.3328 ppb           | 14:35:50         |
| 1     | Ba 233.527†        | 936.2            | 1020.9                 | 23.631 µg/L           | 23.631 ppb            | 14:36:10         |
| 1     | Be 313.107†        | 87.1             | 1651.3                 | 0.7730 µg/L           | 0.7730 ppb            | 14:35:50         |
| 1     | Cd 226.502†        | -102.2           | 56.8                   | -0.1236 µg/L          | -0.1236 ppb           | 14:36:10         |
| 1     | Co 228.616†        | 69.7             | 39.6                   | 0.4128 µg/L           | 0.4128 ppb            | 14:36:10         |
| 1     | Cr 267.716†        | 515.8            | 455.2                  | 10.626 µg/L           | 10.626 ppb            | 14:35:50         |
| 1     | Cu 324.752†        | 4097.9           | 126.3                  | 3.4961 µg/L           | 3.4961 ppb            | 14:35:50         |
| 1     | Mn 257.610†        | 125764.9         | 134248.4               | 436.51 µg/L           | 436.51 ppb            | 14:35:50         |
| 1     | Mo 202.031†        | 28.4             | 17.8                   | 2.4056 µg/L           | 2.4056 ppb            | 14:36:10         |
| 1     | Ni 231.604†        | 442.5            | 112.3                  | 6.8261 µg/L           | 6.8261 ppb            | 14:36:10         |
| 1     | P 214.914†         | 354.3            | 88.2                   | 144.90 µg/L           | 144.90 ppb            | 14:36:10         |
| 1     | Pb 220.353†        | 60.4             | 24.5                   | 7.2593 µg/L           | 7.2593 ppb            | 14:36:10         |
| 1     | S 181.975 Axial†   | 20.8             | -0.8                   | -2.7949 µg/L          | -2.7949 ppb           | 14:36:10         |
| 1     | Sb 206.836†        | 19.9             | -6.7                   | -6.4974 µg/L          | -6.4974 ppb           | 14:36:10         |
| 1     | Se 196.026†        | 10.7             | -10.4                  | 33.800 µg/L           | 33.800 ppb            | 14:36:10         |
| 1     | SiO2†              | 59296.7          | 60206.2                | 11404 µg/L            | 11404 ppb             | 14:35:50         |
| 1     | Si 251.611†        | 70541.8          | 74463.8                | 5304.4 µg/L           | 5304.4 ppb            | 14:35:50         |
| 1     | Sn 189.927†        | -1.0             | 4.1                    | 1.7274 µg/L           | 1.7274 ppb            | 14:36:10         |
| 1     | Ti 334.940†        | 254474.7         | 270835.5               | 664.85 µg/L           | 664.85 ppb            | 14:35:44         |
| 1     | Tl 190.801†        | -42.6            | -10.8                  | -1.8536 µg/L          | -1.8536 ppb           | 14:36:10         |
| 1     | U 409.014†         | -354.2           | -336.1                 | -33.336 µg/L          | -33.336 ppb           | 14:35:50         |
| 1     | V 292.402†         | 569.0            | 504.9                  | 4.5856 µg/L           | 4.5856 ppb            | 14:35:50         |
| 1     | Zn 213.857†        | 3790.6           | 3365.7                 | 80.690 µg/L           | 80.690 ppb            | 14:35:50         |
| 2     | Sc RADIAL          | 85015.8          | 85015.8                | 92.6 %                |                       | 14:34:47         |
| 2     | Al 396.153Radial†  | 3757.2           | 4218.4                 | 2065.3 µg/L           | 2065.3 ppb            | 14:34:47         |
| 2     | Ca 317.933Radial†  | 1638.3           | 1427.6                 | 537.23 µg/L           | 537.23 ppb            | 14:35:07         |
| 2     | Fe 238.204 Radial† | 1028.6           | 1097.3                 | 13666 µg/L            | 13666 ppb             | 14:35:07         |
| 2     | K 766.490 Radial†  | 2145.0           | 1910.4                 | 903.88 µg/L           | 903.88 ppb            | 14:34:47         |
| 2     | Mg 279.077 IEC†    | 28.9             | 22.1                   | 284.61 µg/L           | 284.61 ppb            | 14:35:07         |
| 2     | Na 589.592 Radial† | 1703.2           | 1648.5                 | 833.79 µg/L           | 833.79 ppb            | 14:34:47         |
| 2     | Sr 421.552†        | 611.8            | 525.2                  | 3.1805 µg/L           | 3.1805 ppb            | 14:34:47         |
| 2     | Sc 361.383         | 1831750.4        | 1831750.4              | 93.930 %              |                       | 14:36:16         |
| 2     | Y 371.029          | 1269615.9        | 1269615.9              | 95.222 %              |                       | 14:36:16         |
| 2     | Ag 328.068†        | -662.3           | -181.6                 | -0.4351 µg/L          | -0.4351 ppb           | 14:36:22         |
| 2     | As 188.979†        | -2.7             | 0.5                    | -1.0466 µg/L          | -1.0466 ppb           | 14:36:43         |
| 2     | B 249.677†         | 334.5            | 78.8                   | -3.3258 µg/L          | -3.3258 ppb           | 14:36:22         |
| 2     | Ba 233.527†        | 926.7            | 1013.6                 | 23.464 µg/L           | 23.464 ppb            | 14:36:43         |
| 2     | Be 313.107†        | 27.0             | 1587.5                 | 0.7334 µg/L           | 0.7334 ppb            | 14:36:22         |
| 2     | Cd 226.502†        | -108.8           | 49.5                   | -0.2728 µg/L          | -0.2728 ppb           | 14:36:43         |
| 2     | Co 228.616†        | 72.3             | 42.6                   | 0.5458 µg/L           | 0.5458 ppb            | 14:36:43         |
| 2     | Cr 267.716†        | 484.5            | 423.5                  | 9.8851 µg/L           | 9.8851 ppb            | 14:36:22         |
| 2     | Cu 324.752†        | 4050.8           | 88.7                   | 3.1745 µg/L           | 3.1745 ppb            | 14:36:22         |
| 2     | Mn 257.610†        | 125238.0         | 134070.4               | 435.92 µg/L           | 435.92 ppb            | 14:36:22         |
| 2     | Mo 202.031†        | 23.4             | 12.6                   | 1.8387 µg/L           | 1.8387 ppb            | 14:36:43         |
| 2     | Ni 231.604†        | 427.0            | 97.2                   | 5.9263 µg/L           | 5.9263 ppb            | 14:36:43         |
| 2     | P 214.914†         | 352.1            | 86.8                   | 142.83 µg/L           | 142.83 ppb            | 14:36:43         |
| 2     | Pb 220.353†        | 63.3             | 27.9                   | 8.1764 µg/L           | 8.1764 ppb            | 14:36:43         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 22.0      | 0.5       | 1.7408 µg/L  | 1.7408 ppb  | 14:36:43 |
| 2 | Sb 206.836†        | 22.9      | -3.5      | -3.3942 µg/L | -3.3942 ppb | 14:36:43 |
| 2 | Se 196.026†        | 15.5      | -5.3      | 37.824 µg/L  | 37.824 ppb  | 14:36:43 |
| 2 | SiO2†              | 59235.3   | 60321.5   | 11426 µg/L   | 11426 ppb   | 14:36:22 |
| 2 | Si 251.611†        | 70428.4   | 74557.9   | 5311.1 µg/L  | 5311.1 ppb  | 14:36:22 |
| 2 | Sn 189.927†        | -2.2      | 2.9       | 1.1922 µg/L  | 1.1922 ppb  | 14:36:43 |
| 2 | Ti 334.940†        | 253800.3  | 270892.5  | 664.99 µg/L  | 664.99 ppb  | 14:36:16 |
| 2 | Tl 190.801†        | -42.5     | -10.9     | -1.9566 µg/L | -1.9566 ppb | 14:36:43 |
| 2 | U 409.014†         | -362.3    | -345.8    | -34.186 µg/L | -34.186 ppb | 14:36:22 |
| 2 | V 292.402†         | 566.8     | 504.2     | 4.6140 µg/L  | 4.6140 ppb  | 14:36:22 |
| 2 | Zn 213.857†        | 3765.8    | 3350.9    | 80.356 µg/L  | 80.356 ppb  | 14:36:22 |
| 3 | Sc RADIAL          | 85884.0   | 85884.0   | 93.6 %       |             | 14:35:13 |
| 3 | Al 396.153Radial†  | 3600.3    | 4009.7    | 1963.2 µg/L  | 1963.2 ppb  | 14:35:13 |
| 3 | Ca 317.933Radial†  | 1638.3    | 1409.8    | 530.50 µg/L  | 530.50 ppb  | 14:35:33 |
| 3 | Fe 238.204 Radial† | 1037.3    | 1095.3    | 13642 µg/L   | 13642 ppb   | 14:35:33 |
| 3 | K 766.490 Radial†  | 2260.1    | 2010.0    | 951.00 µg/L  | 951.00 ppb  | 14:35:13 |
| 3 | Mg 279.077 IEC†    | 27.0      | 19.8      | 253.68 µg/L  | 253.68 ppb  | 14:35:33 |
| 3 | Na 589.592 Radial† | 1661.2    | 1585.0    | 801.65 µg/L  | 801.65 ppb  | 14:35:13 |
| 3 | Sr 421.552†        | 610.5     | 517.1     | 3.1317 µg/L  | 3.1317 ppb  | 14:35:13 |
| 3 | Sc 361.383         | 1832012.4 | 1832012.4 | 93.944 %     |             | 14:36:49 |
| 3 | Y 371.029          | 1268271.2 | 1268271.2 | 95.121 %     |             | 14:36:49 |
| 3 | Ag 328.068†        | -682.1    | -202.6    | -0.6201 µg/L | -0.6201 ppb | 14:36:55 |
| 3 | As 188.979†        | -2.8      | 0.4       | -1.1963 µg/L | -1.1963 ppb | 14:37:15 |
| 3 | B 249.677†         | 328.6     | 72.5      | -3.6175 µg/L | -3.6175 ppb | 14:36:55 |
| 3 | Ba 233.527†        | 780.1     | 857.5     | 19.849 µg/L  | 19.849 ppb  | 14:37:15 |
| 3 | Be 313.107†        | -85.9     | 1467.4    | 0.6775 µg/L  | 0.6775 ppb  | 14:36:55 |
| 3 | Cd 226.502†        | -113.6    | 44.3      | -0.4016 µg/L | -0.4016 ppb | 14:37:15 |
| 3 | Co 228.616†        | 60.3      | 29.7      | 0.0656 µg/L  | 0.0656 ppb  | 14:37:15 |
| 3 | Cr 267.716†        | 454.0     | 390.9     | 9.1242 µg/L  | 9.1242 ppb  | 14:36:55 |
| 3 | Cu 324.752†        | 4138.7    | 181.6     | 3.8043 µg/L  | 3.8043 ppb  | 14:36:55 |
| 3 | Mn 257.610†        | 113021.2  | 121047.0  | 393.65 µg/L  | 393.65 ppb  | 14:36:55 |
| 3 | Mo 202.031†        | 21.8      | 10.9      | 1.6587 µg/L  | 1.6587 ppb  | 14:37:15 |
| 3 | Ni 231.604†        | 426.9     | 97.0      | 5.9161 µg/L  | 5.9161 ppb  | 14:37:15 |
| 3 | P 214.914†         | 338.8     | 72.6      | 117.72 µg/L  | 117.72 ppb  | 14:37:15 |
| 3 | Pb 220.353†        | 44.6      | 7.9       | 2.5910 µg/L  | 2.5910 ppb  | 14:37:15 |
| 3 | S 181.975 Axial†   | 21.5      | -0.1      | -0.2989 µg/L | -0.2989 ppb | 14:37:15 |
| 3 | Sb 206.836†        | 25.8      | -0.4      | -0.4411 µg/L | -0.4411 ppb | 14:37:15 |
| 3 | Se 196.026†        | 4.8       | -16.7     | 26.381 µg/L  | 26.381 ppb  | 14:37:15 |
| 3 | SiO2†              | 54887.5   | 55684.4   | 10548 µg/L   | 10548 ppb   | 14:36:55 |
| 3 | Si 251.611†        | 65125.0   | 68901.8   | 4908.2 µg/L  | 4908.2 ppb  | 14:36:55 |
| 3 | Sn 189.927†        | 1.6       | 6.9       | 2.8907 µg/L  | 2.8907 ppb  | 14:37:15 |
| 3 | Ti 334.940†        | 234932.2  | 250769.4  | 615.60 µg/L  | 615.60 ppb  | 14:36:49 |
| 3 | Tl 190.801†        | -42.3     | -10.6     | -2.2579 µg/L | -2.2579 ppb | 14:37:15 |
| 3 | U 409.014†         | -266.4    | -243.7    | -24.659 µg/L | -24.659 ppb | 14:36:55 |
| 3 | V 292.402†         | 497.2     | 430.1     | 3.6902 µg/L  | 3.6902 ppb  | 14:36:55 |
| 3 | Zn 213.857†        | 3478.5    | 3044.5    | 72.947 µg/L  | 72.947 ppb  | 14:36:55 |

## Mean Data: 247188013|954676|5

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|--------|
| Sc 361.383         | 1833589.4                | 94.024 %     |        | 0.1518   |                    |          | 0.16%  |
| Sc RADIAL          | 85074.8                  | 92.7 %       |        | 0.85     |                    |          | 0.92%  |
| Y 371.029          | 1270872.8                | 95.316 %     |        | 0.2556   |                    |          | 0.27%  |
| Ag 328.068†        | -188.2                   | -0.4846 µg/L |        | 0.11880  | -0.4846 ppb        | 0.11880  | 24.52% |
| Al 396.153Radial†  | 4135.6                   | 2024.8 µg/L  |        | 54.24    | 2024.8 ppb         | 54.24    | 2.68%  |
| As 188.979†        | 0.0                      | -1.6963 µg/L |        | 0.99850  | -1.6963 ppb        | 0.99850  | 58.86% |
| B 249.677†         | 77.9                     | -3.4254 µg/L |        | 0.16641  | -3.4254 ppb        | 0.16641  | 4.86%  |
| Ba 233.527†        | 964.0                    | 22.315 µg/L  |        | 2.1373   | 22.315 ppb         | 2.1373   | 9.58%  |
| Be 313.107†        | 1568.7                   | 0.7280 µg/L  |        | 0.04800  | 0.7280 ppb         | 0.04800  | 6.59%  |
| Ca 317.933Radial†  | 1428.0                   | 537.35 µg/L  |        | 6.910    | 537.35 ppb         | 6.910    | 1.29%  |
| Cd 226.502†        | 50.2                     | -0.2660 µg/L |        | 0.13913  | -0.2660 ppb        | 0.13913  | 52.30% |
| Co 228.616†        | 37.3                     | 0.3414 µg/L  |        | 0.24792  | 0.3414 ppb         | 0.24792  | 72.61% |
| Cr 267.716†        | 423.2                    | 9.8785 µg/L  |        | 0.75095  | 9.8785 ppb         | 0.75095  | 7.60%  |
| Cu 324.752†        | 132.2                    | 3.4916 µg/L  |        | 0.31491  | 3.4916 ppb         | 0.31491  | 9.02%  |
| Fe 238.204 Radial† | 1105.9                   | 13774 µg/L   |        | 206.7    | 13774 ppb          | 206.7    | 1.50%  |
| K 766.490 Radial†  | 1960.1                   | 927.40 µg/L  |        | 23.562   | 927.40 ppb         | 23.562   | 2.54%  |
| Mg 279.077 IEC†    | 23.1                     | 297.17 µg/L  |        | 50.940   | 297.17 ppb         | 50.940   | 17.14% |
| Mn 257.610†        | 129788.6                 | 422.03 µg/L  |        | 24.576   | 422.03 ppb         | 24.576   | 5.82%  |
| Mo 202.031†        | 13.8                     | 1.9677 µg/L  |        | 0.38980  | 1.9677 ppb         | 0.38980  | 19.81% |
| Na 589.592 Radial† | 1634.0                   | 826.44 µg/L  |        | 22.054   | 826.44 ppb         | 22.054   | 2.67%  |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 102.2    | 6.2228 µg/L  | 0.52251 | 6.2228 ppb  | 0.52251 | 8.40%   |
| P 214.914†       | 82.6     | 135.15 µg/L  | 15.131  | 135.15 ppb  | 15.131  | 11.20%  |
| Pb 220.353†      | 20.1     | 6.0089 µg/L  | 2.99531 | 6.0089 ppb  | 2.99531 | 49.85%  |
| S 181.975 Axial† | -0.1     | -0.4510 µg/L | 2.27167 | -0.4510 ppb | 2.27167 | 503.69% |
| Sb 206.836†      | -3.5     | -3.4442 µg/L | 3.02846 | -3.4442 ppb | 3.02846 | 87.93%  |
| Se 196.026†      | -10.8    | 32.668 µg/L  | 5.8044  | 32.668 ppb  | 5.8044  | 17.77%  |
| SiO2†            | 58737.4  | 11126 µg/L   | 500.9   | 11126 ppb   | 500.9   | 4.50%   |
| Si 251.611†      | 72641.2  | 5174.6 µg/L  | 230.71  | 5174.6 ppb  | 230.71  | 4.46%   |
| Sn 189.927†      | 4.6      | 1.9368 µg/L  | 0.86843 | 1.9368 ppb  | 0.86843 | 44.84%  |
| Sr 421.552†      | 523.1    | 3.1683 µg/L  | 0.03226 | 3.1683 ppb  | 0.03226 | 1.02%   |
| Ti 334.940†      | 264165.8 | 648.48 µg/L  | 28.478  | 648.48 ppb  | 28.478  | 4.39%   |
| Tl 190.801†      | -10.8    | -2.0227 µg/L | 0.21011 | -2.0227 ppb | 0.21011 | 10.39%  |
| U 409.014†       | -308.5   | -30.727 µg/L | 5.2721  | -30.727 ppb | 5.2721  | 17.16%  |
| V 292.402†       | 479.7    | 4.2966 µg/L  | 0.52536 | 4.2966 ppb  | 0.52536 | 12.23%  |
| Zn 213.857†      | 3253.7   | 77.998 µg/L  | 4.3774  | 77.998 ppb  | 4.3774  | 5.61%   |

Sequence No.: 13

Sample ID: 247188014|954676|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 309

Date Collected: 3/15/2010 14:37:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247188014|954676|5

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc RADIAL          | 90313.7       | 90313.7             | 98.4 %             |                    | 14:37:56      |
| 1     | Al 396.153Radial†  | 3102.7        | 3315.4              | 1623.2 µg/L        | 1623.2 ppb         | 14:37:56      |
| 1     | Ca 317.933Radial†  | 3158.2        | 2868.4              | 1079.4 µg/L        | 1079.4 ppb         | 14:37:56      |
| 1     | Fe 238.204 Radial† | 1043.8        | 1047.6              | 13048 µg/L         | 13048 ppb          | 14:38:16      |
| 1     | K 766.490 Radial†  | 2418.6        | 2052.6              | 971.14 µg/L        | 971.14 ppb         | 14:37:56      |
| 1     | Mg 279.077 IEC†    | 27.4          | 18.7                | 239.61 µg/L        | 239.61 ppb         | 14:38:16      |
| 1     | Na 589.592 Radial† | 1770.9        | 1609.4              | 814.01 µg/L        | 814.01 ppb         | 14:37:56      |
| 1     | Sr 421.552†        | 633.0         | 507.9               | 3.0759 µg/L        | 3.0759 ppb         | 14:37:56      |
| 1     | Sc 361.383         | 1888623.0     | 1888623.0           | 96.846 %           |                    | 14:39:19      |
| 1     | Y 371.029          | 1316001.9     | 1316001.9           | 98.701 %           |                    | 14:39:19      |
| 1     | Ag 328.068†        | -669.2        | -167.5              | -0.3658 µg/L       | -0.3658 ppb        | 14:39:24      |
| 1     | As 188.979†        | -2.4          | 0.9                 | -0.3875 µg/L       | -0.3875 ppb        | 14:39:45      |
| 1     | B 249.677†         | 330.5         | 64.0                | -3.7278 µg/L       | -3.7278 ppb        | 14:39:24      |
| 1     | Ba 233.527†        | 955.0         | 1013.2              | 23.453 µg/L        | 23.453 ppb         | 14:39:45      |
| 1     | Be 313.107†        | 838.8         | 2425.0              | 1.2708 µg/L        | 1.2708 ppb         | 14:39:24      |
| 1     | Cd 226.502†        | -101.8        | 60.2                | 0.0656 µg/L        | 0.0656 ppb         | 14:39:45      |
| 1     | Co 228.616†        | 58.9          | 26.4                | -0.0976 µg/L       | -0.0976 ppb        | 14:39:45      |
| 1     | Cr 267.716†        | 198.3         | 112.5               | 2.6278 µg/L        | 2.6278 ppb         | 14:39:24      |
| 1     | Cu 324.752†        | 4249.5        | 164.0               | 3.5723 µg/L        | 3.5723 ppb         | 14:39:24      |
| 1     | Mn 257.610†        | 188631.8      | 195513.4            | 635.30 µg/L        | 635.30 ppb         | 14:39:19      |
| 1     | Mo 202.031†        | 15.1          | 3.2                 | 0.8338 µg/L        | 0.8338 ppb         | 14:39:45      |
| 1     | Ni 231.604†        | 362.8         | 17.2                | 1.1851 µg/L        | 1.1851 ppb         | 14:39:45      |
| 1     | P 214.914†         | 338.4         | 61.4                | 98.241 µg/L        | 98.241 ppb         | 14:39:45      |
| 1     | Pb 220.353†        | 67.3          | 29.9                | 8.6882 µg/L        | 8.6882 ppb         | 14:39:45      |
| 1     | S 181.975 Axial†   | 20.6          | -1.7                | -5.6391 µg/L       | -5.6391 ppb        | 14:39:45      |
| 1     | Sb 206.836†        | 17.0          | -10.3               | -9.8321 µg/L       | -9.8321 ppb        | 14:39:45      |
| 1     | Se 196.026†        | 14.4          | -7.0                | 34.213 µg/L        | 34.213 ppb         | 14:39:45      |
| 1     | SiO2†              | 56602.0       | 55703.3             | 10551 µg/L         | 10551 ppb          | 14:39:24      |
| 1     | Si 251.611†        | 67266.5       | 69035.1             | 4917.7 µg/L        | 4917.7 ppb         | 14:39:24      |
| 1     | Sn 189.927†        | -8.0          | -3.1                | -1.2410 µg/L       | -1.2410 ppb        | 14:39:45      |
| 1     | Ti 334.940†        | 244087.4      | 252726.8            | 620.41 µg/L        | 620.41 ppb         | 14:39:19      |
| 1     | Tl 190.801†        | -44.9         | -12.0               | -2.8998 µg/L       | -2.8998 ppb        | 14:39:45      |
| 1     | U 409.014†         | -317.8        | -288.2              | -28.764 µg/L       | -28.764 ppb        | 14:39:24      |
| 1     | V 292.402†         | 565.0         | 484.2               | 4.4238 µg/L        | 4.4238 ppb         | 14:39:24      |
| 1     | Zn 213.857†        | 4785.2        | 4282.7              | 102.95 µg/L        | 102.95 ppb         | 14:39:24      |
| 2     | Sc RADIAL          | 90497.5       | 90497.5             | 98.6 %             |                    | 14:38:21      |
| 2     | Al 396.153Radial†  | 3116.0        | 3322.5              | 1626.7 µg/L        | 1626.7 ppb         | 14:38:21      |
| 2     | Ca 317.933Radial†  | 3163.1        | 2866.8              | 1078.8 µg/L        | 1078.8 ppb         | 14:38:21      |
| 2     | Fe 238.204 Radial† | 1036.5        | 1038.1              | 12930 µg/L         | 12930 ppb          | 14:38:42      |
| 2     | K 766.490 Radial†  | 2380.2        | 2008.7              | 950.37 µg/L        | 950.37 ppb         | 14:38:21      |
| 2     | Mg 279.077 IEC†    | 31.9          | 23.3                | 300.86 µg/L        | 300.86 ppb         | 14:38:42      |
| 2     | Na 589.592 Radial† | 1802.5        | 1637.8              | 828.37 µg/L        | 828.37 ppb         | 14:38:21      |
| 2     | Sr 421.552†        | 572.6         | 445.3               | 2.6970 µg/L        | 2.6970 ppb         | 14:38:21      |
| 2     | Sc 361.383         | 1880726.7     | 1880726.7           | 96.442 %           |                    | 14:39:52      |
| 2     | Y 371.029          | 1314040.4     | 1314040.4           | 98.554 %           |                    | 14:39:52      |
| 2     | Ag 328.068†        | -657.3        | -158.0              | -0.2906 µg/L       | -0.2906 ppb        | 14:39:57      |
| 2     | As 188.979†        | -0.4          | 3.0                 | 2.9715 µg/L        | 2.9715 ppb         | 14:40:18      |
| 2     | B 249.677†         | 329.8         | 64.7                | -3.6301 µg/L       | -3.6301 ppb        | 14:39:57      |
| 2     | Ba 233.527†        | 944.8         | 1006.8              | 23.306 µg/L        | 23.306 ppb         | 14:40:18      |
| 2     | Be 313.107†        | 831.3         | 2420.8              | 1.2683 µg/L        | 1.2683 ppb         | 14:39:57      |
| 2     | Cd 226.502†        | -105.7        | 55.7                | -0.0339 µg/L       | -0.0339 ppb        | 14:40:18      |
| 2     | Co 228.616†        | 68.4          | 36.5                | 0.3658 µg/L        | 0.3658 ppb         | 14:40:18      |
| 2     | Cr 267.716†        | 244.4         | 161.1               | 3.7626 µg/L        | 3.7626 ppb         | 14:39:57      |
| 2     | Cu 324.752†        | 4156.0        | 85.5                | 3.0141 µg/L        | 3.0141 ppb         | 14:39:57      |
| 2     | Mn 257.610†        | 187774.7      | 195442.5            | 635.06 µg/L        | 635.06 ppb         | 14:39:52      |
| 2     | Mo 202.031†        | 24.4          | 12.9                | 1.8480 µg/L        | 1.8480 ppb         | 14:40:18      |
| 2     | Ni 231.604†        | 374.7         | 31.1                | 2.0079 µg/L        | 2.0079 ppb         | 14:40:18      |
| 2     | P 214.914†         | 336.4         | 60.8                | 97.282 µg/L        | 97.282 ppb         | 14:40:18      |
| 2     | Pb 220.353†        | 74.7          | 37.8                | 10.902 µg/L        | 10.902 ppb         | 14:40:18      |



|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 20.4      | -1.7      | -5.8176 µg/L | -5.8176 ppb | 14:40:18 |
| 2 | Sb 206.836†        | 21.2      | -5.9      | -5.6850 µg/L | -5.6850 ppb | 14:40:18 |
| 2 | Se 196.026†        | 10.7      | -10.7     | 30.027 µg/L  | 30.027 ppb  | 14:40:18 |
| 2 | SiO2†              | 56855.4   | 56211.5   | 10648 µg/L   | 10648 ppb   | 14:39:57 |
| 2 | Si 251.611†        | 67570.5   | 69641.9   | 4960.9 µg/L  | 4960.9 ppb  | 14:39:57 |
| 2 | Sn 189.927†        | -5.9      | -0.9      | -0.3122 µg/L | -0.3122 ppb | 14:40:18 |
| 2 | Ti 334.940†        | 243104.4  | 252765.6  | 620.50 µg/L  | 620.50 ppb  | 14:39:52 |
| 2 | Tl 190.801†        | -42.3     | -9.5      | -0.2964 µg/L | -0.2964 ppb | 14:40:18 |
| 2 | U 409.014†         | -350.1    | -323.1    | -32.002 µg/L | -32.002 ppb | 14:39:57 |
| 2 | V 292.402†         | 619.2     | 542.8     | 5.1836 µg/L  | 5.1836 ppb  | 14:39:57 |
| 2 | Zn 213.857†        | 4772.5    | 4290.3    | 103.13 µg/L  | 103.13 ppb  | 14:39:57 |
| 3 | Sc RADIAL          | 91261.9   | 91261.9   | 99.4 %       |             | 14:38:47 |
| 3 | Al 396.153Radial†  | 3132.7    | 3312.8    | 1622.0 µg/L  | 1622.0 ppb  | 14:38:47 |
| 3 | Ca 317.933Radial†  | 3195.7    | 2872.7    | 1081.0 µg/L  | 1081.0 ppb  | 14:38:47 |
| 3 | Fe 238.204 Radial† | 1039.1    | 1031.8    | 12851 µg/L   | 12851 ppb   | 14:39:08 |
| 3 | K 766.490 Radial†  | 2446.0    | 2054.7    | 972.13 µg/L  | 972.13 ppb  | 14:38:47 |
| 3 | Mg 279.077 IEC†    | 32.6      | 23.7      | 306.91 µg/L  | 306.91 ppb  | 14:39:08 |
| 3 | Na 589.592 Radial† | 1809.3    | 1629.4    | 824.12 µg/L  | 824.12 ppb  | 14:38:47 |
| 3 | Sr 421.552†        | 567.1     | 435.0     | 2.6345 µg/L  | 2.6345 ppb  | 14:38:47 |
| 3 | Sc 361.383         | 1873870.7 | 1873870.7 | 96.090 %     |             | 14:40:25 |
| 3 | Y 371.029          | 1305351.7 | 1305351.7 | 97.902 %     |             | 14:40:25 |
| 3 | Ag 328.068†        | -650.0    | -152.9    | -0.2593 µg/L | -0.2593 ppb | 14:40:30 |
| 3 | As 188.979†        | -2.3      | 1.0       | -0.2088 µg/L | -0.2088 ppb | 14:40:51 |
| 3 | B 249.677†         | 336.8     | 73.2      | -3.1782 µg/L | -3.1782 ppb | 14:40:30 |
| 3 | Ba 233.527†        | 796.3     | 855.8     | 19.811 µg/L  | 19.811 ppb  | 14:40:51 |
| 3 | Be 313.107†        | 686.2     | 2273.0    | 1.1941 µg/L  | 1.1941 ppb  | 14:40:30 |
| 3 | Cd 226.502†        | -125.1    | 35.1      | -0.5527 µg/L | -0.5527 ppb | 14:40:51 |
| 3 | Co 228.616†        | 57.6      | 25.5      | -0.0368 µg/L | -0.0368 ppb | 14:40:51 |
| 3 | Cr 267.716†        | 216.3     | 132.8     | 3.1025 µg/L  | 3.1025 ppb  | 14:40:30 |
| 3 | Cu 324.752†        | 4268.5    | 218.2     | 3.9055 µg/L  | 3.9055 ppb  | 14:40:30 |
| 3 | Mn 257.610†        | 174896.6  | 182752.7  | 593.87 µg/L  | 593.87 ppb  | 14:40:25 |
| 3 | Mo 202.031†        | 19.8      | 8.2       | 1.3499 µg/L  | 1.3499 ppb  | 14:40:51 |
| 3 | Ni 231.604†        | 370.5     | 28.1      | 1.8308 µg/L  | 1.8308 ppb  | 14:40:51 |
| 3 | P 214.914†         | 342.0     | 67.9      | 109.83 µg/L  | 109.83 ppb  | 14:40:51 |
| 3 | Pb 220.353†        | 58.9      | 21.7      | 6.4146 µg/L  | 6.4146 ppb  | 14:40:51 |
| 3 | S 181.975 Axial†   | 17.1      | -5.1      | -16.943 µg/L | -16.943 ppb | 14:40:51 |
| 3 | Sb 206.836†        | 20.3      | -6.7      | -6.4129 µg/L | -6.4129 ppb | 14:40:51 |
| 3 | Se 196.026†        | 10.5      | -10.9     | 29.617 µg/L  | 29.617 ppb  | 14:40:51 |
| 3 | SiO2†              | 52368.0   | 51757.1   | 9803.9 µg/L  | 9803.9 ppb  | 14:40:30 |
| 3 | Si 251.611†        | 62072.0   | 64176.1   | 4571.6 µg/L  | 4571.6 ppb  | 14:40:30 |
| 3 | Sn 189.927†        | -5.9      | -0.9      | -0.3368 µg/L | -0.3368 ppb | 14:40:51 |
| 3 | Ti 334.940†        | 223933.2  | 233736.6  | 573.79 µg/L  | 573.79 ppb  | 14:40:25 |
| 3 | Tl 190.801†        | -41.4     | -8.7      | -0.0842 µg/L | -0.0842 ppb | 14:40:51 |
| 3 | U 409.014†         | -291.9    | -263.9    | -26.468 µg/L | -26.468 ppb | 14:40:30 |
| 3 | V 292.402†         | 550.8     | 474.0     | 4.3275 µg/L  | 4.3275 ppb  | 14:40:30 |
| 3 | Zn 213.857†        | 4348.6    | 3867.2    | 92.899 µg/L  | 92.899 ppb  | 14:40:30 |

Mean Data: 247188014|954676|5

| Analyte            | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383         | 1881073.5                | 96.459 %           | 0.3786   |                    |          | 0.39%   |
| Sc RADIAL          | 90691.1                  | 98.8 %             | 0.55     |                    |          | 0.55%   |
| Y 371.029          | 1311798.0                | 98.386 %           | 0.4251   |                    |          | 0.43%   |
| Ag 328.068†        | -159.5                   | -0.3052 µg/L       | 0.05477  | -0.3052 ppb        | 0.05477  | 17.94%  |
| Al 396.153Radial†  | 3316.9                   | 1624.0 µg/L        | 2.44     | 1624.0 ppb         | 2.44     | 0.15%   |
| As 188.979†        | 1.6                      | 0.7918 µg/L        | 1.88984  | 0.7918 ppb         | 1.88984  | 238.69% |
| B 249.677†         | 67.3                     | -3.5120 µg/L       | 0.29324  | -3.5120 ppb        | 0.29324  | 8.35%   |
| Ba 233.527†        | 958.6                    | 22.190 µg/L        | 2.0613   | 22.190 ppb         | 2.0613   | 9.29%   |
| Be 313.107†        | 2372.9                   | 1.2444 µg/L        | 0.04356  | 1.2444 ppb         | 0.04356  | 3.50%   |
| Ca 317.933Radial†  | 2869.3                   | 1079.7 µg/L        | 1.15     | 1079.7 ppb         | 1.15     | 0.11%   |
| Cd 226.502†        | 50.3                     | -0.1737 µg/L       | 0.33200  | -0.1737 ppb        | 0.33200  | 191.17% |
| Co 228.616†        | 29.5                     | 0.0771 µg/L        | 0.25182  | 0.0771 ppb         | 0.25182  | 326.47% |
| Cr 267.716†        | 135.4                    | 3.1643 µg/L        | 0.56991  | 3.1643 ppb         | 0.56991  | 18.01%  |
| Cu 324.752†        | 155.9                    | 3.4973 µg/L        | 0.45039  | 3.4973 ppb         | 0.45039  | 12.88%  |
| Fe 238.204 Radial† | 1039.2                   | 12943 µg/L         | 98.8     | 12943 ppb          | 98.8     | 0.76%   |
| K 766.490 Radial†  | 2038.6                   | 964.55 µg/L        | 12.288   | 964.55 ppb         | 12.288   | 1.27%   |
| Mg 279.077 IEC†    | 21.9                     | 282.46 µg/L        | 37.234   | 282.46 ppb         | 37.234   | 13.18%  |
| Mn 257.610†        | 191236.2                 | 621.41 µg/L        | 23.851   | 621.41 ppb         | 23.851   | 3.84%   |
| Mo 202.031†        | 8.1                      | 1.3439 µg/L        | 0.50709  | 1.3439 ppb         | 0.50709  | 37.73%  |
| Na 589.592 Radial† | 1625.5                   | 822.16 µg/L        | 7.375    | 822.16 ppb         | 7.375    | 0.90%   |

|                  |          |              |         |             |         |         |
|------------------|----------|--------------|---------|-------------|---------|---------|
| Ni 231.604†      | 25.5     | 1.6746 µg/L  | 0.43307 | 1.6746 ppb  | 0.43307 | 25.86%  |
| P 214.914†       | 63.4     | 101.78 µg/L  | 6.984   | 101.78 ppb  | 6.984   | 6.86%   |
| Pb 220.353†      | 29.8     | 8.6685 µg/L  | 2.24399 | 8.6685 ppb  | 2.24399 | 25.89%  |
| S 181.975 Axial† | -2.8     | -9.4665 µg/L | 6.47530 | -9.4665 ppb | 6.47530 | 68.40%  |
| Sb 206.836†      | -7.6     | -7.3100 µg/L | 2.21429 | -7.3100 ppb | 2.21429 | 30.29%  |
| Se 196.026†      | -9.5     | 31.286 µg/L  | 2.5433  | 31.286 ppb  | 2.5433  | 8.13%   |
| SiO2†            | 54557.3  | 10334 µg/L   | 461.9   | 10334 ppb   | 461.9   | 4.47%   |
| Si 251.611†      | 67617.7  | 4816.7 µg/L  | 213.42  | 4816.7 ppb  | 213.42  | 4.43%   |
| Sn 189.927†      | -1.6     | -0.6300 µg/L | 0.52928 | -0.6300 ppb | 0.52928 | 84.01%  |
| Sr 421.552†      | 462.7    | 2.8025 µg/L  | 0.23886 | 2.8025 ppb  | 0.23886 | 8.52%   |
| Ti 334.940†      | 246409.7 | 604.90 µg/L  | 26.945  | 604.90 ppb  | 26.945  | 4.45%   |
| Tl 190.801†      | -10.1    | -1.0935 µg/L | 1.56791 | -1.0935 ppb | 1.56791 | 143.39% |
| U 409.014†       | -291.7   | -29.078 µg/L | 2.7802  | -29.078 ppb | 2.7802  | 9.56%   |
| V 292.402†       | 500.4    | 4.6449 µg/L  | 0.46894 | 4.6449 ppb  | 0.46894 | 10.10%  |
| Zn 213.857†      | 4146.7   | 99.658 µg/L  | 5.8543  | 99.658 ppb  | 5.8543  | 5.87%   |

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/15/2010 14:41:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 86746.2          | 86746.2                | 94.5 %                |                       | 14:41:34         |
| 1     | Al 396.153Radial†  | 9870.2           | 10604.9                | 5181.1 µg/L           | 5181.1 ppb            | 14:41:34         |
| 1     | Ca 317.933Radial†  | 13400.3          | 13836.4                | 5206.7 µg/L           | 5206.7 ppb            | 14:41:34         |
| 1     | Fe 238.204 Radial† | 408.5            | 419.1                  | 5231.0 µg/L           | 5231.0 ppb            | 14:41:54         |
| 1     | K 766.490 Radial†  | 10420.0          | 10619.1                | 5024.2 µg/L           | 5024.2 ppb            | 14:41:34         |
| 1     | Mg 279.077 IEC†    | 370.6            | 383.0                  | 5184.6 µg/L           | 5184.6 ppb            | 14:41:54         |
| 1     | Na 589.592 Radial† | 19956.2          | 20923.2                | 10583 µg/L            | 10583 ppb             | 14:41:34         |
| 1     | Sr 421.552†        | 81425.9          | 86012.2                | 520.92 µg/L           | 520.92 ppb            | 14:41:34         |
| 1     | Sc 361.383         | 1875518.8        | 1875518.8              | 96.175 %              |                       | 14:42:58         |
| 1     | Y 371.029          | 1278117.6        | 1278117.6              | 95.860 %              |                       | 14:42:58         |
| 1     | Ag 328.068†        | 57627.1          | 60442.8                | 512.51 µg/L           | 512.51 ppb            | 14:43:04         |
| 1     | As 188.979†        | 325.9            | 342.3                  | 532.40 µg/L           | 532.40 ppb            | 14:43:24         |
| 1     | B 249.677†         | 10412.0          | 10548.8                | 505.51 µg/L           | 505.51 ppb            | 14:43:04         |
| 1     | Ba 233.527†        | 21330.6          | 22206.1                | 514.71 µg/L           | 514.71 ppb            | 14:43:04         |
| 1     | Be 313.107†        | 795727.2         | 828937.2               | 515.03 µg/L           | 515.03 ppb            | 14:42:58         |
| 1     | Cd 226.502†        | 19232.8          | 20163.1                | 515.61 µg/L           | 515.61 ppb            | 14:43:04         |
| 1     | Co 228.616†        | 10969.1          | 11371.0                | 515.73 µg/L           | 515.73 ppb            | 14:43:04         |
| 1     | Cr 267.716†        | 21695.4          | 22466.0                | 524.52 µg/L           | 524.52 ppb            | 14:43:04         |
| 1     | Cu 324.752†        | 76596.7          | 75419.5                | 515.77 µg/L           | 515.77 ppb            | 14:43:04         |
| 1     | Mn 257.610†        | 154268.6         | 161144.3               | 522.96 µg/L           | 522.96 ppb            | 14:42:58         |
| 1     | Mo 202.031†        | 4952.8           | 5137.4                 | 539.42 µg/L           | 539.42 ppb            | 14:43:24         |
| 1     | Ni 231.604†        | 8805.7           | 8798.5                 | 520.00 µg/L           | 520.00 ppb            | 14:43:04         |
| 1     | P 214.914†         | 1730.2           | 1511.0                 | 2619.9 µg/L           | 2619.9 ppb            | 14:43:24         |
| 1     | Pb 220.353†        | 1868.4           | 1903.1                 | 530.41 µg/L           | 530.41 ppb            | 14:43:24         |
| 1     | S 181.975 Axial†   | 322.8            | 312.7                  | 1039.7 µg/L           | 1039.7 ppb            | 14:43:24         |
| 1     | Sb 206.836†        | 561.7            | 556.2                  | 532.14 µg/L           | 532.14 ppb            | 14:43:24         |
| 1     | Se 196.026†        | 531.5            | 530.8                  | 544.94 µg/L           | 544.94 ppb            | 14:43:24         |
| 1     | SiO2†              | 30201.7          | 28661.3                | 5429.1 µg/L           | 5429.1 ppb            | 14:43:04         |
| 1     | Si 251.611†        | 34706.3          | 35665.1                | 2540.6 µg/L           | 2540.6 ppb            | 14:43:04         |
| 1     | Sn 189.927†        | 1237.0           | 1291.4                 | 542.97 µg/L           | 542.97 ppb            | 14:43:24         |
| 1     | Ti 334.940†        | 201369.8         | 210070.9               | 515.37 µg/L           | 515.37 ppb            | 14:42:58         |
| 1     | Tl 190.801†        | 444.3            | 496.4                  | 522.46 µg/L           | 522.46 ppb            | 14:43:24         |
| 1     | U 409.014†         | 5331.7           | 5583.6                 | 519.79 µg/L           | 519.79 ppb            | 14:43:04         |
| 1     | V 292.402†         | 39671.5          | 41150.3                | 523.48 µg/L           | 523.48 ppb            | 14:43:04         |
| 1     | Zn 213.857†        | 21252.6          | 21439.7                | 514.90 µg/L           | 514.90 ppb            | 14:43:04         |
| 2     | Sc RADIAL          | 89251.6          | 89251.6                | 97.2 %                |                       | 14:42:00         |
| 2     | Al 396.153Radial†  | 9688.1           | 10124.6                | 4946.2 µg/L           | 4946.2 ppb            | 14:42:00         |
| 2     | Ca 317.933Radial†  | 13174.7          | 13206.4                | 4969.7 µg/L           | 4969.7 ppb            | 14:42:00         |
| 2     | Fe 238.204 Radial† | 415.0            | 413.7                  | 5163.4 µg/L           | 5163.4 ppb            | 14:42:21         |
| 2     | K 766.490 Radial†  | 10150.6          | 10032.6                | 4746.7 µg/L           | 4746.7 ppb            | 14:42:00         |
| 2     | Mg 279.077 IEC†    | 375.3            | 376.8                  | 5101.3 µg/L           | 5101.3 ppb            | 14:42:21         |
| 2     | Na 589.592 Radial† | 19691.2          | 20058.0                | 10145 µg/L            | 10145 ppb             | 14:42:00         |
| 2     | Sr 421.552†        | 80072.1          | 82201.8                | 497.84 µg/L           | 497.84 ppb            | 14:42:00         |
| 2     | Sc 361.383         | 1862037.9        | 1862037.9              | 95.483 %              |                       | 14:43:31         |
| 2     | Y 371.029          | 1269155.4        | 1269155.4              | 95.188 %              |                       | 14:43:31         |
| 2     | Ag 328.068†        | 58040.6          | 61309.6                | 519.84 µg/L           | 519.84 ppb            | 14:43:37         |
| 2     | As 188.979†        | 312.8            | 330.9                  | 514.74 µg/L           | 514.74 ppb            | 14:43:58         |
| 2     | B 249.677†         | 10474.7          | 10692.9                | 512.49 µg/L           | 512.49 ppb            | 14:43:37         |
| 2     | Ba 233.527†        | 21472.2          | 22515.0                | 521.87 µg/L           | 521.87 ppb            | 14:43:37         |
| 2     | Be 313.107†        | 790663.5         | 829624.1               | 515.45 µg/L           | 515.45 ppb            | 14:43:31         |
| 2     | Cd 226.502†        | 19346.0          | 20426.5                | 522.36 µg/L           | 522.36 ppb            | 14:43:37         |
| 2     | Co 228.616†        | 11029.8          | 11517.1                | 522.35 µg/L           | 522.35 ppb            | 14:43:37         |
| 2     | Cr 267.716†        | 21821.7          | 22761.6                | 531.43 µg/L           | 531.43 ppb            | 14:43:37         |
| 2     | Cu 324.752†        | 76973.4          | 76390.7                | 522.39 µg/L           | 522.39 ppb            | 14:43:37         |
| 2     | Mn 257.610†        | 153291.1         | 161281.9               | 523.41 µg/L           | 523.41 ppb            | 14:43:31         |
| 2     | Mo 202.031†        | 4822.5           | 5038.3                 | 529.01 µg/L           | 529.01 ppb            | 14:43:58         |
| 2     | Ni 231.604†        | 8840.2           | 8901.0                 | 526.05 µg/L           | 526.05 ppb            | 14:43:37         |
| 2     | P 214.914†         | 1705.3           | 1498.0                 | 2595.9 µg/L           | 2595.9 ppb            | 14:43:58         |
| 2     | Pb 220.353†        | 1828.2           | 1875.1                 | 522.55 µg/L           | 522.55 ppb            | 14:43:58         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | S 181.975 Axial†   | 322.1     | 314.4     | 1045.2 µg/L | 1045.2 ppb | 14:43:58 |
| 2 | Sb 206.836†        | 550.8     | 549.0     | 525.03 µg/L | 525.03 ppb | 14:43:58 |
| 2 | Se 196.026†        | 515.8     | 518.4     | 532.37 µg/L | 532.37 ppb | 14:43:58 |
| 2 | SiO2†              | 30326.6   | 29019.4   | 5496.9 µg/L | 5496.9 ppb | 14:43:37 |
| 2 | Si 251.611†        | 34940.9   | 36172.1   | 2576.7 µg/L | 2576.7 ppb | 14:43:37 |
| 2 | Sn 189.927†        | 1189.5    | 1251.0    | 525.97 µg/L | 525.97 ppb | 14:43:58 |
| 2 | Ti 334.940†        | 200257.8  | 210422.2  | 516.24 µg/L | 516.24 ppb | 14:43:31 |
| 2 | Tl 190.801†        | 444.7     | 500.1     | 526.37 µg/L | 526.37 ppb | 14:43:58 |
| 2 | U 409.014†         | 5334.1    | 5626.3    | 523.79 µg/L | 523.79 ppb | 14:43:37 |
| 2 | V 292.402†         | 39864.4   | 41650.9   | 529.73 µg/L | 529.73 ppb | 14:43:37 |
| 2 | Zn 213.857†        | 21377.5   | 21730.4   | 521.90 µg/L | 521.90 ppb | 14:43:37 |
| 3 | Sc RADIAL          | 88447.1   | 88447.1   | 96.4 %      |            | 14:42:26 |
| 3 | Al 396.153Radial†  | 9639.1    | 10164.4   | 4967.6 µg/L | 4967.6 ppb | 14:42:26 |
| 3 | Ca 317.933Radial†  | 13063.8   | 13214.6   | 4972.7 µg/L | 4972.7 ppb | 14:42:26 |
| 3 | Fe 238.204 Radial† | 409.3     | 411.6     | 5136.3 µg/L | 5136.3 ppb | 14:42:47 |
| 3 | K 766.490 Radial†  | 10273.7   | 10255.3   | 4852.1 µg/L | 4852.1 ppb | 14:42:26 |
| 3 | Mg 279.077 IEC†    | 367.3     | 372.0     | 5034.6 µg/L | 5034.6 ppb | 14:42:47 |
| 3 | Na 589.592 Radial† | 19589.3   | 20136.5   | 10185 µg/L  | 10185 ppb  | 14:42:26 |
| 3 | Sr 421.552†        | 79718.2   | 82583.4   | 500.15 µg/L | 500.15 ppb | 14:42:26 |
| 3 | Sc 361.383         | 1873064.5 | 1873064.5 | 96.049 %    |            | 14:44:05 |
| 3 | Y 371.029          | 1278412.6 | 1278412.6 | 95.882 %    |            | 14:44:05 |
| 3 | Ag 328.068†        | 53641.0   | 56371.2   | 477.82 µg/L | 477.82 ppb | 14:44:10 |
| 3 | As 188.979†        | 267.5     | 281.9     | 438.32 µg/L | 438.32 ppb | 14:44:31 |
| 3 | B 249.677†         | 9588.0    | 9705.1    | 464.86 µg/L | 464.86 ppb | 14:44:10 |
| 3 | Ba 233.527†        | 19145.5   | 19960.2   | 462.63 µg/L | 462.63 ppb | 14:44:10 |
| 3 | Be 313.107†        | 727595.5  | 759086.8  | 471.63 µg/L | 471.63 ppb | 14:44:05 |
| 3 | Cd 226.502†        | 17159.0   | 18030.2   | 461.02 µg/L | 461.02 ppb | 14:44:10 |
| 3 | Co 228.616†        | 9703.8    | 10068.5   | 456.59 µg/L | 456.59 ppb | 14:44:10 |
| 3 | Cr 267.716†        | 18667.6   | 19343.3   | 451.62 µg/L | 451.62 ppb | 14:44:10 |
| 3 | Cu 324.752†        | 68642.2   | 67242.2   | 459.94 µg/L | 459.94 ppb | 14:44:10 |
| 3 | Mn 257.610†        | 141427.0  | 147984.5  | 480.26 µg/L | 480.26 ppb | 14:44:05 |
| 3 | Mo 202.031†        | 4003.8    | 4156.2    | 436.43 µg/L | 436.43 ppb | 14:44:31 |
| 3 | Ni 231.604†        | 7852.1    | 7817.7    | 462.04 µg/L | 462.04 ppb | 14:44:10 |
| 3 | P 214.914†         | 1464.7    | 1237.0    | 2140.2 µg/L | 2140.2 ppb | 14:44:31 |
| 3 | Pb 220.353†        | 1572.3    | 1597.4    | 445.14 µg/L | 445.14 ppb | 14:44:31 |
| 3 | S 181.975 Axial†   | 279.4     | 268.0     | 891.09 µg/L | 891.09 ppb | 14:44:31 |
| 3 | Sb 206.836†        | 467.0     | 458.4     | 438.16 µg/L | 438.16 ppb | 14:44:31 |
| 3 | Se 196.026†        | 453.5     | 450.4     | 464.06 µg/L | 464.06 ppb | 14:44:31 |
| 3 | SiO2†              | 27772.0   | 26172.8   | 4957.7 µg/L | 4957.7 ppb | 14:44:10 |
| 3 | Si 251.611†        | 31718.8   | 32602.0   | 2322.4 µg/L | 2322.4 ppb | 14:44:10 |
| 3 | Sn 189.927†        | 970.8     | 1016.0    | 427.28 µg/L | 427.28 ppb | 14:44:31 |
| 3 | Ti 334.940†        | 182939.7  | 191156.9  | 468.95 µg/L | 468.95 ppb | 14:44:05 |
| 3 | Tl 190.801†        | 387.9     | 438.3     | 461.50 µg/L | 461.50 ppb | 14:44:31 |
| 3 | U 409.014†         | 4674.5    | 4906.7    | 456.67 µg/L | 456.67 ppb | 14:44:10 |
| 3 | V 292.402†         | 34828.8   | 36162.4   | 459.65 µg/L | 459.65 ppb | 14:44:10 |
| 3 | Zn 213.857†        | 18940.6   | 19061.5   | 457.73 µg/L | 457.73 ppb | 14:44:10 |

## Mean Data: CCV

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383   | 1870207.0                | 95.902 %           | 0.3682   |                    |          | 0.38%  |
| Sc RADIAL  | 88148.3                  | 96.0 %             | 1.39     |                    |          | 1.45%  |
| Y 371.029  | 1275228.5                | 95.643 %           | 0.3946   |                    |          | 0.41%  |
| Ag 328.068†  | 59374.5                  | 503.39 µg/L        | 22.445   | 503.39 ppb         | 22.445   | 4.46%  |
| QC value within limits for Ag 328.068 Recovery = 100.68%       |                          |                    |          |                    |          |        |
| Al 396.153Radial†  | 10298.0                  | 5031.6 µg/L        | 129.93   | 5031.6 ppb         | 129.93   | 2.58%  |
| QC value within limits for Al 396.153Radial Recovery = 100.63% |                          |                    |          |                    |          |        |
| As 188.979†  | 318.4                    | 495.15 µg/L        | 50.005   | 495.15 ppb         | 50.005   | 10.10% |
| QC value within limits for As 188.979 Recovery = 99.03%        |                          |                    |          |                    |          |        |
| B 249.677†   | 10315.6                  | 494.29 µg/L        | 25.720   | 494.29 ppb         | 25.720   | 5.20%  |
| QC value within limits for B 249.677 Recovery = 98.86%         |                          |                    |          |                    |          |        |
| Ba 233.527†  | 21560.4                  | 499.74 µg/L        | 32.331   | 499.74 ppb         | 32.331   | 6.47%  |
| QC value within limits for Ba 233.527 Recovery = 99.95%        |                          |                    |          |                    |          |        |
| Be 313.107†  | 805882.7                 | 500.70 µg/L        | 25.180   | 500.70 ppb         | 25.180   | 5.03%  |
| QC value within limits for Be 313.107 Recovery = 100.14%       |                          |                    |          |                    |          |        |
| Ca 317.933Radial†  | 13419.1                  | 5049.7 µg/L        | 135.99   | 5049.7 ppb         | 135.99   | 2.69%  |
| QC value within limits for Ca 317.933Radial Recovery = 100.99% |                          |                    |          |                    |          |        |
| Cd 226.502†  | 19539.9                  | 499.67 µg/L        | 33.640   | 499.67 ppb         | 33.640   | 6.73%  |
| QC value within limits for Cd 226.502 Recovery = 99.93%        |                          |                    |          |                    |          |        |
| Co 228.616†  | 10985.6                  | 498.22 µg/L        | 36.206   | 498.22 ppb         | 36.206   | 7.27%  |

|   |          |             |        |            |        |        |  |
|---|----------|-------------|--------|------------|--------|--------|--|
| QC value within limits for Co 228.616 Recovery = 99.64%         |          |             |        |            |        |        |  |
| Cr 267.716†   | 21523.6  | 502.52 µg/L | 44.217 | 502.52 ppb | 44.217 | 8.80%  |  |
| QC value within limits for Cr 267.716 Recovery = 100.50%        |          |             |        |            |        |        |  |
| Cu 324.752†   | 73017.4  | 499.36 µg/L | 34.305 | 499.36 ppb | 34.305 | 6.87%  |  |
| QC value within limits for Cu 324.752 Recovery = 99.87%         |          |             |        |            |        |        |  |
| Fe 238.204 Radial†  | 414.8    | 5176.9 µg/L | 48.78  | 5176.9 ppb | 48.78  | 0.94%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = 103.54% |          |             |        |            |        |        |  |
| K 766.490 Radial†   | 10302.3  | 4874.3 µg/L | 140.09 | 4874.3 ppb | 140.09 | 2.87%  |  |
| QC value within limits for K 766.490 Radial Recovery = 97.49%   |          |             |        |            |        |        |  |
| Mg 279.077 IEC†   | 377.3    | 5106.9 µg/L | 75.16  | 5106.9 ppb | 75.16  | 1.47%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = 102.14%    |          |             |        |            |        |        |  |
| Mn 257.610†   | 156803.6 | 508.88 µg/L | 24.787 | 508.88 ppb | 24.787 | 4.87%  |  |
| QC value within limits for Mn 257.610 Recovery = 101.78%        |          |             |        |            |        |        |  |
| Mo 202.031†   | 4777.3   | 501.62 µg/L | 56.697 | 501.62 ppb | 56.697 | 11.30% |  |
| QC value within limits for Mo 202.031 Recovery = 100.32%        |          |             |        |            |        |        |  |
| Na 589.592 Radial†  | 20372.6  | 10304 µg/L  | 242.0  | 10304 ppb  | 242.0  | 2.35%  |  |
| QC value within limits for Na 589.592 Radial Recovery = 103.04% |          |             |        |            |        |        |  |
| Ni 231.604†   | 8505.7   | 502.70 µg/L | 35.341 | 502.70 ppb | 35.341 | 7.03%  |  |
| QC value within limits for Ni 231.604 Recovery = 100.54%        |          |             |        |            |        |        |  |
| P 214.914†  | 1415.3   | 2452.0 µg/L | 270.34 | 2452.0 ppb | 270.34 | 11.03% |  |
| QC value within limits for P 214.914 Recovery = 98.08%          |          |             |        |            |        |        |  |
| Pb 220.353†   | 1791.9   | 499.37 µg/L | 47.127 | 499.37 ppb | 47.127 | 9.44%  |  |
| QC value within limits for Pb 220.353 Recovery = 99.87%         |          |             |        |            |        |        |  |
| S 181.975 Axial†  | 298.4    | 991.99 µg/L | 87.423 | 991.99 ppb | 87.423 | 8.81%  |  |
| QC value within limits for S 181.975 Axial Recovery = 99.20%    |          |             |        |            |        |        |  |
| Sb 206.836†   | 521.2    | 498.45 µg/L | 52.330 | 498.45 ppb | 52.330 | 10.50% |  |
| QC value within limits for Sb 206.836 Recovery = 99.69%         |          |             |        |            |        |        |  |
| Se 196.026†   | 499.8    | 513.79 µg/L | 43.523 | 513.79 ppb | 43.523 | 8.47%  |  |
| QC value within limits for Se 196.026 Recovery = 102.76%        |          |             |        |            |        |        |  |
| SiO2†   | 27951.2  | 5294.6 µg/L | 293.70 | 5294.6 ppb | 293.70 | 5.55%  |  |
| QC value within limits for SiO2 Recovery = 99.01%               |          |             |        |            |        |        |  |
| Si 251.611†   | 34813.0  | 2479.9 µg/L | 137.59 | 2479.9 ppb | 137.59 | 5.55%  |  |
| QC value within limits for Si 251.611 Recovery = 99.20%         |          |             |        |            |        |        |  |
| Sn 189.927†   | 1186.1   | 498.74 µg/L | 62.471 | 498.74 ppb | 62.471 | 12.53% |  |
| QC value within limits for Sn 189.927 Recovery = 99.75%         |          |             |        |            |        |        |  |
| Sr 421.552†   | 83599.1  | 506.30 µg/L | 12.709 | 506.30 ppb | 12.709 | 2.51%  |  |
| QC value within limits for Sr 421.552 Recovery = 101.26%        |          |             |        |            |        |        |  |
| Ti 334.940†   | 203883.4 | 500.19 µg/L | 27.056 | 500.19 ppb | 27.056 | 5.41%  |  |
| QC value within limits for Ti 334.940 Recovery = 100.04%        |          |             |        |            |        |        |  |
| Tl 190.801†   | 478.2    | 503.44 µg/L | 36.380 | 503.44 ppb | 36.380 | 7.23%  |  |
| QC value within limits for Tl 190.801 Recovery = 100.69%        |          |             |        |            |        |        |  |
| U 409.014†  | 5372.2   | 500.08 µg/L | 37.648 | 500.08 ppb | 37.648 | 7.53%  |  |
| QC value within limits for U 409.014 Recovery = 100.02%         |          |             |        |            |        |        |  |
| V 292.402†  | 39654.5  | 504.28 µg/L | 38.784 | 504.28 ppb | 38.784 | 7.69%  |  |
| QC value within limits for V 292.402 Recovery = 100.86%         |          |             |        |            |        |        |  |
| Zn 213.857†   | 20743.9  | 498.18 µg/L | 35.199 | 498.18 ppb | 35.199 | 7.07%  |  |
| QC value within limits for Zn 213.857 Recovery = 99.64%         |          |             |        |            |        |        |  |

All analyte(s) passed QC.

Sequence No.: 15  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/15/2010 14:44:40  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc RADIAL          | 87333.5          | 87333.5                | 95.2 %                |                       | 14:45:11         |
| 1     | Al 396.153Radial†  | -138.9           | 16.5                   | 8.0313 µg/L           | 8.0313 ppb            | 14:45:11         |
| 1     | Ca 317.933Radial†  | 349.6            | 26.5                   | 9.9566 µg/L           | 9.9566 ppb            | 14:45:31         |
| 1     | Fe 238.204 Radial† | 14.7             | 2.4                    | 29.477 µg/L           | 29.477 ppb            | 14:45:31         |
| 1     | K 766.490 Radial†  | 450.7            | 68.5                   | 32.405 µg/L           | 32.405 ppb            | 14:45:11         |
| 1     | Mg 279.077 IEC†    | 9.8              | 1.3                    | 17.173 µg/L           | 17.173 ppb            | 14:45:31         |
| 1     | Na 589.592 Radial† | 177.8            | -3.3                   | -1.6648 µg/L          | -1.6648 ppb           | 14:45:11         |
| 1     | Sr 421.552†        | 132.0            | 3.4                    | 0.0208 µg/L           | 0.0208 ppb            | 14:45:11         |
| 1     | Sc 361.383         | 1816741.8        | 1816741.8              | 93.161 %              |                       | 14:46:33         |
| 1     | Y 371.029          | 1242130.6        | 1242130.6              | 93.161 %              |                       | 14:46:33         |
| 1     | Ag 328.068†        | -508.1           | -21.9                  | -0.1834 µg/L          | -0.1834 ppb           | 14:46:39         |
| 1     | As 188.979†        | -4.8             | -1.8                   | -2.8322 µg/L          | -2.8322 ppb           | 14:46:59         |
| 1     | B 249.677†         | 288.3            | 32.1                   | 1.5296 µg/L           | 1.5296 ppb            | 14:46:39         |
| 1     | Ba 233.527†        | -17.4            | 8.4                    | 0.1944 µg/L           | 0.1944 ppb            | 14:46:59         |
| 1     | Be 313.107†        | -1267.7          | 198.0                  | 0.1230 µg/L           | 0.1230 ppb            | 14:46:39         |
| 1     | Cd 226.502†        | -161.5           | -8.1                   | -0.2079 µg/L          | -0.2079 ppb           | 14:46:59         |
| 1     | Co 228.616†        | 19.8             | -13.1                  | -0.5952 µg/L          | -0.5952 ppb           | 14:46:59         |
| 1     | Cr 267.716†        | 52.8             | -35.6                  | -0.8314 µg/L          | -0.8314 ppb           | 14:46:39         |
| 1     | Cu 324.752†        | 4032.4           | 104.5                  | 0.7189 µg/L           | 0.7189 ppb            | 14:46:39         |
| 1     | Mn 257.610†        | -651.5           | 40.1                   | 0.1307 µg/L           | 0.1307 ppb            | 14:46:59         |
| 1     | Mo 202.031†        | 21.3             | 10.6                   | 1.1087 µg/L           | 1.1087 ppb            | 14:46:59         |
| 1     | Ni 231.604†        | 367.4            | 36.9                   | 2.1841 µg/L           | 2.1841 ppb            | 14:46:59         |
| 1     | P 214.914†         | 292.0            | 25.4                   | 44.859 µg/L           | 44.859 ppb            | 14:46:59         |
| 1     | Pb 220.353†        | 45.9             | 9.7                    | 2.6845 µg/L           | 2.6845 ppb            | 14:46:59         |
| 1     | S 181.975 Axial†   | 24.2             | 3.0                    | 10.054 µg/L           | 10.054 ppb            | 14:46:59         |
| 1     | Sb 206.836†        | 24.5             | -1.5                   | -1.4233 µg/L          | -1.4233 ppb           | 14:46:59         |
| 1     | Se 196.026†        | 20.8             | 0.5                    | 0.5948 µg/L           | 0.5948 ppb            | 14:46:59         |
| 1     | SiO2†              | 2527.2           | -29.0                  | -5.4940 µg/L          | -5.4940 ppb           | 14:46:39         |
| 1     | Si 251.611†        | 369.6            | -25.0                  | -1.7804 µg/L          | -1.7804 ppb           | 14:46:59         |
| 1     | Sn 189.927†        | 0.9              | 6.2                    | 2.6023 µg/L           | 2.6023 ppb            | 14:46:59         |
| 1     | Ti 334.940†        | -537.3           | 114.6                  | 0.2802 µg/L           | 0.2802 ppb            | 14:46:39         |
| 1     | Tl 190.801†        | -34.3            | -2.4                   | -2.5093 µg/L          | -2.5093 ppb           | 14:46:59         |
| 1     | U 409.014†         | 76.0             | 121.5                  | 11.327 µg/L           | 11.327 ppb            | 14:46:39         |
| 1     | V 292.402†         | 76.9             | -16.6                  | -0.1945 µg/L          | -0.1945 ppb           | 14:46:39         |
| 1     | Zn 213.857†        | 626.3            | 14.0                   | 0.3253 µg/L           | 0.3253 ppb            | 14:46:59         |
| 2     | Sc RADIAL          | 86339.9          | 86339.9                | 94.1 %                |                       | 14:45:37         |
| 2     | Al 396.153Radial†  | -140.3           | 13.4                   | 6.5247 µg/L           | 6.5247 ppb            | 14:45:37         |
| 2     | Ca 317.933Radial†  | 339.5            | 19.9                   | 7.4900 µg/L           | 7.4900 ppb            | 14:45:57         |
| 2     | Fe 238.204 Radial† | 14.7             | 2.5                    | 31.726 µg/L           | 31.726 ppb            | 14:45:57         |
| 2     | K 766.490 Radial†  | 239.6            | -150.4                 | -71.176 µg/L          | -71.176 ppb           | 14:45:37         |
| 2     | Mg 279.077 IEC†    | 9.5              | 1.1                    | 14.463 µg/L           | 14.463 ppb            | 14:45:57         |
| 2     | Na 589.592 Radial† | 198.3            | 20.6                   | 10.437 µg/L           | 10.437 ppb            | 14:45:37         |
| 2     | Sr 421.552†        | 89.4             | -40.3                  | -0.2438 µg/L          | -0.2438 ppb           | 14:45:37         |
| 2     | Sc 361.383         | 1821170.7        | 1821170.7              | 93.388 %              |                       | 14:47:05         |
| 2     | Y 371.029          | 1244049.4        | 1244049.4              | 93.305 %              |                       | 14:47:05         |
| 2     | Ag 328.068†        | -581.2           | -98.8                  | -0.8292 µg/L          | -0.8292 ppb           | 14:47:11         |
| 2     | As 188.979†        | -1.3             | 2.0                    | 3.1269 µg/L           | 3.1269 ppb            | 14:47:32         |
| 2     | B 249.677†         | 248.7            | -11.0                  | -0.5469 µg/L          | -0.5469 ppb           | 14:47:11         |
| 2     | Ba 233.527†        | -21.9            | 3.7                    | 0.0851 µg/L           | 0.0851 ppb            | 14:47:32         |
| 2     | Be 313.107†        | -1258.3          | 211.4                  | 0.1313 µg/L           | 0.1313 ppb            | 14:47:11         |
| 2     | Cd 226.502†        | -170.1           | -16.9                  | -0.4338 µg/L          | -0.4338 ppb           | 14:47:32         |
| 2     | Co 228.616†        | 23.1             | -9.6                   | -0.4375 µg/L          | -0.4375 ppb           | 14:47:32         |
| 2     | Cr 267.716†        | 101.6            | 16.5                   | 0.3849 µg/L           | 0.3849 ppb            | 14:47:11         |
| 2     | Cu 324.752†        | 4031.3           | 92.8                   | 0.6393 µg/L           | 0.6393 ppb            | 14:47:11         |
| 2     | Mn 257.610†        | -664.8           | 27.6                   | 0.0904 µg/L           | 0.0904 ppb            | 14:47:32         |
| 2     | Mo 202.031†        | 17.6             | 6.5                    | 0.6828 µg/L           | 0.6828 ppb            | 14:47:32         |
| 2     | Ni 231.604†        | 354.2            | 21.8                   | 1.2928 µg/L           | 1.2928 ppb            | 14:47:32         |
| 2     | P 214.914†         | 285.4            | 17.7                   | 31.124 µg/L           | 31.124 ppb            | 14:47:32         |
| 2     | Pb 220.353†        | 43.9             | 7.5                    | 2.0719 µg/L           | 2.0719 ppb            | 14:47:32         |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | S 181.975 Axial†   | 27.5      | 6.5       | 21.758 µg/L  | 21.758 ppb  | 14:47:32 |
| 2 | Sb 206.836†        | 27.6      | 1.6       | 1.5606 µg/L  | 1.5606 ppb  | 14:47:32 |
| 2 | Se 196.026†        | 19.4      | -1.0      | -0.9500 µg/L | -0.9500 ppb | 14:47:32 |
| 2 | SiO2†              | 2579.5    | 20.4      | 3.8727 µg/L  | 3.8727 ppb  | 14:47:11 |
| 2 | Si 251.611†        | 368.4     | -27.2     | -1.9390 µg/L | -1.9390 ppb | 14:47:32 |
| 2 | Sn 189.927†        | -4.4      | 0.5       | 0.2020 µg/L  | 0.2020 ppb  | 14:47:32 |
| 2 | Ti 334.940†        | -539.4    | 113.8     | 0.2783 µg/L  | 0.2783 ppb  | 14:47:11 |
| 2 | Tl 190.801†        | -37.8     | -6.1      | -6.3828 µg/L | -6.3828 ppb | 14:47:32 |
| 2 | U 409.014†         | 13.7      | 54.6      | 5.0842 µg/L  | 5.0842 ppb  | 14:47:11 |
| 2 | V 292.402†         | 92.5      | -0.1      | 0.0058 µg/L  | 0.0058 ppb  | 14:47:11 |
| 2 | Zn 213.857†        | 622.2     | 8.0       | 0.1833 µg/L  | 0.1833 ppb  | 14:47:32 |
| 3 | Sc RADIAL          | 86396.4   | 86396.4   | 94.1 %       |             | 14:46:03 |
| 3 | Al 396.153Radial†  | -159.0    | -6.5      | -3.1699 µg/L | -3.1699 ppb | 14:46:03 |
| 3 | Ca 317.933Radial†  | 350.0     | 30.9      | 11.621 µg/L  | 11.621 ppb  | 14:46:23 |
| 3 | Fe 238.204 Radial† | 14.1      | 1.8       | 23.012 µg/L  | 23.012 ppb  | 14:46:23 |
| 3 | K 766.490 Radial†  | 495.6     | 121.3     | 57.409 µg/L  | 57.409 ppb  | 14:46:03 |
| 3 | Mg 279.077 IEC†    | 9.8       | 1.3       | 17.916 µg/L  | 17.916 ppb  | 14:46:23 |
| 3 | Na 589.592 Radial† | 193.0     | 14.8      | 7.4975 µg/L  | 7.4975 ppb  | 14:46:03 |
| 3 | Sr 421.552†        | 139.9     | 13.3      | 0.0806 µg/L  | 0.0806 ppb  | 14:46:03 |
| 3 | Sc 361.383         | 1814726.1 | 1814726.1 | 93.057 %     |             | 14:47:38 |
| 3 | Y 371.029          | 1243075.1 | 1243075.1 | 93.231 %     |             | 14:47:38 |
| 3 | Ag 328.068†        | -515.1    | -30.0     | -0.2463 µg/L | -0.2463 ppb | 14:47:43 |
| 3 | As 188.979†        | -0.6      | 2.7       | 4.1982 µg/L  | 4.1982 ppb  | 14:48:04 |
| 3 | B 249.677†         | 238.2     | -21.3     | -1.0376 µg/L | -1.0376 ppb | 14:47:43 |
| 3 | Ba 233.527†        | -17.6     | 8.2       | 0.1899 µg/L  | 0.1899 ppb  | 14:48:04 |
| 3 | Be 313.107†        | -1353.3   | 104.6     | 0.0650 µg/L  | 0.0650 ppb  | 14:47:43 |
| 3 | Cd 226.502†        | -164.8    | -11.8     | -0.3021 µg/L | -0.3021 ppb | 14:48:04 |
| 3 | Co 228.616†        | 24.3      | -8.3      | -0.3765 µg/L | -0.3765 ppb | 14:48:04 |
| 3 | Cr 267.716†        | 74.6      | -12.1     | -0.2828 µg/L | -0.2828 ppb | 14:47:43 |
| 3 | Cu 324.752†        | 4021.5    | 97.6      | 0.6704 µg/L  | 0.6704 ppb  | 14:47:43 |
| 3 | Mn 257.610†        | -673.4    | 15.8      | 0.0514 µg/L  | 0.0514 ppb  | 14:48:04 |
| 3 | Mo 202.031†        | 11.8      | 0.4       | 0.0399 µg/L  | 0.0399 ppb  | 14:48:04 |
| 3 | Ni 231.604†        | 353.4     | 22.3      | 1.3215 µg/L  | 1.3215 ppb  | 14:48:04 |
| 3 | P 214.914†         | 290.6     | 24.3      | 42.835 µg/L  | 42.835 ppb  | 14:48:04 |
| 3 | Pb 220.353†        | 45.1      | 8.9       | 2.4783 µg/L  | 2.4783 ppb  | 14:48:04 |
| 3 | S 181.975 Axial†   | 20.1      | -1.3      | -4.2580 µg/L | -4.2580 ppb | 14:48:04 |
| 3 | Sb 206.836†        | 24.9      | -1.2      | -1.0921 µg/L | -1.0921 ppb | 14:48:04 |
| 3 | Se 196.026†        | 19.3      | -1.1      | -1.0647 µg/L | -1.0647 ppb | 14:48:04 |
| 3 | SiO2†              | 2612.0    | 65.2      | 12.350 µg/L  | 12.350 ppb  | 14:47:43 |
| 3 | Si 251.611†        | 356.1     | -39.0     | -2.7801 µg/L | -2.7801 ppb | 14:48:04 |
| 3 | Sn 189.927†        | 0.7       | 6.0       | 2.5135 µg/L  | 2.5135 ppb  | 14:48:04 |
| 3 | Ti 334.940†        | -594.3    | 52.7      | 0.1283 µg/L  | 0.1283 ppb  | 14:47:43 |
| 3 | Tl 190.801†        | -36.0     | -4.3      | -4.4768 µg/L | -4.4768 ppb | 14:48:04 |
| 3 | U 409.014†         | -15.6     | 23.1      | 2.1504 µg/L  | 2.1504 ppb  | 14:47:43 |
| 3 | V 292.402†         | 139.2     | 50.4      | 0.6342 µg/L  | 0.6342 ppb  | 14:47:43 |
| 3 | Zn 213.857†        | 633.3     | 22.3      | 0.5296 µg/L  | 0.5296 ppb  | 14:48:04 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 1817546.2                | 93.202 %           | 0.1691   |                    |          | 0.18%   |
| Sc RADIAL   | 86689.9                  | 94.5 %             | 0.61     |                    |          | 0.64%   |
| Y 371.029   | 1243085.0                | 93.232 %           | 0.0720   |                    |          | 0.08%   |
| Ag 328.068†   | -50.2                    | -0.4196 µg/L       | 0.35612  | -0.4196 ppb        | 0.35612  | 84.86%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 7.8                      | 3.7954 µg/L        | 6.07894  | 3.7954 ppb         | 6.07894  | 160.17% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 1.0                      | 1.4976 µg/L        | 3.78781  | 1.4976 ppb         | 3.78781  | 252.93% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | -0.1                     | -0.0183 µg/L       | 1.36282  | -0.0183 ppb        | 1.36282  | >999.9% |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 6.8                      | 0.1565 µg/L        | 0.06184  | 0.1565 ppb         | 0.06184  | 39.52%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 171.3                    | 0.1064 µg/L        | 0.03613  | 0.1064 ppb         | 0.03613  | 33.95%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 25.7                     | 9.6893 µg/L        | 2.07856  | 9.6893 ppb         | 2.07856  | 21.45%  |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| Cd 226.502†   | -12.2                    | -0.3146 µg/L       | 0.11347  | -0.3146 ppb        | 0.11347  | 36.07%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Co 228.616†   | -10.3                    | -0.4697 µg/L       | 0.11287  | -0.4697 ppb        | 0.11287  | 24.03%  |

|                    |  |                           |          |             |                  |
|--------------------|--|---------------------------|----------|-------------|------------------|
| Cr 267.716†        | QC value within limits for Co 228.616        | Recovery = Not calculated |          |             |                  |
|                    | -10.4  | -0.2431 µg/L              | 0.60913  | -0.2431 ppb | 0.60913 250.55%  |
| Cu 324.752†        | QC value within limits for Cr 267.716        | Recovery = Not calculated |          |             |                  |
|                    | 98.3   | 0.6762 µg/L               | 0.04008  | 0.6762 ppb  | 0.04008 5.93%    |
| Fe 238.204 Radial† | QC value within limits for Cu 324.752        | Recovery = Not calculated |          |             |                  |
|                    | 2.3  | 28.072 µg/L               | 4.5240   | 28.072 ppb  | 4.5240 16.12%    |
| K 766.490 Radial†  | QC value within limits for Fe 238.204 Radial | Recovery = Not calculated |          |             |                  |
|                    | 13.1   | 6.2126 µg/L               | 68.17643 | 6.2126 ppb  | 68.17643 >999.9% |
| Mg 279.077 IEC†    | QC value within limits for K 766.490 Radial  | Recovery = Not calculated |          |             |                  |
|                    | 1.2  | 16.517 µg/L               | 1.8176   | 16.517 ppb  | 1.8176 11.00%    |
| Mn 257.610†        | QC value within limits for Mg 279.077 IEC    | Recovery = Not calculated |          |             |                  |
|                    | 27.8   | 0.0908 µg/L               | 0.03963  | 0.0908 ppb  | 0.03963 43.64%   |
| Mo 202.031†        | QC value within limits for Mn 257.610        | Recovery = Not calculated |          |             |                  |
|                    | 5.8  | 0.6105 µg/L               | 0.53803  | 0.6105 ppb  | 0.53803 88.13%   |
| Na 589.592 Radial† | QC value within limits for Mo 202.031        | Recovery = Not calculated |          |             |                  |
|                    | 10.7   | 5.4231 µg/L               | 6.31173  | 5.4231 ppb  | 6.31173 116.39%  |
| Ni 231.604†        | QC value within limits for Na 589.592 Radial | Recovery = Not calculated |          |             |                  |
|                    | 27.0   | 1.5994 µg/L               | 0.50654  | 1.5994 ppb  | 0.50654 31.67%   |
| P 214.914†         | QC value within limits for Ni 231.604        | Recovery = Not calculated |          |             |                  |
|                    | 22.5   | 39.606 µg/L               | 7.4150   | 39.606 ppb  | 7.4150 18.72%    |
| Pb 220.353†        | QC value within limits for P 214.914         | Recovery = Not calculated |          |             |                  |
|                    | 8.7  | 2.4116 µg/L               | 0.31171  | 2.4116 ppb  | 0.31171 12.93%   |
| S 181.975 Axial†   | QC value within limits for Pb 220.353        | Recovery = Not calculated |          |             |                  |
|                    | 2.8  | 9.1846 µg/L               | 13.02960 | 9.1846 ppb  | 13.02960 141.86% |
| Sb 206.836†        | QC value within limits for S 181.975 Axial   | Recovery = Not calculated |          |             |                  |
|                    | -0.3   | -0.3183 µg/L              | 1.63555  | -0.3183 ppb | 1.63555 513.88%  |
| Se 196.026†        | QC value within limits for Sb 206.836        | Recovery = Not calculated |          |             |                  |
|                    | -0.5   | -0.4733 µg/L              | 0.92678  | -0.4733 ppb | 0.92678 195.82%  |
| SiO2†              | QC value within limits for Se 196.026        | Recovery = Not calculated |          |             |                  |
|                    | 18.9   | 3.5764 µg/L               | 8.92586  | 3.5764 ppb  | 8.92586 249.58%  |
| Si 251.611†        | QC value within limits for SiO2              | Recovery = Not calculated |          |             |                  |
|                    | -30.4  | -2.1665 µg/L              | 0.53729  | -2.1665 ppb | 0.53729 24.80%   |
| Sn 189.927†        | QC value within limits for Si 251.611        | Recovery = Not calculated |          |             |                  |
|                    | 4.2  | 1.7726 µg/L               | 1.36092  | 1.7726 ppb  | 1.36092 76.77%   |
| Sr 421.552†        | QC value within limits for Sn 189.927        | Recovery = Not calculated |          |             |                  |
|                    | -7.8   | -0.0475 µg/L              | 0.17263  | -0.0475 ppb | 0.17263 363.77%  |
| Ti 334.940†        | QC value within limits for Sr 421.552        | Recovery = Not calculated |          |             |                  |
|                    | 93.7   | 0.2289 µg/L               | 0.08719  | 0.2289 ppb  | 0.08719 38.09%   |
| Tl 190.801†        | QC value within limits for Ti 334.940        | Recovery = Not calculated |          |             |                  |
|                    | -4.3   | -4.4563 µg/L              | 1.93687  | -4.4563 ppb | 1.93687 43.46%   |
| U 409.014†         | QC value within limits for Tl 190.801        | Recovery = Not calculated |          |             |                  |
|                    | 66.4   | 6.1872 µg/L               | 4.68675  | 6.1872 ppb  | 4.68675 75.75%   |
| V 292.402†         | QC value within limits for U 409.014         | Recovery = Not calculated |          |             |                  |
|                    | 11.2   | 0.1485 µg/L               | 0.43237  | 0.1485 ppb  | 0.43237 291.15%  |
| Zn 213.857†        | QC value within limits for V 292.402         | Recovery = Not calculated |          |             |                  |
|                    | 14.7   | 0.3460 µg/L               | 0.17407  | 0.3460 ppb  | 0.17407 50.30%   |
|                    | QC value within limits for Zn 213.857        | Recovery = Not calculated |          |             |                  |

All analyte(s) passed QC.



## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Sunday, March 14, 2010 11:58:55

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.727

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

### Summary

| Analyte | Mass  | Meas. Intens. | Mean     | Net Intens. | Mean       | Net Intens. | SD       | Net Intens. | RSD  |
|---------|-------|---------------|----------|-------------|------------|-------------|----------|-------------|------|
| Be      | 9.0   |               | 4344.7   |             | 4344.661   |             | 102.190  |             | 2.4  |
| Mg      | 24.0  |               | 57874.6  |             | 57874.597  |             | 279.872  |             | 0.5  |
| Co      | 58.9  |               | 95822.5  |             | 95822.502  |             | 542.987  |             | 0.6  |
| Rh      | 102.9 |               | 192187.5 |             | 192187.532 |             | 550.696  |             | 0.3  |
| In      | 114.9 |               | 259301.9 |             | 259301.918 |             | 2508.171 |             | 1.0  |
| Pb      | 208.0 |               | 270867.8 |             | 270867.784 |             | 2517.185 |             | 0.9  |
| [> Ba   | 137.9 |               | 253974.9 |             | 253974.928 |             | 2526.033 |             | 1.0  |
| [ Ba++  | 69.0  |               | 4284.8   |             | 0.017      |             | 0.000    |             | 2.7  |
| [> Ce   | 139.9 |               | 311107.6 |             | 311107.628 |             | 2260.344 |             | 0.7  |
| [ CeO   | 155.9 |               | 7066.4   |             | 0.023      |             | 0.001    |             | 2.5  |
| Bkgd    | 220.0 |               | 18.9     |             | 18.900     |             | 4.219    |             | 22.3 |

### Current Optimization File Data

| Current Value | Description             |
|---------------|-------------------------|
| 0.87          | Nebulizer Gas Flow      |
| 7.25          | Lens Voltage            |
| 1450.00       | ICP RF Power            |
| -1750.00      | Analog Stage Voltage    |
| 1250.00       | Pulse Stage Voltage     |
| 275.00        | Discriminator Threshold |
| -6.00         | AC Rod Offset           |

### Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be      | 9    | 13         | 7.0       | 5122.6            |
| Co      | 59   | 13         | 7.8       | 92442.1           |
| In      | 115  | 13         | 9.0       | 252013.1          |

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

| Analyte | Exact Mass | Meas. Mass | Mass DAC | Res. DAC | Meas. Pk. Width |
|---------|------------|------------|----------|----------|-----------------|
| He      | 3.0        | 3.0        | 581      | 2050     | 0.723           |
| Be      | 9.0        | 9.0        | 2033     | 2075     | 0.674           |
| Mg      | 24.0       | 24.0       | 5683     | 2080     | 0.619           |
| Mg      | 25.0       | 24.9       | 5935     | 2080     | 0.670           |
| Mg      | 26.0       | 26.0       | 6142     | 2080     | 0.660           |
| Co      | 58.9       | 58.9       | 14189    | 2110     | 0.639           |
| Rh      | 102.9      | 102.9      | 24872    | 2160     | 0.661           |
| In      | 114.9      | 114.9      | 27786    | 2180     | 0.657           |
| Ce      | 139.9      | 139.9      | 33870    | 2200     | 0.668           |
| Pb      | 206.0      | 206.0      | 49948    | 2295     | 0.615           |
| Pb      | 207.0      | 207.0      | 50171    | 2240     | 0.654           |
| Pb      | 208.0      | 208.0      | 50451    | 2265     | 0.710           |
| U       | 238.1      | 238.0      | 57725    | 2275     | 0.752           |

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, March 15, 2010 01:23:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\Blank.589

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    |            | ug/L        |           |                    | 16               |
| > Sc    | 45   |            | ug/L        |           | 428035             |                  |
| [ Ni    | 60   |            | ug/L        |           |                    | 139              |
| > Ge    | 74   |            | ug/L        |           | 450889             |                  |
| [ As    | 75   |            | ug/L        |           |                    | 314              |
| [ Se    | 77   |            | ug/L        |           | 9376               |                  |
| [ Se    | 82   |            | ug/L        |           |                    | 19               |
| [ Kr    | 83   |            | ug/L        |           |                    | 143              |
| > Lu    | 175  |            | ug/L        |           | 528796             |                  |
| [ Tl    | 205  |            | ug/L        |           |                    | 3721             |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Simple Linear    |                         |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Simple Linear    |                         |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| > Sc    | 45   |                   |                    |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| > Ge    | 74   |                   |                    |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| > Lu    | 175  |                   |                    |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, March 15, 2010 01:24:32

Page 1

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, March 15, 2010 01:27:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI soll.mth

Dataset File: c:\elandata\dataset\100313\Standard 1.590

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 10.000     | ug/L        | 1.343     | 3902               | 0.009            |
| [> Sc   | 45   |            | ug/L        |           | 441621             | 441621.414       |
| [ Ni    | 60   | 10.000     | ug/L        | 2.593     | 15851              | 0.036            |
| [> Ge   | 74   |            | ug/L        |           | 471372             | 471372.216       |
| [ As    | 75   | 10.000     | ug/L        | 0.794     | 13162              | 0.027            |
| [ Se    | 77   |            | ug/L        |           | 9745               | -0.000           |
| [ Se    | 82   | 10.000     | ug/L        | 2.744     | 1341               | 0.003            |
| [ Kr    | 83   |            | ug/L        |           | 141                | -0.000           |
| [> Lu   | 175  |            | ug/L        |           | 536916             | 536916.094       |
| [ Tl    | 205  | 10.000     | ug/L        | 1.586     | 222073             | 0.407            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   |                    |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   |                    |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   |                    |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Monday, March 15, 2010 01:28:07

Page 1

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, March 15, 2010 01:31:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\Standard 2.591

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 100.022    | ug/L        | 0.534     | 38411              | 0.090            |
| [> Sc   | 45   |            | ug/L        |           | 426929             | 426928.887       |
| [ Ni    | 60   | 99.991     | ug/L        | 1.118     | 150708             | 0.353            |
| [> Ge   | 74   |            | ug/L        |           | 456460             | 456459.947       |
| [ As    | 75   | 100.006    | ug/L        | 2.018     | 125407             | 0.274            |
| [ Se    | 77   |            | ug/L        |           | 17657              | 0.018            |
| [ Se    | 82   | 100.017    | ug/L        | 1.775     | 13040              | 0.029            |
| [ Kr    | 83   |            | ug/L        |           | 155                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 528396             | 528395.600       |
| [ Tl    | 205  | 99.852     | ug/L        | 2.568     | 1872170            | 3.536            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   |                    |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   |                    |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   |                    |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Monday, March 15, 2010 01:31:42

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, March 15, 2010 01:34:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: c:\elandata\dataset\100313\QC Std 1.592

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 52.818     | ug/L        | 1.689     | 20477              | 0.047            |
| [ > Sc  | 45   |            | ug/L        |           | 430881             | 430880.901       |
| [ Ni    | 60   | 52.330     | ug/L        | 3.443     | 79649              | 0.185            |
| [ > Ge  | 74   |            | ug/L        |           | 453263             | 453263.176       |
| [ As    | 75   | 50.025     | ug/L        | 2.640     | 62438              | 0.137            |
| [ Se    | 77   |            | ug/L        |           | 12785              | 0.007            |
| [ Se    | 82   | 52.166     | ug/L        | 4.411     | 6758               | 0.015            |
| [ Kr    | 83   |            | ug/L        |           | 159                | 0.000            |
| [ > Lu  | 175  |            | ug/L        |           | 528737             | 528737.438       |
| [ Tl    | 205  | 54.749     | ug/L        | 4.461     | 1028160            | 1.939            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    | 105.637           |                    |               |                |                |              |
| [ > Sc  | 45   |                   | 100.7              |               |                |                |              |
| [ Ni    | 60   | 104.660           |                    |               |                |                |              |
| [ > Ge  | 74   |                   | 100.5              |               |                |                |              |
| [ As    | 75   | 100.049           |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   | 104.332           |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [ > Lu  | 175  |                   | 100.0              |               |                |                |              |
| [ Tl    | 205  | 109.498           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Monday, March 15, 2010 01:35:18

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, March 15, 2010 01:38:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 2.593

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 0.013      | ug/L        | 32.902    | 21                 | 0.000            |
| Sc      | 45   |            | ug/L        |           | 418479             | 418478.721       |
| Ni      | 60   | -0.006     | ug/L        | 200.879   | 127                | -0.000           |
| Ge      | 74   |            | ug/L        |           | 441982             | 441982.266       |
| As      | 75   | 0.134      | ug/L        | 42.051    | 471                | 0.000            |
| Se      | 77   |            | ug/L        |           | 8329               | -0.002           |
| Se      | 82   | 0.040      | ug/L        | 273.445   | 23                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 137                | -0.000           |
| Lu      | 175  |            | ug/L        |           | 514060             | 514060.030       |
| Tl      | 205  | 0.216      | ug/L        | 4.482     | 7556               | 0.008            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |                  |                |                             |
| Sc      | 45   |                   | 97.8               |                  |                |                             |
| Ni      | 60   |                   |                    |                  |                |                             |
| Ge      | 74   |                   | 98.0               |                  |                |                             |
| As      | 75   |                   |                    |                  |                |                             |
| Se      | 77   |                   |                    |                  |                |                             |
| Se      | 82   |                   |                    |                  |                |                             |
| Kr      | 83   |                   |                    |                  |                |                             |
| Lu      | 175  |                   | 97.2               |                  |                |                             |
| Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Monday, March 15, 2010 01:38:58

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## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, March 15, 2010 01:41:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 3.594

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 0.599      | ug/L        | 0.961     | 247                | 0.001            |
| >  | Sc      | 45   |            | ug/L        |           | 427954             | 427954.423       |
| [  | Ni      | 60   | 2.226      | ug/L        | 2.972     | 3498               | 0.008            |
| [> | Ge      | 74   |            | ug/L        |           | 452375             | 452374.738       |
|    | As      | 75   | 5.502      | ug/L        | 6.185     | 7134               | 0.015            |
|    | Se      | 77   |            | ug/L        |           | 7931               | -0.003           |
|    | Se      | 82   | 5.643      | ug/L        | 4.689     | 747                | 0.002            |
| [  | Kr      | 83   |            | ug/L        |           | 136                | -0.000           |
| [> | Lu      | 175  |            | ug/L        |           | 529122             | 529121.719       |
| [  | Tl      | 205  | 1.292      | ug/L        | 2.864     | 27934              | 0.046            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [  | Be      | 9    | 119.715           |                    |               |               |                             |
| >  | Sc      | 45   |                   | 100.0              |               |               |                             |
| [  | Ni      | 60   | 111.309           |                    |               |               |                             |
| [> | Ge      | 74   |                   | 100.3              |               |               |                             |
|    | As      | 75   | 110.036           |                    |               |               |                             |
|    | Se      | 77   |                   |                    |               |               |                             |
|    | Se      | 82   | 112.861           |                    |               |               |                             |
| [  | Kr      | 83   |                   |                    |               |               |                             |
| [> | Lu      | 175  |                   | 100.1              |               |               |                             |
| [  | Tl      | 205  | 129.221           |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Monday, March 15, 2010 01:42:34

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## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, March 15, 2010 01:45:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 4.595

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.142      | ug/L        | 19.742    | 60                 | 0.000            |
| [> Sc   | 45   |            | ug/L        |           | 360212             | 360212.096       |
| [ Ni    | 60   | 3.581      | ug/L        | 3.269     | 4666               | 0.013            |
| [> Ge   | 74   |            | ug/L        |           | 407176             | 407176.365       |
| [ As    | 75   | -0.320     | ug/L        | 105.500   | -70                | -0.001           |
| [ Se    | 77   |            | ug/L        |           | 7409               | -0.003           |
| [ Se    | 82   | -1.310     | ug/L        | 9.814     | -135               | -0.000           |
| [ Kr    | 83   |            | ug/L        |           | 331                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 470879             | 470878.702       |
| [ Tl    | 205  | -0.004     | ug/L        | 211.775   | 3249               | -0.000           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   | 84.2               |               |                |                |              |
| [ Ni    | 60   | 108.173           |                    |               |                |                |              |
| [> Ge   | 74   |                   | 90.3               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 89.0               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Monday, March 15, 2010 01:46:11

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## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, March 15, 2010 01:49:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 5.596

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 22.386     | ug/L        | 2.320     | 7225               | 0.020            |
| [> Sc   | 45   |            | ug/L        |           | 358315             | 358315.043       |
| [ Ni    | 60   | 25.393     | ug/L        | 3.249     | 32204              | 0.090            |
| [> Ge   | 74   |            | ug/L        |           | 406131             | 406130.737       |
| As      | 75   | 22.755     | ug/L        | 5.203     | 25612              | 0.062            |
| Se      | 77   |            | ug/L        |           | 8682               | 0.001            |
| Se      | 82   | 20.954     | ug/L        | 3.693     | 2444               | 0.006            |
| [ Kr    | 83   |            | ug/L        |           | 318                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 475200             | 475200.113       |
| [ Tl    | 205  | 23.058     | ug/L        | 1.634     | 391355             | 0.817            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    | 111.932           |                    |               |                |                |              |
| [> Sc   | 45   |                   | 83.7               |               |                |                |              |
| [ Ni    | 60   | 108.936           |                    |               |                |                |              |
| [> Ge   | 74   |                   | 90.1               |               |                |                |              |
| As      | 75   | 113.775           |                    |               |                |                |              |
| Se      | 77   |                   |                    |               |                |                |              |
| Se      | 82   | 104.768           |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 89.9               |               |                |                |              |
| [ Tl    | 205  | 115.291           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Monday, March 15, 2010 01:49:48

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, March 15, 2010 01:52:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani sol.mth

Dataset File: c:\elandata\dataset\100313\QC Std 6.597

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 57.021     | ug/L        | 2.387     | 20995              | 0.051            |
| > Sc    | 45   |            | ug/L        |           | 409293             | 409292.635       |
| Ni      | 60   | 55.062     | ug/L        | 2.575     | 79619              | 0.194            |
| > Ge    | 74   |            | ug/L        |           | 448087             | 448086.623       |
| As      | 75   | 51.701     | ug/L        | 1.329     | 63794              | 0.142            |
| Se      | 77   |            | ug/L        |           | 11161              | 0.004            |
| Se      | 82   | 53.247     | ug/L        | 2.900     | 6822               | 0.015            |
| Kr      | 83   |            | ug/L        |           | 147                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 518014             | 518013.736       |
| Tl      | 205  | 54.490     | ug/L        | 1.183     | 1003217            | 1.930            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| Be      | 9    | 114.042           |                    |                  |                |                |              |
| > Sc    | 45   |                   | 95.6               |                  |                |                |              |
| Ni      | 60   | 110.123           |                    |                  |                |                |              |
| > Ge    | 74   |                   | 99.4               |                  |                |                |              |
| As      | 75   | 103.403           |                    |                  |                |                |              |
| Se      | 77   |                   |                    |                  |                |                |              |
| Se      | 82   | 106.494           |                    |                  |                |                |              |
| Kr      | 83   |                   |                    |                  |                |                |              |
| > Lu    | 175  |                   | 98.0               |                  |                |                |              |
| Tl      | 205  | 108.980           |                    |                  |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message        |
|------------------|---------|----------------------------------|
| QC Std 6         | Be      | 9CCV is out of limits (+/- 10%)  |
| QC Std 6         | Ni      | 60CCV is out of limits (+/- 10%) |

### QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Monday, March 15, 2010 01:53:25

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, March 15, 2010 01:56:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 7.598

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.011      | ug/L        | 48.411    | 19                 | 0.000            |
| [> Sc   | 45   |            | ug/L        |           | 404722             | 404721.553       |
| [ Ni    | 60   | 0.006      | ug/L        | 100.617   | 139                | 0.000            |
| [> Ge   | 74   |            | ug/L        |           | 440565             | 440564.804       |
| [ As    | 75   | -0.129     | ug/L        | 146.319   | 150                | -0.000           |
| [ Se    | 77   |            | ug/L        |           | 7002               | -0.005           |
| [ Se    | 82   | -0.106     | ug/L        | 159.245   | 5                  | -0.000           |
| [ Kr    | 83   |            | ug/L        |           | 143                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 515069             | 515068.573       |
| [ Tl    | 205  | 0.189      | ug/L        | 8.060     | 7061               | 0.007            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   | 94.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   | 97.7               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 97.4               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, March 15, 2010 01:57:05

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## ICPMS#5 - Summary Report

Sample ID: 1202046593

Sample Date/Time: Monday, March 15, 2010 02:00:04

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\Nanl soil.mth

Dataset File: c:\elandata\dataset\100313\1202046593.599

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.015      | ug/L        | 50.755    | 20                 | 0.000            |
| > | Sc      | 45   |            | ug/L        |           | 384275             | 384275.333       |
| [ | Ni      | 60   | 0.119      | ug/L        | 3.228     | 287                | 0.000            |
| > | Ge      | 74   |            | ug/L        |           | 414316             | 414315.632       |
|   | As      | 75   | -0.360     | ug/L        | 201.916   | -116               | -0.001           |
|   | Se      | 77   |            | ug/L        |           | 5456               | -0.008           |
|   | Se      | 82   | 0.238      | ug/L        | 63.114    | 46                 | 0.000            |
| [ | Kr      | 83   |            | ug/L        |           | 132                | 0.000            |
| > | Lu      | 175  |            | ug/L        |           | 485990             | 485989.854       |
| [ | Tl      | 205  | 0.059      | ug/L        | 17.906    | 4435               | 0.002            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 89.8               |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |
| > | Ge      | 74   |                   | 91.9               |               |                |                |              |
|   | As      | 75   |                   |                    |               |                |                |              |
|   | Se      | 77   |                   |                    |               |                |                |              |
|   | Se      | 82   |                   |                    |               |                |                |              |
| [ | Kr      | 83   |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   | 91.9               |               |                |                |              |
| [ | Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046593

Report Date/Time: Monday, March 15, 2010 02:00:43

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## ICPMS#5 - Summary Report

Sample ID: 1202046598

Sample Date/Time: Monday, March 15, 2010 02:03:43

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 954678|40|baj

Method File: c:\elandata\Method\Vanl soil.mth

Dataset File: c:\elandata\dataset\100313\1202046598.600

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 21.977     | ug/L        | 0.851     | 8017               | 0.020            |
| [> Sc   | 45   |            | ug/L        |           | 404950             | 404949.989       |
| [ Ni    | 60   | 39.095     | ug/L        | 1.861     | 55958              | 0.138            |
| [> Ge   | 74   |            | ug/L        |           | 436374             | 436373.977       |
| [ As    | 75   | 27.670     | ug/L        | 3.812     | 33392              | 0.076            |
| [ Se    | 77   |            | ug/L        |           | 13624              | 0.010            |
| [ Se    | 82   | 75.960     | ug/L        | 1.311     | 9470               | 0.022            |
| [ Kr    | 83   |            | ug/L        |           | 142                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 508279             | 508278.691       |
| [ Tl    | 205  | 36.666     | ug/L        | 1.239     | 663504             | 1.298            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   | 94.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   | 96.8               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 96.1               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046598

Report Date/Time: Monday, March 15, 2010 02:04:22

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## ICPMS#5 - Summary Report

Sample ID: 247188001

Sample Date/Time: Monday, March 15, 2010 02:07:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678[2]ba]

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\247188001.601

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 2.457      | ug/L        | 1.817     | 903                | 0.002            |
| [> Sc   | 45   |            | ug/L        |           | 401891             | 401891.345       |
| [ Ni    | 60   | 2.660      | ug/L        | 1.554     | 3901               | 0.009            |
| [> Ge   | 74   |            | ug/L        |           | 406499             | 406499.013       |
| [ As    | 75   | 1.658      | ug/L        | 17.118    | 2129               | 0.005            |
| [ Se    | 77   |            | ug/L        |           | 5446               | -0.007           |
| [ Se    | 82   | 0.626      | ug/L        | 4.942     | 90                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 322                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 528637             | 528637.429       |
| [ Tl    | 205  | 0.002      | ug/L        | 314.220   | 3761               | 0.000            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   | 93.9               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   | 90.2               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 100.0              |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188001

Report Date/Time: Monday, March 15, 2010 02:08:00

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## ICPMS#5 - Summary Report

Sample ID: 1202046594

Sample Date/Time: Monday, March 15, 2010 02:11:00

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\1202046594.602

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 2.385      | ug/L        | 1.678     | 885                | 0.002            |
| > Sc    | 45   |            | ug/L        |           | 405445             | 405445.398       |
| Ni      | 60   | 2.178      | ug/L        | 3.245     | 3247               | 0.008            |
| > Ge    | 74   |            | ug/L        |           | 406906             | 406906.017       |
| As      | 75   | 1.676      | ug/L        | 10.740    | 2152               | 0.005            |
| Se      | 77   |            | ug/L        |           | 5275               | -0.008           |
| Se      | 82   | 0.593      | ug/L        | 48.856    | 86                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 296                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 523225             | 523225.096       |
| Tl      | 205  | -0.037     | ug/L        | 6.879     | 2996               | -0.001           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |                  |                |                             |
| > Sc    | 45   |                   | 94.7               |                  |                |                             |
| Ni      | 60   |                   |                    |                  |                |                             |
| > Ge    | 74   |                   | 90.2               |                  |                |                             |
| As      | 75   |                   |                    |                  |                |                             |
| Se      | 77   |                   |                    |                  |                |                             |
| Se      | 82   |                   |                    |                  |                |                             |
| Kr      | 83   |                   |                    |                  |                |                             |
| > Lu    | 175  |                   | 98.9               |                  |                |                             |
| Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046594

Report Date/Time: Monday, March 15, 2010 02:11:39

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## ICPMS#5 - Summary Report

Sample ID: 1202046596

Sample Date/Time: Monday, March 15, 2010 02:14:38

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\MethodNanI soil.mth

Dataset File: c:\elandata\dataset\100313\1202046596.603

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 28.225     | ug/L        | 1.376     | 10399              | 0.025            |
| > Sc    | 45   |            | ug/L        |           | 409155             | 409154.528       |
| [ Ni    | 60   | 28.965     | ug/L        | 1.295     | 41937              | 0.102            |
| > Ge    | 74   |            | ug/L        |           | 408549             | 408548.622       |
| [ As    | 75   | 41.817     | ug/L        | 0.643     | 47099              | 0.115            |
| Se      | 77   |            | ug/L        |           | 6120               | -0.006           |
| Se      | 82   | 10.080     | ug/L        | 4.312     | 1191               | 0.003            |
| [ Kr    | 83   |            | ug/L        |           | 312                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 527479             | 527478.687       |
| [ Tl    | 205  | 53.352     | ug/L        | 0.703     | 1000253            | 1.889            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ Be    | 9    |                   |                    |                  |                |                             |
| > Sc    | 45   |                   | 95.6               |                  |                |                             |
| [ Ni    | 60   |                   |                    |                  |                |                             |
| > Ge    | 74   |                   | 90.6               |                  |                |                             |
| [ As    | 75   |                   |                    |                  |                |                             |
| Se      | 77   |                   |                    |                  |                |                             |
| Se      | 82   |                   |                    |                  |                |                             |
| [ Kr    | 83   |                   |                    |                  |                |                             |
| > Lu    | 175  |                   | 99.8               |                  |                |                             |
| [ Tl    | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046596

Report Date/Time: Monday, March 15, 2010 02:15:18

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## ICPMS#5 - Summary Report

Sample ID: 1202046597

Sample Date/Time: Monday, March 15, 2010 02:18:17

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\1202046597.604

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 29.174     | ug/L        | 1.665     | 10688              | 0.026            |
| [ > Sc  | 45   |            | ug/L        |           | 406902             | 406901.504       |
| [ Ni    | 60   | 29.676     | ug/L        | 2.284     | 42719              | 0.105            |
| [ > Ge  | 74   |            | ug/L        |           | 406089             | 406089.018       |
| [ As    | 75   | 42.381     | ug/L        | 3.354     | 47439              | 0.116            |
| [ Se    | 77   |            | ug/L        |           | 6151               | -0.006           |
| [ Se    | 82   | 10.149     | ug/L        | 5.538     | 1192               | 0.003            |
| [ Kr    | 83   |            | ug/L        |           | 332                | 0.001            |
| [ > Lu  | 175  |            | ug/L        |           | 529624             | 529624.232       |
| [ Tl    | 205  | 53.883     | ug/L        | 1.692     | 1014303            | 1.908            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |               |                |              |
| [ > Sc  | 45   |                   | 95.1               |               |               |                |              |
| [ Ni    | 60   |                   |                    |               |               |                |              |
| [ > Ge  | 74   |                   | 90.1               |               |               |                |              |
| [ As    | 75   |                   |                    |               |               |                |              |
| [ Se    | 77   |                   |                    |               |               |                |              |
| [ Se    | 82   |                   |                    |               |               |                |              |
| [ Kr    | 83   |                   |                    |               |               |                |              |
| [ > Lu  | 175  |                   | 100.2              |               |               |                |              |
| [ Tl    | 205  |                   |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046597

Report Date/Time: Monday, March 15, 2010 02:18:56

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## ICPMS#5 - Summary Report

Sample ID: 1202046595

Sample Date/Time: Monday, March 15, 2010 02:21:55

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 954678|10|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\1202046595.605

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.530      | ug/L        | 7.123     | 199                | 0.000            |
| [ > Sc  | 45   |            | ug/L        |           | 385841             | 385840.844       |
| [ Ni    | 60   | 0.551      | ug/L        | 5.341     | 876                | 0.002            |
| [ > Ge  | 74   |            | ug/L        |           | 419848             | 419847.641       |
| [ As    | 75   | 0.008      | ug/L        | 10206.873 | 298                | 0.000            |
| [ Se    | 77   |            | ug/L        |           | 6698               | -0.005           |
| [ Se    | 82   | 0.072      | ug/L        | 337.089   | 26                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 159                | 0.000            |
| [ > Lu  | 175  |            | ug/L        |           | 501333             | 501333.038       |
| [ Tl    | 205  | -0.071     | ug/L        | 14.462    | 2274               | -0.002           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [ > Sc  | 45   |                   | 90.1               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [ > Ge  | 74   |                   | 93.1               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [ > Lu  | 175  |                   | 94.8               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046595

Report Date/Time: Monday, March 15, 2010 02:22:35

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, March 15, 2010 02:25:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 8.606

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 57.436     | ug/L        | 3.582     | 20458              | 0.052            |
| [ > Sc  | 45   |            | ug/L        |           | 396002             | 396002.297       |
| [ Ni    | 60   | 54.758     | ug/L        | 2.948     | 76577              | 0.193            |
| [ > Ge  | 74   |            | ug/L        |           | 434746             | 434746.449       |
| [ As    | 75   | 50.163     | ug/L        | 0.668     | 60065              | 0.137            |
| [ Se    | 77   |            | ug/L        |           | 11578              | 0.006            |
| [ Se    | 82   | 52.450     | ug/L        | 2.338     | 6520               | 0.015            |
| [ Kr    | 83   |            | ug/L        |           | 146                | 0.000            |
| [ > Lu  | 175  |            | ug/L        |           | 506708             | 506707.562       |
| [ Tl    | 205  | 54.921     | ug/L        | 1.558     | 988948             | 1.945            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    | 114.873           |                    |               |                |                |              |
| [ > Sc  | 45   |                   | 92.5               |               |                |                |              |
| [ Ni    | 60   | 109.517           |                    |               |                |                |              |
| [ > Ge  | 74   |                   | 96.4               |               |                |                |              |
| [ As    | 75   | 100.326           |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   | 104.900           |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [ > Lu  | 175  |                   | 95.8               |               |                |                |              |
| [ Tl    | 205  | 109.842           |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message       |
|------------------|---------|---------------------------------|
| QC Std 8         | Be      | 9CCV is out of limits (+/- 10%) |

### QC Action

QC Action Line: Continue

Sample ID: QC Std 8

Report Date/Time: Monday, March 15, 2010 02:26:12

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## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, March 15, 2010 02:29:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 9.607

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.009      | ug/L        | 106.526   | 18                 | 0.000            |
| [> Sc   | 45   |            | ug/L        |           | 383541             | 383540.595       |
| [ Ni    | 60   | 0.000      | ug/L        | 3191.315  | 125                | 0.000            |
| [> Ge   | 74   |            | ug/L        |           | 426121             | 426121.483       |
| [ As    | 75   | -0.370     | ug/L        | 39.131    | -135               | -0.001           |
| [ Se    | 77   |            | ug/L        |           | 7348               | -0.004           |
| [ Se    | 82   | -0.186     | ug/L        | 60.492    | -5                 | -0.000           |
| [ Kr    | 83   |            | ug/L        |           | 142                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 494393             | 494392.856       |
| [ Tl    | 205  | 0.154      | ug/L        | 9.615     | 6172               | 0.005            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [> Sc   | 45   |                   | 89.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [> Ge   | 74   |                   | 94.5               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 93.5               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Monday, March 15, 2010 02:29:52

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## ICPMS#5 - Summary Report

Sample ID: 247188002

Sample Date/Time: Monday, March 15, 2010 02:32:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188002.608

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 1.202      | ug/L        | 2.834     | 459                | 0.001            |
| > Sc    | 45   |            | ug/L        |           | 410713             | 410713.097       |
| [ Ni    | 60   | 9.686      | ug/L        | 4.312     | 14155              | 0.034            |
| > Ge    | 74   |            | ug/L        |           | 392020             | 392019.516       |
| [ As    | 75   | 2.014      | ug/L        | 12.079    | 2437               | 0.006            |
| [ Se    | 77   |            | ug/L        |           | 5214               | -0.007           |
| [ Se    | 82   | 0.385      | ug/L        | 38.113    | 59                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 246                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 500377             | 500376.957       |
| [ Ti    | 205  | 0.096      | ug/L        | 3.955     | 5226               | 0.003            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Ti      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ Be    | 9    |                   |                    |               |               |                             |
| > Sc    | 45   |                   | 96.0               |               |               |                             |
| [ Ni    | 60   |                   |                    |               |               |                             |
| > Ge    | 74   |                   | 86.9               |               |               |                             |
| [ As    | 75   |                   |                    |               |               |                             |
| [ Se    | 77   |                   |                    |               |               |                             |
| [ Se    | 82   |                   |                    |               |               |                             |
| [ Kr    | 83   |                   |                    |               |               |                             |
| > Lu    | 175  |                   | 94.6               |               |               |                             |
| [ Ti    | 205  |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188002

Report Date/Time: Monday, March 15, 2010 02:33:31

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## ICPMS#5 - Summary Report

Sample ID: 247188003

Sample Date/Time: Monday, March 15, 2010 02:36:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188003.609

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 2.604      | ug/L        | 2.787     | 912                | 0.002            |
| [> | Sc      | 45   |            | ug/L        |           | 383334             | 383333.713       |
| [  | Ni      | 60   | 2.875      | ug/L        | 4.972     | 4009               | 0.010            |
| [> | Ge      | 74   |            | ug/L        |           | 390068             | 390068.394       |
| [  | As      | 75   | 3.786      | ug/L        | 15.967    | 4320               | 0.010            |
| [  | Se      | 77   |            | ug/L        |           | 5051               | -0.008           |
| [  | Se      | 82   | 0.617      | ug/L        | 39.157    | 85                 | 0.000            |
| [  | Kr      | 83   |            | ug/L        |           | 293                | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 504557             | 504556.774       |
| [  | Tl      | 205  | -0.046     | ug/L        | 9.609     | 2731               | -0.002           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [  | Be      | 9    |                   |                    |                  |                |                             |
| [> | Sc      | 45   |                   | 89.6               |                  |                |                             |
| [  | Ni      | 60   |                   |                    |                  |                |                             |
| [> | Ge      | 74   |                   | 86.5               |                  |                |                             |
| [  | As      | 75   |                   |                    |                  |                |                             |
| [  | Se      | 77   |                   |                    |                  |                |                             |
| [  | Se      | 82   |                   |                    |                  |                |                             |
| [  | Kr      | 83   |                   |                    |                  |                |                             |
| [> | Lu      | 175  |                   | 95.4               |                  |                |                             |
| [  | Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188003

Report Date/Time: Monday, March 15, 2010 02:37:10

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## ICPMS#5 - Summary Report

Sample ID: 247188004

Sample Date/Time: Monday, March 15, 2010 02:40:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\247188004.610

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 2.482      | ug/L        | 1.150     | 871                | 0.002            |
| [ > Sc  | 45   |            | ug/L        |           | 383707             | 383707.362       |
| [ Ni    | 60   | 13.163     | ug/L        | 0.775     | 17937              | 0.046            |
| [ > Ge  | 74   |            | ug/L        |           | 386474             | 386474.207       |
| [ As    | 75   | 1.055      | ug/L        | 8.312     | 1387               | 0.003            |
| [ Se    | 77   |            | ug/L        |           | 4780               | -0.008           |
| [ Se    | 82   | 0.279      | ug/L        | 49.404    | 47                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 253                | 0.000            |
| [ > Lu  | 175  |            | ug/L        |           | 498706             | 498705.638       |
| [ Tl    | 205  | -0.053     | ug/L        | 12.733    | 2569               | -0.002           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [ > Sc  | 45   |                   | 89.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [ > Ge  | 74   |                   | 85.7               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [ > Lu  | 175  |                   | 94.3               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188004

Report Date/Time: Monday, March 15, 2010 02:40:49

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## ICPMS#5 - Summary Report

Sample ID: 247188005

Sample Date/Time: Monday, March 15, 2010 02:43:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188005.611

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 1.678      | ug/L        | 1.944     | 588                | 0.002            |
| [> Sc   | 45   |            | ug/L        |           | 380163             | 380163.336       |
| [ Ni    | 60   | 2.879      | ug/L        | 2.415     | 3984               | 0.010            |
| [> Ge   | 74   |            | ug/L        |           | 377570             | 377570.419       |
| [ As    | 75   | 1.204      | ug/L        | 4.862     | 1509               | 0.003            |
| [ Se    | 77   |            | ug/L        |           | 4583               | -0.009           |
| [ Se    | 82   | 0.173      | ug/L        | 245.559   | 34                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 249                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 494023             | 494023.292       |
| [ Tl    | 205  | -0.063     | ug/L        | 4.987     | 2379               | -0.002           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ Be    | 9    |                   |                    |               |               |                             |
| [> Sc   | 45   |                   | 88.8               |               |               |                             |
| [ Ni    | 60   |                   |                    |               |               |                             |
| [> Ge   | 74   |                   | 83.7               |               |               |                             |
| [ As    | 75   |                   |                    |               |               |                             |
| [ Se    | 77   |                   |                    |               |               |                             |
| [ Se    | 82   |                   |                    |               |               |                             |
| [ Kr    | 83   |                   |                    |               |               |                             |
| [> Lu   | 175  |                   | 93.4               |               |               |                             |
| [ Tl    | 205  |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188005

Report Date/Time: Monday, March 15, 2010 02:44:28

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## ICPMS#5 - Summary Report

Sample ID: 247188006

Sample Date/Time: Monday, March 15, 2010 02:47:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188006.612

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 1.742      | ug/L        | 7.281     | 629                | 0.002            |
| [ > Sc  | 45   |            | ug/L        |           | 392083             | 392083.430       |
| [ Ni    | 60   | 4.697      | ug/L        | 3.894     | 6623               | 0.017            |
| [ > Ge  | 74   |            | ug/L        |           | 389652             | 389651.521       |
| [ As    | 75   | 1.281      | ug/L        | 10.115    | 1639               | 0.004            |
| [ Se    | 77   |            | ug/L        |           | 4566               | -0.009           |
| [ Se    | 82   | 0.347      | ug/L        | 30.922    | 55                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 243                | 0.000            |
| [ > Lu  | 175  |            | ug/L        |           | 506905             | 506904.678       |
| [ Tl    | 205  | -0.075     | ug/L        | 4.271     | 2215               | -0.003           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |                |                |              |
| [ > Sc  | 45   |                   | 91.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| [ > Ge  | 74   |                   | 86.4               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [ > Lu  | 175  |                   | 95.9               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188006

Report Date/Time: Monday, March 15, 2010 02:48:07

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## ICPMS#5 - Summary Report

Sample ID: 247188007

Sample Date/Time: Monday, March 15, 2010 02:51:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188007.613

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 2.740      | ug/L        | 6.252     | 922                | 0.002            |
| > Sc    | 45   |            | ug/L        |           | 368665             | 368664.738       |
| Ni      | 60   | 2.166      | ug/L        | 1.600     | 2936               | 0.008            |
| > Ge    | 74   |            | ug/L        |           | 375774             | 375773.906       |
| As      | 75   | 1.313      | ug/L        | 45.941    | 1617               | 0.004            |
| Se      | 77   |            | ug/L        |           | 4627               | -0.008           |
| Se      | 82   | 0.733      | ug/L        | 33.988    | 94                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 284                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 505206             | 505205.753       |
| Tl      | 205  | -0.102     | ug/L        | 2.086     | 1721               | -0.004           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| > Sc    | 45   |                   | 86.1               |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |
| > Ge    | 74   |                   | 83.3               |               |                |                |              |
| As      | 75   |                   |                    |               |                |                |              |
| Se      | 77   |                   |                    |               |                |                |              |
| Se      | 82   |                   |                    |               |                |                |              |
| Kr      | 83   |                   |                    |               |                |                |              |
| > Lu    | 175  |                   | 95.5               |               |                |                |              |
| Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188007

Report Date/Time: Monday, March 15, 2010 02:51:47

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## ICPMS#5 - Summary Report

Sample ID: 247188008

Sample Date/Time: Monday, March 15, 2010 02:54:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: c:\elandata\dataset\100313\247188008.614

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.674      | ug/L        | 0.875     | 579                | 0.002            |
| > Sc    | 45   |            | ug/L        |           | 374925             | 374925.458       |
| [ Ni    | 60   | 3.358      | ug/L        | 1.266     | 4562               | 0.012            |
| > Ge    | 74   |            | ug/L        |           | 380243             | 380243.080       |
| [ As    | 75   | 0.672      | ug/L        | 42.524    | 968                | 0.002            |
| [ Se    | 77   |            | ug/L        |           | 4456               | -0.009           |
| [ Se    | 82   | 0.671      | ug/L        | 55.861    | 88                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 227                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 494237             | 494236.855       |
| [ Tl    | 205  | -0.093     | ug/L        | 3.377     | 1847               | -0.003           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| > Sc    | 45   |                   | 87.6               |               |                |                |              |
| [ Ni    | 60   |                   |                    |               |                |                |              |
| > Ge    | 74   |                   | 84.3               |               |                |                |              |
| [ As    | 75   |                   |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   |                   |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| > Lu    | 175  |                   | 93.5               |               |                |                |              |
| [ Tl    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188008

Report Date/Time: Monday, March 15, 2010 02:55:26

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, March 15, 2010 02:58:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 8.615

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 60.850     | ug/L        | 2.443     | 20024              | 0.055            |
| [> Sc   | 45   |            | ug/L        |           | 365772             | 365772.347       |
| [ Ni    | 60   | 57.152     | ug/L        | 1.496     | 73855              | 0.202            |
| [> Ge   | 74   |            | ug/L        |           | 406715             | 406715.191       |
| [ As    | 75   | 51.204     | ug/L        | 0.962     | 57354              | 0.140            |
| [ Se    | 77   |            | ug/L        |           | 10305              | 0.005            |
| [ Se    | 82   | 51.736     | ug/L        | 1.017     | 6018               | 0.015            |
| [ Kr    | 83   |            | ug/L        |           | 126                | -0.000           |
| [> Lu   | 175  |            | ug/L        |           | 488312             | 488312.303       |
| [ Tl    | 205  | 53.861     | ug/L        | 1.262     | 934825             | 1.907            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ Be    | 9    | 121.700           |                    |               |                |                |              |
| [> Sc   | 45   |                   | 85.5               |               |                |                |              |
| [ Ni    | 60   | 114.305           |                    |               |                |                |              |
| [> Ge   | 74   |                   | 90.2               |               |                |                |              |
| [ As    | 75   | 102.409           |                    |               |                |                |              |
| [ Se    | 77   |                   |                    |               |                |                |              |
| [ Se    | 82   | 103.472           |                    |               |                |                |              |
| [ Kr    | 83   |                   |                    |               |                |                |              |
| [> Lu   | 175  |                   | 92.3               |               |                |                |              |
| [ Tl    | 205  | 107.722           |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message        |
|------------------|---------|----------------------------------|
| QC Std 8         | Be      | 9CCV is out of limits (+/- 10%)  |
| QC Std 8         | Ni      | 60CCV is out of limits (+/- 10%) |

### QC Action

QC Action Line: Continue

Sample ID: QC Std 8

Report Date/Time: Monday, March 15, 2010 02:59:03

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## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, March 15, 2010 03:02:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 9.616

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 0.014      | ug/L        | 114.774   | 18                 | 0.000            |
| > Sc    | 45   |            | ug/L        |           | 355584             | 355584.060       |
| Ni      | 60   | 0.007      | ug/L        | 119.343   | 125                | 0.000            |
| > Ge    | 74   |            | ug/L        |           | 393813             | 393813.097       |
| As      | 75   | -0.341     | ug/L        | 44.091    | -95                | -0.001           |
| Se      | 77   |            | ug/L        |           | 6307               | -0.005           |
| Se      | 82   | -0.022     | ug/L        | 250.074   | 14                 | -0.000           |
| Kr      | 83   |            | ug/L        |           | 128                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 475977             | 475977.318       |
| Tl      | 205  | 0.112      | ug/L        | 7.425     | 5240               | 0.004            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |
| Ge      | 74   | Linear Thru Zero |                         |
| As      | 75   | Linear Thru Zero | 1.0000                  |
| Se      | 77   | Linear Thru Zero |                         |
| Se      | 82   | Linear Thru Zero | 1.0000                  |
| Kr      | 83   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |                  |                |                             |
| > Sc    | 45   |                   | 83.1               |                  |                |                             |
| Ni      | 60   |                   |                    |                  |                |                             |
| > Ge    | 74   |                   | 87.3               |                  |                |                             |
| As      | 75   |                   |                    |                  |                |                             |
| Se      | 77   |                   |                    |                  |                |                             |
| Se      | 82   |                   |                    |                  |                |                             |
| Kr      | 83   |                   |                    |                  |                |                             |
| > Lu    | 175  |                   | 90.0               |                  |                |                             |
| Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type: Analyte      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Monday, March 15, 2010 03:02:43

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## ICPMS#5 - Summary Report

Sample ID: 247188009

Sample Date/Time: Monday, March 15, 2010 03:05:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188009.617

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.754      | ug/L        | 5.584     | 589                | 0.002            |
| > Sc    | 45   |            | ug/L        |           | 364664             | 364664.375       |
| Ni      | 60   | 2.753      | ug/L        | 1.687     | 3659               | 0.010            |
| > Ge    | 74   |            | ug/L        |           | 368006             | 368005.798       |
| As      | 75   | 1.280      | ug/L        | 39.899    | 1547               | 0.004            |
| Se      | 77   |            | ug/L        |           | 4728               | -0.008           |
| Se      | 82   | 0.350      | ug/L        | 52.028    | 52                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 220                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 476788             | 476788.392       |
| Tl      | 205  | -0.024     | ug/L        | 24.767    | 2942               | -0.001           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| > Sc    | 45   |                   | 85.2               |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |
| > Ge    | 74   |                   | 81.6               |               |                |                |              |
| As      | 75   |                   |                    |               |                |                |              |
| Se      | 77   |                   |                    |               |                |                |              |
| Se      | 82   |                   |                    |               |                |                |              |
| Kr      | 83   |                   |                    |               |                |                |              |
| > Lu    | 175  |                   | 90.2               |               |                |                |              |
| Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188009

Report Date/Time: Monday, March 15, 2010 03:06:22

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## ICPMS#5 - Summary Report

Sample ID: 247188010

Sample Date/Time: Monday, March 15, 2010 03:09:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678[2]baj

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: c:\elandata\dataset\100313\247188010.618

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.457      | ug/L        | 8.380     | 486                | 0.001            |
| > Sc    | 45   |            | ug/L        |           | 360771             | 360770.938       |
| Ni      | 60   | 2.339      | ug/L        | 0.656     | 3093               | 0.008            |
| > Ge    | 74   |            | ug/L        |           | 369267             | 369267.237       |
| As      | 75   | 0.624      | ug/L        | 26.275    | 890                | 0.002            |
| Se      | 77   |            | ug/L        |           | 4562               | -0.008           |
| Se      | 82   | 0.195      | ug/L        | 37.913    | 36                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 203                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 471980             | 471979.521       |
| Tl      | 205  | -0.052     | ug/L        | 7.514     | 2448               | -0.002           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |                  |                |                             |
| > Sc    | 45   |                   | 84.3               |                  |                |                             |
| Ni      | 60   |                   |                    |                  |                |                             |
| > Ge    | 74   |                   | 81.9               |                  |                |                             |
| As      | 75   |                   |                    |                  |                |                             |
| Se      | 77   |                   |                    |                  |                |                             |
| Se      | 82   |                   |                    |                  |                |                             |
| Kr      | 83   |                   |                    |                  |                |                             |
| > Lu    | 175  |                   | 89.3               |                  |                |                             |
| Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188010

Report Date/Time: Monday, March 15, 2010 03:10:02

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## ICPMS#5 - Summary Report

Sample ID: 247188011

Sample Date/Time: Monday, March 15, 2010 03:13:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: c:\elandata\dataset\100313\247188011.619

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 2.021      | ug/L        | 6.178     | 667                | 0.002            |
| >  | Sc      | 45   |            | ug/L        |           | 359115             | 359114.886       |
| [  | Ni      | 60   | 2.592      | ug/L        | 0.514     | 3399               | 0.009            |
| [> | Ge      | 74   |            | ug/L        |           | 369391             | 369391.494       |
|    | As      | 75   | 0.721      | ug/L        | 38.241    | 987                | 0.002            |
|    | Se      | 77   |            | ug/L        |           | 4450               | -0.009           |
|    | Se      | 82   | 0.361      | ug/L        | 45.885    | 53                 | 0.000            |
| [  | Kr      | 83   |            | ug/L        |           | 222                | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 477352             | 477352.090       |
| [  | Tl      | 205  | -0.078     | ug/L        | 3.870     | 2039               | -0.003           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [  | Be      | 9    |                   |                    |               |                |                             |
| >  | Sc      | 45   |                   | 83.9               |               |                |                             |
| [  | Ni      | 60   |                   |                    |               |                |                             |
| [> | Ge      | 74   |                   | 81.9               |               |                |                             |
|    | As      | 75   |                   |                    |               |                |                             |
|    | Se      | 77   |                   |                    |               |                |                             |
|    | Se      | 82   |                   |                    |               |                |                             |
| [  | Kr      | 83   |                   |                    |               |                |                             |
| [> | Lu      | 175  |                   | 90.3               |               |                |                             |
| [  | Tl      | 205  |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188011

Report Date/Time: Monday, March 15, 2010 03:13:42

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## ICPMS#5 - Summary Report

Sample ID: 247188012

Sample Date/Time: Monday, March 15, 2010 03:16:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188012.620

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 3.084      | ug/L        | 2.352     | 1043               | 0.003            |
| > Sc    | 45   |            | ug/L        |           | 371084             | 371083.965       |
| Li      | 60   | 2.424      | ug/L        | 3.153     | 3293               | 0.009            |
| > Ge    | 74   |            | ug/L        |           | 370175             | 370175.421       |
| As      | 75   | 2.163      | ug/L        | 8.714     | 2453               | 0.006            |
| Se      | 77   |            | ug/L        |           | 4635               | -0.008           |
| Se      | 82   | 0.673      | ug/L        | 33.195    | 86                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 317                | 0.001            |
| > Lu    | 175  |            | ug/L        |           | 503553             | 503553.260       |
| Tl      | 205  | -0.095     | ug/L        | 4.649     | 1856               | -0.003           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| > Sc    | 45   |                   | 86.7               |               |                |                |              |
| Li      | 60   |                   |                    |               |                |                |              |
| > Ge    | 74   |                   | 82.1               |               |                |                |              |
| As      | 75   |                   |                    |               |                |                |              |
| Se      | 77   |                   |                    |               |                |                |              |
| Se      | 82   |                   |                    |               |                |                |              |
| Kr      | 83   |                   |                    |               |                |                |              |
| > Lu    | 175  |                   | 95.2               |               |                |                |              |
| Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188012

Report Date/Time: Monday, March 15, 2010 03:17:21

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## ICPMS#5 - Summary Report

Sample ID: 247188013

Sample Date/Time: Monday, March 15, 2010 03:20:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\MethodVanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188013.621

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 1.537      | ug/L        | 6.554     | 512                | 0.001            |
| > Sc    | 45   |            | ug/L        |           | 360672             | 360671.678       |
| [ Ni    | 60   | 4.419      | ug/L        | 0.611     | 5739               | 0.016            |
| [> Ge   | 74   |            | ug/L        |           | 365770             | 365769.632       |
| As      | 75   | 1.046      | ug/L        | 28.298    | 1301               | 0.003            |
| Se      | 77   |            | ug/L        |           | 4428               | -0.009           |
| Se      | 82   | 0.524      | ug/L        | 49.501    | 70                 | 0.000            |
| [ Kr    | 83   |            | ug/L        |           | 225                | 0.000            |
| [> Lu   | 175  |            | ug/L        |           | 472870             | 472870.334       |
| [ Tl    | 205  | -0.086     | ug/L        | 4.315     | 1880               | -0.003           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ Be    | 9    |                   |                    |               |               |                             |
| > Sc    | 45   |                   | 84.3               |               |               |                             |
| [ Ni    | 60   |                   |                    |               |               |                             |
| [> Ge   | 74   |                   | 81.1               |               |               |                             |
| As      | 75   |                   |                    |               |               |                             |
| Se      | 77   |                   |                    |               |               |                             |
| Se      | 82   |                   |                    |               |               |                             |
| [ Kr    | 83   |                   |                    |               |               |                             |
| [> Lu   | 175  |                   | 89.4               |               |               |                             |
| [ Tl    | 205  |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188013

Report Date/Time: Monday, March 15, 2010 03:21:01

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## ICPMS#5 - Summary Report

Sample ID: 247188014

Sample Date/Time: Monday, March 15, 2010 03:24:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\247188014.622

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 2.885      | ug/L        | 3.375     | 927                | 0.003            |
| > Sc    | 45   |            | ug/L        |           | 352191             | 352191.267       |
| Ni      | 60   | 2.190      | ug/L        | 4.177     | 2835               | 0.008            |
| > Ge    | 74   |            | ug/L        |           | 358726             | 358725.653       |
| As      | 75   | 1.532      | ug/L        | 16.603    | 1755               | 0.004            |
| Se      | 77   |            | ug/L        |           | 4501               | -0.008           |
| Se      | 82   | 0.634      | ug/L        | 46.807    | 80                 | 0.000            |
| Kr      | 83   |            | ug/L        |           | 260                | 0.000            |
| > Lu    | 175  |            | ug/L        |           | 488305             | 488304.834       |
| Tl      | 205  | -0.112     | ug/L        | 2.503     | 1496               | -0.004           |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be      | 9    |                   |                    |               |               |                             |
| > Sc    | 45   |                   | 82.3               |               |               |                             |
| Ni      | 60   |                   |                    |               |               |                             |
| > Ge    | 74   |                   | 79.6               |               |               |                             |
| As      | 75   |                   |                    |               |               |                             |
| Se      | 77   |                   |                    |               |               |                             |
| Se      | 82   |                   |                    |               |               |                             |
| Kr      | 83   |                   |                    |               |               |                             |
| > Lu    | 175  |                   | 92.3               |               |               |                             |
| Tl      | 205  |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188014

Report Date/Time: Monday, March 15, 2010 03:24:41

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, March 15, 2010 03:27:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\dataset\100313\QC Std 6.623

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 61.540     | ug/L        | 0.815     | 19944              | 0.055            |
| Sc      | 45   |            | ug/L        |           | 360192             | 360192.195       |
| Ni      | 60   | 56.374     | ug/L        | 1.536     | 71730              | 0.199            |
| Ge      | 74   |            | ug/L        |           | 397068             | 397067.504       |
| As      | 75   | 51.411     | ug/L        | 1.714     | 56211              | 0.141            |
| Se      | 77   |            | ug/L        |           | 10176              | 0.005            |
| Se      | 82   | 52.483     | ug/L        | 3.832     | 5957               | 0.015            |
| Kr      | 83   |            | ug/L        |           | 121                | -0.000           |
| Lu      | 175  |            | ug/L        |           | 480060             | 480059.777       |
| Tl      | 205  | 54.167     | ug/L        | 3.460     | 924131             | 1.918            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    | 123.081           |                    |               |                |                |              |
| Sc      | 45   |                   | 84.2               |               |                |                |              |
| Ni      | 60   | 112.747           |                    |               |                |                |              |
| Ge      | 74   |                   | 88.1               |               |                |                |              |
| As      | 75   | 102.823           |                    |               |                |                |              |
| Se      | 77   |                   |                    |               |                |                |              |
| Se      | 82   | 104.967           |                    |               |                |                |              |
| Kr      | 83   |                   |                    |               |                |                |              |
| Lu      | 175  |                   | 90.8               |               |                |                |              |
| Tl      | 205  | 108.333           |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message        |
|------------------|---------|----------------------------------|
| QC Std 6         | Be      | 9CCV is out of limits (+/- 10%)  |
| QC Std 6         | Ni      | 60CCV is out of limits (+/- 10%) |

### QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Monday, March 15, 2010 03:28:18

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, March 15, 2010 03:31:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soll.mth

Dataset File: c:\elandata\dataset\100313\QC Std 7.624

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.022      | ug/L        | 27.727    | 20                 | 0.000            |
| [ > Sc  | 45   |            | ug/L        |           | 349303             | 349303.286       |
| [ Ni    | 60   | -0.002     | ug/L        | 421.707   | 111                | -0.000           |
| [ > Ge  | 74   |            | ug/L        |           | 390244             | 390244.308       |
| [ As    | 75   | -0.274     | ug/L        | 172.555   | -15                | -0.001           |
| [ Se    | 77   |            | ug/L        |           | 6331               | -0.005           |
| [ Se    | 82   | -0.057     | ug/L        | 234.129   | 10                 | -0.000           |
| [ Kr    | 83   |            | ug/L        |           | 119                | -0.000           |
| [ > Lu  | 175  |            | ug/L        |           | 464850             | 464849.947       |
| [ Ti    | 205  | 0.112      | ug/L        | 27.527    | 5116               | 0.004            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Ni      | 60Linear Thru Zero  | 1.0000                  |
| Ge      | 74Linear Thru Zero  |                         |
| As      | 75Linear Thru Zero  | 1.0000                  |
| Se      | 77Linear Thru Zero  |                         |
| Se      | 82Linear Thru Zero  | 1.0000                  |
| Kr      | 83Linear Thru Zero  |                         |
| Lu      | 175Linear Thru Zero |                         |
| Ti      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [ Be    | 9    |                   |                    |               |               |                |              |
| [ > Sc  | 45   |                   | 81.6               |               |               |                |              |
| [ Ni    | 60   |                   |                    |               |               |                |              |
| [ > Ge  | 74   |                   | 86.5               |               |               |                |              |
| [ As    | 75   |                   |                    |               |               |                |              |
| [ Se    | 77   |                   |                    |               |               |                |              |
| [ Se    | 82   |                   |                    |               |               |                |              |
| [ Kr    | 83   |                   |                    |               |               |                |              |
| [ > Lu  | 175  |                   | 87.9               |               |               |                |              |
| [ Ti    | 205  |                   |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, March 15, 2010 03:31:58

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## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Monday, March 15, 2010 11:49:49

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.731

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

### Summary

| Analyte | Mass  | Meas. Intens. | Mean     | Net Intens. | Mean       | Net Intens. | SD       | Net Intens. | RSD  |
|---------|-------|---------------|----------|-------------|------------|-------------|----------|-------------|------|
| Be      | 9.0   |               | 3870.9   |             | 3870.924   |             | 21.944   |             | 0.6  |
| Mg      | 24.0  |               | 48922.4  |             | 48922.432  |             | 465.568  |             | 1.0  |
| Co      | 58.9  |               | 88703.4  |             | 88703.374  |             | 1147.297 |             | 1.3  |
| Rh      | 102.9 |               | 170324.8 |             | 170324.804 |             | 1372.464 |             | 0.8  |
| In      | 114.9 |               | 234972.6 |             | 234972.563 |             | 1929.394 |             | 0.8  |
| Pb      | 208.0 |               | 237752.2 |             | 237752.248 |             | 2423.747 |             | 1.0  |
| [> Ba   | 137.9 |               | 225503.8 |             | 225503.775 |             | 1300.803 |             | 0.6  |
| [ Ba++  | 69.0  |               | 3607.1   |             | 0.016      |             | 0.000    |             | 1.0  |
| [> Ce   | 139.9 |               | 277260.6 |             | 277260.595 |             | 1748.070 |             | 0.6  |
| [ CeO   | 155.9 |               | 5905.0   |             | 0.021      |             | 0.000    |             | 1.9  |
| Bkgd    | 220.0 |               | 20.5     |             | 20.500     |             | 3.571    |             | 17.4 |

### Current Optimization File Data

| Current Value | Description             |
|---------------|-------------------------|
| 0.87          | Nebulizer Gas Flow      |
| 7.25          | Lens Voltage            |
| 1450.00       | ICP RF Power            |
| -1750.00      | Analog Stage Voltage    |
| 1250.00       | Pulse Stage Voltage     |
| 275.00        | Discriminator Threshold |
| -6.00         | AC Rod Offset           |

### Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be      | 9    | 13         | 7.0       | 4285.0            |
| Co      | 59   | 13         | 8.0       | 88894.1           |
| In      | 115  | 13         | 8.8       | 222733.6          |

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

| Analyte | Exact Mass | Meas. Mass | Mass DAC | Res. DAC | Meas. Pk. Width |
|---------|------------|------------|----------|----------|-----------------|
| He      | 3.0        | 3.0        | 584      | 2050     | 0.668           |
| Be      | 9.0        | 9.0        | 2050     | 2075     | 0.629           |
| Mg      | 24.0       | 24.0       | 5691     | 2080     | 0.604           |
| Mg      | 25.0       | 25.0       | 5955     | 2080     | 0.659           |
| Mg      | 26.0       | 26.0       | 6150     | 2080     | 0.641           |
| Co      | 58.9       | 58.9       | 14185    | 2110     | 0.626           |
| Rh      | 102.9      | 102.9      | 24870    | 2160     | 0.641           |
| In      | 114.9      | 114.9      | 27796    | 2180     | 0.638           |
| Ce      | 139.9      | 139.9      | 33868    | 2200     | 0.646           |
| Pb      | 206.0      | 206.0      | 49948    | 2295     | 0.597           |
| Pb      | 207.0      | 207.0      | 50171    | 2240     | 0.634           |
| Pb      | 208.0      | 208.0      | 50451    | 2265     | 0.694           |
| U       | 238.1      | 238.0      | 57725    | 2275     | 0.730           |



## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, March 15, 2010 12:21:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\Blank.006

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    |            | ug/L        |           | 18                 |                  |
| Sc      | 45   |            | ug/L        |           | 342490             |                  |
| Ni      | 60   |            | ug/L        |           | 105                |                  |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero |                         |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero |                         |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| Sc      | 45   |                   |                    |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, March 15, 2010 12:22:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\Standard 1.007

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 10.000     | ug/L        | 2.615     | 4024               | 0.011            |
| Sc      | 45   |            | ug/L        |           | 357465             | 357464.887       |
| Ni      | 60   | 10.000     | ug/L        | 3.101     | 15842              | 0.044            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |                  |                |                             |
| Sc      | 45   |                   |                    |                  |                |                             |
| Ni      | 60   |                   |                    |                  |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, March 15, 2010 12:24:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\Standard 2.008

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 100.006    | ug/L        | 1.226     | 38551              | 0.113            |
| Sc      | 45   |            | ug/L        |           | 341541             | 341540.757       |
| Ni      | 60   | 99.983     | ug/L        | 0.097     | 147994             | 0.433            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |               |                |                             |
| Sc      | 45   |                   |                    |               |                |                             |
| Ni      | 60   |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, March 15, 2010 12:26:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 1.009

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 53.254     | ug/L        | 2.386     | 20707              | 0.060            |
| > | Sc      | 45   |            | ug/L        |           | 344445             | 344444.963       |
| [ | Ni      | 60   | 53.346     | ug/L        | 1.551     | 79670              | 0.231            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    | 106.509           |                    |               |                |                |              |
| > | Sc      | 45   |                   | 100.6              |               |                |                |              |
| [ | Ni      | 60   | 106.691           |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Monday, March 15, 2010 12:26:22

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## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, March 15, 2010 12:27:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 2.010

### Concentration Results

|   | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [ | Be           | 9          | 0.004 ug/L  | 18.644    | 20                 | 0.000            |
| > | Sc           | 45         | ug/L        |           | 350187             | 350187.369       |
| [ | Ni           | 60         | 0.001 ug/L  | 1665.069  | 109                | 0.000            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be           | 9                 |                    |               |                |                |              |
| > | Sc           | 45                | 102.2              |               |                |                |              |
| [ | Ni           | 60                |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, March 15, 2010 12:29:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 3.011

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.530      | ug/L        | 6.886     | 231                | 0.001            |
| > | Sc      | 45   |            | ug/L        |           | 355008             | 355007.872       |
| [ | Ni      | 60   | 2.323      | ug/L        | 4.442     | 3679               | 0.010            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [ | Be      | 9    | 105.920           |                    |                  |                |                |              |
| > | Sc      | 45   |                   | 103.7              |                  |                |                |              |
| [ | Ni      | 60   | 116.136           |                    |                  |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, March 15, 2010 12:31:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 4.012

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.110      | ug/L        | 18.102    | 53                 | 0.000            |
| > | Sc      | 45   |            | ug/L        |           | 301052             | 301051.803       |
| [ | Ni      | 60   | 3.335      | ug/L        | 1.399     | 4440               | 0.014            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |                  |                |                |              |
| > | Sc      | 45   |                   |                    | 87.9             |                |                |              |
| [ | Ni      | 60   | 100.759           |                    |                  |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, March 15, 2010 12:32:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 5.013

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 21.845     | ug/L        | 1.508     | 7406               | 0.025            |
| > | Sc      | 45   |            | ug/L        |           | 299908             | 299907.961       |
| [ | Ni      | 60   | 24.291     | ug/L        | 1.868     | 31640              | 0.105            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [ | Be      | 9    | 109.224           |                    |               |               |                |              |
| > | Sc      | 45   |                   | 87.6               |               |               |                |              |
| [ | Ni      | 60   | 104.209           |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, March 15, 2010 12:34:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 6.014

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 54.942     | ug/L        | 1.184     | 20503              | 0.062            |
| Sc      | 45   |            | ug/L        |           | 330527             | 330527.002       |
| Ni      | 60   | 53.100     | ug/L        | 1.918     | 76104              | 0.230            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|------------|-----------------------------|
| Be      | 9    | 109.883           |                    |                  |            |                             |
| Sc      | 45   |                   | 96.5               |                  |            |                             |
| Ni      | 60   | 106.199           |                    |                  |            |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Monday, March 15, 2010 12:34:56

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, March 15, 2010 12:36:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 7.015

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.000      | ug/L        | 912.724   | 18                 | 0.000            |
| > | Sc      | 45   |            | ug/L        |           | 335608             | 335608.089       |
| [ | Ni      | 60   | -0.003     | ug/L        | 104.394   | 98                 | -0.000           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |                  |                |                |              |
| > | Sc      | 45   |                   | 98.0               |                  |                |                |              |
| [ | Ni      | 60   |                   |                    |                  |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046593

Sample Date/Time: Monday, March 15, 2010 12:38:10

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\1202046593.016

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 0.008      | ug/L        | 130.317   | 20                 | 0.000            |
| Sc      | 45   |            | ug/L        |           | 315192             | 315192.194       |
| Ni      | 60   | 0.131      | ug/L        | 8.027     | 275                | 0.001            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| Sc      | 45   |                   | 92.0               |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046593

Report Date/Time: Monday, March 15, 2010 12:38:24

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202046598

Sample Date/Time: Monday, March 15, 2010 12:39:54

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 954678|40|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\1202046598.017

### Concentration Results

|   | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [ | Be           | 9          | 21.472 ug/L | 0.935     | 8269               | 0.024            |
| > | Sc           | 45         | ug/L        |           | 340629             | 340629.030       |
| [ | Ni           | 60         | 38.279 ug/L | 0.156     | 56573              | 0.166            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ | Be           | 9                 |                    |               |               |                             |
| > | Sc           | 45                | 99.5               |               |               |                             |
| [ | Ni           | 60                |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188001

Sample Date/Time: Monday, March 15, 2010 12:41:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and nl.mth

Dataset File: C:\elandata\Dataset\100315\247188001.018

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 2.344      | ug/L        | 6.915     | 933                | 0.003            |
| > | Sc      | 45   |            | ug/L        |           | 346271             | 346271.288       |
| ] | Ni      | 60   | 2.498      | ug/L        | 2.388     | 3851               | 0.011            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   | 101.1              |               |                |                             |
| ] | Ni      | 60   |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188001

Report Date/Time: Monday, March 15, 2010 12:41:52

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202046594

Sample Date/Time: Monday, March 15, 2010 12:43:21

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\1202046594.019

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 2.301      | ug/L        | 1.484     | 918                | 0.003            |
| Sc      | 45   |            | ug/L        |           | 346549             | 346548.705       |
| Ni      | 60   | 2.057      | ug/L        | 0.708     | 3194               | 0.009            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be      | 9    |                   |                    |               |               |                             |
| Sc      | 45   |                   | 101.2              |               |               |                             |
| Ni      | 60   |                   |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046594

Report Date/Time: Monday, March 15, 2010 12:43:36

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## ICPMS#5 - Summary Report

Sample ID: 1202046596

Sample Date/Time: Monday, March 15, 2010 12:45:05

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\1202046596.020

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 26.476     | ug/L        | 2.506     | 10756              | 0.030            |
| > | Sc      | 45   |            | ug/L        |           | 359626             | 359625.900       |
| [ | Ni      | 60   | 26.837     | ug/L        | 3.566     | 41882              | 0.116            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |                  |                |                             |
| > | Sc      | 45   |                   | 105.0              |                  |                |                             |
| [ | Ni      | 60   |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046597

Sample Date/Time: Monday, March 15, 2010 12:46:49

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 954678[2]ba]

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\1202046597.021

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 27.419     | ug/L        | 2.309     | 10992              | 0.031            |
| Sc      | 45   |            | ug/L        |           | 354875             | 354875.473       |
| Ni      | 60   | 27.321     | ug/L        | 2.160     | 42084              | 0.118            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |               |                |                             |
| Sc      | 45   |                   | 103.6              |               |                |                             |
| Ni      | 60   |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type: Analyte      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202046595

Sample Date/Time: Monday, March 15, 2010 12:48:32

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 954678|10|baj

Method File: c:\elandata\Method\be and nl.mth

Dataset File: C:\elandata\Dataset\100315\1202046595.022

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.482      | ug/L        | 10.841    | 199                | 0.001            |
| > | Sc      | 45   |            | ug/L        |           | 333888             | 333887.641       |
| [ | Ni      | 60   | 0.537      | ug/L        | 0.876     | 879                | 0.002            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |                  |                |                             |
| > | Sc      | 45   |                   | 97.5               |                  |                |                             |
| [ | Ni      | 60   |                   |                    |                  |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, March 15, 2010 12:50:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 8.023

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 51.589     | ug/L        | 0.954     | 20117              | 0.058            |
| > | Sc      | 45   |            | ug/L        |           | 345353             | 345352.825       |
| [ | Ni      | 60   | 51.352     | ug/L        | 1.756     | 76904              | 0.222            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be      | 9    | 103.178           |                    |                  |                |                             |
| > | Sc      | 45   |                   | 100.8              |                  |                |                             |
| [ | Ni      | 60   | 102.704           |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, March 15, 2010 12:52:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 9.024

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 0.004      | ug/L        | 292.552   | 20                 | 0.000            |
| Sc      | 45   |            | ug/L        |           | 349385             | 349384.993       |
| Ni      | 60   | 0.008      | ug/L        | 38.700    | 119                | 0.000            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| Sc      | 45   |                   | 102.0              |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Monday, March 15, 2010 12:52:15

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## ICPMS#5 - Summary Report

Sample ID: 247188002

Sample Date/Time: Monday, March 15, 2010 12:53:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678[2]ba]

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188002.025

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.048      | ug/L        | 7.792     | 482                | 0.001            |
| Sc      | 45   |            | ug/L        |           | 391037             | 391037.204       |
| Ni      | 60   | 8.505      | ug/L        | 4.264     | 14504              | 0.037            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    |                   |                    |               |                |                |              |
| Sc      | 45   |                   | 114.2              |               |                |                |              |
| Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188002

Report Date/Time: Monday, March 15, 2010 12:53:59

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## ICPMS#5 - Summary Report

Sample ID: 247188003

Sample Date/Time: Monday, March 15, 2010 12:55:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188003.026

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 2.191      | ug/L        | 1.687     | 870                | 0.002            |
| > | Sc      | 45   |            | ug/L        |           | 344340             | 344339.850       |
| [ | Ni      | 60   | 2.736      | ug/L        | 1.138     | 4186               | 0.012            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 100.5              |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188003

Report Date/Time: Monday, March 15, 2010 12:55:43

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## ICPMS#5 - Summary Report

Sample ID: 247188004

Sample Date/Time: Monday, March 15, 2010 12:57:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188004.027

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 2.167      | ug/L        | 0.313     | 885                | 0.002            |
| > | Sc      | 45   |            | ug/L        |           | 354466             | 354466.319       |
| [ | Ni      | 60   | 12.041     | ug/L        | 0.334     | 18594              | 0.052            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |                  |                |                             |
| > | Sc      | 45   |                   | 103.5              |                  |                |                             |
| [ | Ni      | 60   |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188005

Sample Date/Time: Monday, March 15, 2010 12:58:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188005.028

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.395      | ug/L        | 3.226     | 561                | 0.002            |
| Sc      | 45   |            | ug/L        |           | 344719             | 344718.667       |
| Ni      | 60   | 2.728      | ug/L        | 4.097     | 4177               | 0.012            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be      | 9    |                   |                    |               |                |                             |
| Sc      | 45   |                   | 100.7              |               |                |                             |
| Ni      | 60   |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188005

Report Date/Time: Monday, March 15, 2010 12:59:12

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## ICPMS#5 - Summary Report

Sample ID: 247188006

Sample Date/Time: Monday, March 15, 2010 13:00:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188006.029

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 1.575      | ug/L        | 0.778     | 656                | 0.002            |
| > | Sc      | 45   |            | ug/L        |           | 358318             | 358317.882       |
| [ | Ni      | 60   | 4.363      | ug/L        | 2.370     | 6880               | 0.019            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |               |                             |
| > | Sc      | 45   |                   | 104.6              |               |               |                             |
| [ | Ni      | 60   |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188006

Report Date/Time: Monday, March 15, 2010 13:00:56

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## ICPMS#5 - Summary Report

Sample ID: 247188007

Sample Date/Time: Monday, March 15, 2010 13:02:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188007.030

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 2.342      | ug/L        | 10.963    | 937                | 0.003            |
| > | Sc      | 45   |            | ug/L        |           | 349392             | 349392.128       |
| [ | Ni      | 60   | 1.939      | ug/L        | 6.678     | 3031               | 0.008            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 102.0              |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188008

Sample Date/Time: Monday, March 15, 2010 13:04:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188008.031

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 1.466      | ug/L        | 3.912     | 610                | 0.002            |
| > | Sc      | 45   |            | ug/L        |           | 357804             | 357804.474       |
| [ | Ni      | 60   | 2.971      | ug/L        | 3.335     | 4709               | 0.013            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |               |                |              |
| > | Sc      | 45   |                   | 104.5              |               |               |                |              |
| [ | Ni      | 60   |                   |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type: Analyte      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, March 15, 2010 13:05:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 8.032

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 51.128     | ug/L        | 5.443     | 20071              | 0.058            |
| > | Sc      | 45   |            | ug/L        |           | 348235             | 348235.058       |
| L | Ni      | 60   | 50.070     | ug/L        | 5.413     | 75486              | 0.217            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    | 102.257           |                    |               |                |                |              |
| > | Sc      | 45   |                   | 101.7              |               |                |                |              |
| L | Ni      | 60   | 100.140           |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, March 15, 2010 13:07:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 9.033

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | -0.002     | ug/L        | 585.532   | 17                 | -0.000           |
| > | Sc      | 45   |            | ug/L        |           | 328637             | 328637.178       |
| [ | Ni      | 60   | -0.001     | ug/L        | 260.940   | 99                 | -0.000           |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 96.0               |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188009

Sample Date/Time: Monday, March 15, 2010 13:09:23

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188009.034

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 1.576      | ug/L        | 3.148     | 618                | 0.002            |
| > | Sc      | 45   |            | ug/L        |           | 337426             | 337426.226       |
| [ | Ni      | 60   | 2.554      | ug/L        | 0.750     | 3836               | 0.011            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 98.5               |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188010

Sample Date/Time: Monday, March 15, 2010 13:11:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188010.035

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 1.231      | ug/L        | 8.697     | 494                | 0.001            |
| Sc      | 45   |            | ug/L        |           | 342627             | 342626.830       |
| Ni      | 60   | 2.106      | ug/L        | 2.045     | 3229               | 0.009            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| Be      | 9    |                   |                    |               |               |                |              |
| Sc      | 45   |                   | 100.0              |               |               |                |              |
| Ni      | 60   |                   |                    |               |               |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188010

Report Date/Time: Monday, March 15, 2010 13:11:22

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## ICPMS#5 - Summary Report

Sample ID: 247188011

Sample Date/Time: Monday, March 15, 2010 13:12:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188011.036

### Concentration Results

|      | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [ Be | 9            | 1.635      | ug/L        | 3.391     | 647                | 0.002            |
| > Sc | 45           |            | ug/L        |           | 340644             | 340643.581       |
| [ Ni | 60           | 2.410      | ug/L        | 0.505     | 3660               | 0.010            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|      | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|------|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ Be | 9            |                   |                    |               |               |                             |
| > Sc | 45           |                   | 99.5               |               |               |                             |
| [ Ni | 60           |                   |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188011

Report Date/Time: Monday, March 15, 2010 13:13:07

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## ICPMS#5 - Summary Report

Sample ID: 247188012

Sample Date/Time: Monday, March 15, 2010 13:14:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188012.037

### Concentration Results

|   | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [ | Be           | 9          | 2.481 ug/L  | 4.497     | 1003               | 0.003            |
| > | Sc           | 45         | ug/L        |           | 352031             | 352031.031       |
| [ | Ni           | 60         | 2.171 ug/L  | 2.645     | 3417               | 0.009            |

### Calibration

| Analyte | MassCurve Type     | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be      | 9Linear Thru Zero  | 1.0000                  |
| Sc      | 45Linear Thru Zero |                         |
| Ni      | 60Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be           | 9                 |                    |                  |                |                             |
| > | Sc           | 45                | 102.8              |                  |                |                             |
| [ | Ni           | 60                |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 247188013

Sample Date/Time: Monday, March 15, 2010 13:16:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|baj

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188013.038

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 1.297      | ug/L        | 0.560     | 518                | 0.001            |
| > | Sc      | 45   |            | ug/L        |           | 341319             | 341318.552       |
| [ | Ni      | 60   | 3.978      | ug/L        | 3.133     | 5985               | 0.017            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 99.7               |               |                |                |              |
| [ | Ni      | 60   |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247188014

Sample Date/Time: Monday, March 15, 2010 13:18:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954678|2|ba|

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\247188014.039

### Concentration Results

|   | Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|-------|------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 2.336 |      | ug/L        | 4.697     | 913                | 0.003            |
| > | Sc      | 45   |       |      | ug/L        |           | 339704             | 339704.216       |
| [ | Ni      | 60   | 1.994 |      | ug/L        | 3.841     | 3035               | 0.009            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   | 99.2               |               |                |                             |
| [ | Ni      | 60   |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247188014

Report Date/Time: Monday, March 15, 2010 13:18:22

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, March 15, 2010 13:19:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 6.040

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 51.511     | ug/L        | 1.240     | 19752              | 0.058            |
| Sc      | 45   |            | ug/L        |           | 339637             | 339637.179       |
| Ni      | 60   | 50.557     | ug/L        | 2.026     | 74451              | 0.219            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be      | 9    | 103.021           |                    |               |                |                |              |
| Sc      | 45   |                   | 99.2               |               |                |                |              |
| Ni      | 60   | 101.114           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Monday, March 15, 2010 13:20:05

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, March 15, 2010 13:21:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be and ni.mth

Dataset File: C:\elandata\Dataset\100315\QC Std 7.041

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be      | 9    | 0.013      | ug/L        | 119.305   | 23                 | 0.000            |
| Sc      | 45   |            | ug/L        |           | 330556             | 330556.337       |
| Ni      | 60   | -0.003     | ug/L        | 108.079   | 97                 | -0.000           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be      | 9    | Linear Thru Zero | 1.0000                  |
| Sc      | 45   | Linear Thru Zero |                         |
| Ni      | 60   | Linear Thru Zero | 1.0000                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be      | 9    |                   |                    |               |               |                             |
| Sc      | 45   |                   | 96.5               |               |               |                             |
| Ni      | 60   |                   |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, March 15, 2010 13:21:50

Page 1

Method Name: SOIL  
 Method Description: 7471A, ILM04 ANALYST JXL1  
 Element: Hg

Date: 03/02/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 030210S1.SIF Results Data Set Name: 030210S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/02/2010  
 Sample ID: Calib Blank

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1      |                    |                  | 0.0050            | 0.0050         | 08:34:11 | No             |
| 2      |                    |                  | 0.0049            | 0.0049         | 08:34:46 | No             |
| Mean:  |                    |                  | 0.0050            |                |          |                |
| SD :   |                    |                  | 0.0001            |                |          |                |
| %RSD:  |                    |                  | 2.2999            |                |          |                |

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/02/2010  
 Sample ID: S0.2

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1      |                    |                  | 0.0026            | 0.0076         | 08:36:09 | No             |
| 2      |                    |                  | 0.0026            | 0.0076         | 08:36:45 | No             |
| Mean:  |                    |                  | 0.0026            |                |          |                |
| SD :   |                    |                  | 0.0000            |                |          |                |
| %RSD:  |                    |                  | 0.4799            |                |          |                |

[Hg] Standard number 1 applied. [0.200]

Correlation Coefficient: 1.00000

Slope: 0.01318

Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/02/2010  
 Sample ID: S0.5

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1      |                    |                  | 0.0054            | 0.0104         | 08:38:07 | No             |
| 2      |                    |                  | 0.0054            | 0.0104         | 08:38:43 | No             |
| Mean:  |                    |                  | 0.0054            |                |          |                |
| SD :   |                    |                  | 0.0000            |                |          |                |
| %RSD:  |                    |                  | 0.7607            |                |          |                |

[Hg] Standard number 2 applied. [0.500]

Correlation Coefficient: 0.99502

Slope: 0.01071

Intercept : 0.00019

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/02/2010  
 Sample ID: S2.0

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1      |                    |                  | 0.0211            | 0.0261         | 08:40:07 | No             |
| 2      |                    |                  | 0.0213            | 0.0262         | 08:40:42 | No             |
| Mean:  |                    |                  | 0.0212            |                |          |                |
| SD :   |                    |                  | 0.0001            |                |          |                |
| %RSD:  |                    |                  | 0.4540            |                |          |                |

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99972  
Intercept : 0.00023

Slope: 0.01049

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/02/2010  
Sample ID: S5.0

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0517            | 0.0567         | 08:42:07 | No             |
| 2      |                    |                 | 0.0520            | 0.0569         | 08:42:42 | No             |
| Mean:  |                    |                 | 0.0519            |                |          |                |
| SD :   |                    |                 | 0.0002            |                |          |                |
| %RSD:  |                    |                 | 0.3292            |                |          |                |

[Hg] Standard number 4 applied. [5.000]  
Correlation Coefficient: 0.99994 Slope: 0.01033  
Intercept : 0.00032

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/02/2010  
Sample ID: S10

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.1011            | 0.1060         | 08:44:08 | No             |
| 2      |                    |                 | 0.1030            | 0.1080         | 08:44:42 | No             |
| Mean:  |                    |                 | 0.1020            |                |          |                |
| SD :   |                    |                 | 0.0014            |                |          |                |
| %RSD:  |                    |                 | 1.3403            |                |          |                |

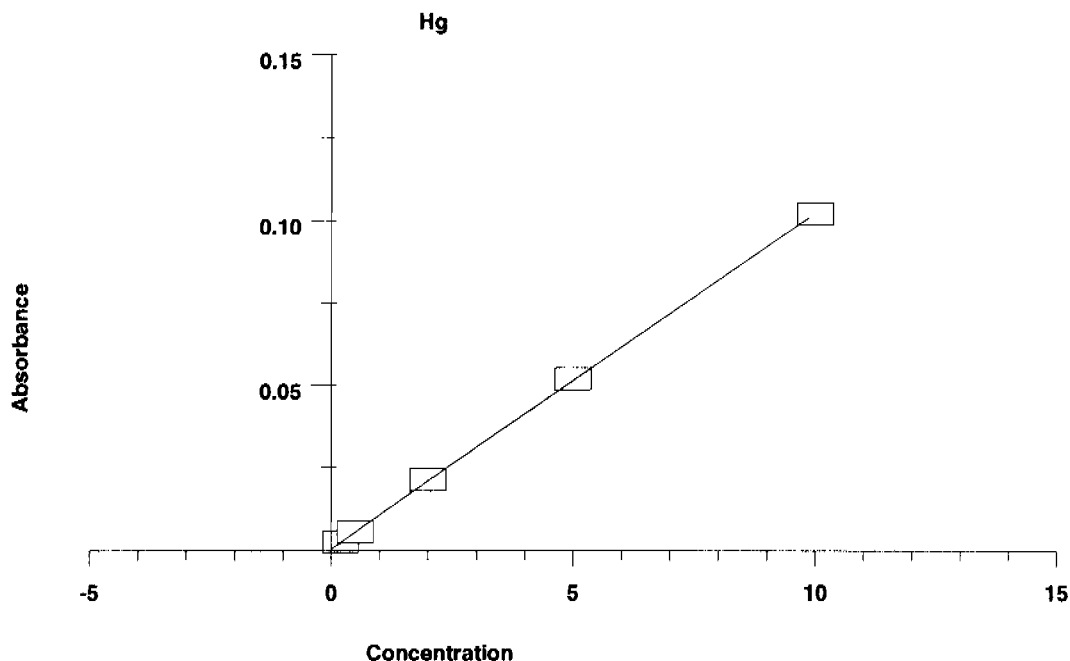
[Hg] Standard number 5 applied. [10.00]  
Correlation Coefficient: 0.99996 Slope: 0.01018  
Intercept : 0.00048

-----

Calibration data for Hg

| Standard ID                      | Mean Signal<br>(Pk Height) | Entered<br>Concentration<br>(µg/L) | Calculated<br>Concentration<br>(µg/L) | Standard<br>Deviation | %RSD   |
|----------------------------------|----------------------------|------------------------------------|---------------------------------------|-----------------------|--------|
| Calib Blank                      | 0.0050                     | ---                                | ---                                   | ---                   | ---    |
| S0.2                             | 0.0026                     | 0.200                              | 0.212                                 | 0.0000                | 0.5    |
| S0.5                             | 0.0054                     | 0.500                              | 0.485                                 | 0.0000                | 0.8    |
| S2.0                             | 0.0212                     | 2.000                              | 2.035                                 | 0.0001                | 0.5    |
| S5.0                             | 0.0519                     | 5.000                              | 5.045                                 | 0.0002                | 0.3    |
| S10                              | 0.1020                     | 10.000                             | 9.971                                 | 0.0014                | 1.3    |
| Correlation Coefficient: 0.99996 |                            | Slope:                             | 0.01018                               | Intercept:            | 0.0005 |

-----



```
=====
Element: Hg   Seq. No.: 7       AS Loc.: 9   Date: 03/02/2010
Sample ID: ICV
```

```
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L      µg/L      Signal    Height    Height    Stored
1      5.166      5.166      0.0531     0.0581    08:46:11  No
2      5.156      5.156      0.0530     0.0580    08:46:45  No
Mean:   5.161      5.161      0.0530
SD :    0.0074      0.0074      0.0001
%RSD:    0.1        0.1        0.1419
QC value within specified limits.
```

```
=====
Element: Hg   Seq. No.: 8       AS Loc.: 10  Date: 03/02/2010
Sample ID: ICB
```

```
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L      µg/L      Signal    Height    Height    Stored
1     -0.109     -0.109     -0.0006     0.0043    08:48:08  No
2     -0.114     -0.114     -0.0007     0.0043    08:48:43  No
Mean:  -0.112     -0.112     -0.0007
SD :    0.0037     0.0037     0.0000
%RSD:    3.3        3.3        5.6706
QC value within specified limits.
```

```
=====
Element: Hg   Seq. No.: 9       AS Loc.: 11  Date: 03/02/2010
Sample ID: CRDL
```

```
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L      µg/L      Signal    Height    Height    Stored
1      0.158      0.158      0.0021     0.0071    08:50:04  No
2      0.156      0.156      0.0021     0.0070    08:50:39  No
Mean:   0.157      0.157      0.0021
SD :    0.0015      0.0015      0.0000
%RSD:    0.9        0.9        0.7131
```

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/02/2010

Sample ID: CCV

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.999              | 4.999           | 0.0514            | 0.0564         | 08:52:04 | No             |
| 2      | 5.030              | 5.030           | 0.0517            | 0.0567         | 08:52:39 | No             |
| Mean:  | 5.014              | 5.014           | 0.0515            |                |          |                |
| SD :   | 0.0216             | 0.0216          | 0.0002            |                |          |                |
| %RSD:  | 0.4                | 0.4             | 0.4272            |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/02/2010

Sample ID: CCB

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.027             | -0.027          | 0.0002            | 0.0052         | 08:54:07 | No             |
| 2      | -0.033             | -0.033          | 0.0001            | 0.0051         | 08:54:42 | No             |
| Mean:  | -0.030             | -0.030          | 0.0002            |                |          |                |
| SD :   | 0.0037             | 0.0037          | 0.0000            |                |          |                |
| %RSD:  | 12.4               | 12.4            | 22.0391           |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/02/2010

Sample ID: 1202055865|i||958596|MB

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.084             | -0.084          | -0.0004           | 0.0046         | 08:56:08 | No             |
| 2      | -0.090             | -0.090          | -0.0004           | 0.0045         | 08:56:43 | No             |
| Mean:  | -0.087             | -0.087          | -0.0004           |                |          |                |
| SD :   | 0.0041             | 0.0041          | 0.0000            |                |          |                |
| %RSD:  | 4.8                | 4.8             | 10.4650           |                |          |                |

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/02/2010

Sample ID: 1202055866|i|10||LCS

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.382              | 3.382           | 0.0349            | 0.0399         | 08:58:10 | No             |
| 2      | 3.354              | 3.354           | 0.0346            | 0.0396         | 08:58:45 | No             |
| Mean:  | 3.368              | 3.368           | 0.0348            |                |          |                |
| SD :   | 0.0204             | 0.0204          | 0.0002            |                |          |                |
| %RSD:  | 0.6                | 0.6             | 0.5984            |                |          |                |

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/02/2010

Sample ID: 246974001|i|||

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.150              | 0.150           | 0.0020            | 0.0070         | 09:00:11 | No             |
| 2      | 0.138              | 0.138           | 0.0019            | 0.0069         | 09:00:47 | No             |
| Mean:  | 0.144              | 0.144           | 0.0019            |                |          |                |
| SD :   | 0.0080             | 0.0080          | 0.0001            |                |          |                |
| %RSD:  | 5.6                | 5.6             | 4.2068            |                |          |                |

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/02/2010

Sample ID: 1202055867|i|||DUP



%RSD: 8.6 8.6 6.9133

=====  
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/02/2010  
 Sample ID: 246974004|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.061              | 0.061           | 0.0011            | 0.0061         | 09:14:03 | No             |
| 2      | 0.047              | 0.047           | 0.0010            | 0.0059         | 09:14:38 | No             |
| Mean:  | 0.054              | 0.054           | 0.0010            |                |          |                |
| SD :   | 0.0102             | 0.0102          | 0.0001            |                |          |                |
| %RSD:  | 18.9               | 18.9            | 10.1144           |                |          |                |

=====  
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.108              | 5.108           | 0.0525            | 0.0575         | 09:16:03 | No             |
| 2      | 5.176              | 5.176           | 0.0532            | 0.0582         | 09:16:38 | No             |
| Mean:  | 5.142              | 5.142           | 0.0528            |                |          |                |
| SD :   | 0.0487             | 0.0487          | 0.0005            |                |          |                |
| %RSD:  | 0.9                | 0.9             | 0.9381            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.058             | -0.058          | -0.0001           | 0.0049         | 09:18:06 | No             |
| 2      | -0.062             | -0.062          | -0.0001           | 0.0048         | 09:18:41 | No             |
| Mean:  | -0.060             | -0.060          | -0.0001           |                |          |                |
| SD :   | 0.0030             | 0.0030          | 0.0000            |                |          |                |
| %RSD:  | 5.0                | 5.0             | 23.6596           |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/02/2010  
 Sample ID: 246974005|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.105              | 0.105           | 0.0015            | 0.0065         | 09:20:07 | No             |
| 2      | 0.112              | 0.112           | 0.0016            | 0.0066         | 09:20:41 | No             |
| Mean:  | 0.108              | 0.108           | 0.0016            |                |          |                |
| SD :   | 0.0050             | 0.0050          | 0.0001            |                |          |                |
| %RSD:  | 4.7                | 4.7             | 3.2436            |                |          |                |

=====  
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/02/2010  
 Sample ID: 246974006|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.002              | 0.002           | 0.0005            | 0.0055         | 09:22:04 | No             |
| 2      | -0.012             | -0.012          | 0.0004            | 0.0053         | 09:22:39 | No             |
| Mean:  | -0.005             | -0.005          | 0.0004            |                |          |                |
| SD :   | 0.0097             | 0.0097          | 0.0001            |                |          |                |
| %RSD:  | 191.4              | 191.4           | 23.1013           |                |          |                |

=====  
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/02/2010  
 Sample ID: 246974007|i|||

%RSD: 5.5 5.5 4.3407

=====  
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/02/2010  
 Sample ID: 246974013|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.238              | 0.238             | 0.0029             | 0.0079         | 09:36:05 | No             |
| 2      | 0.220              | 0.220             | 0.0027             | 0.0077         | 09:36:41 | No             |
| Mean:  | 0.229              | 0.229             | 0.0028             |                |          |                |
| SD :   | 0.0127             | 0.0127            | 0.0001             |                |          |                |
| %RSD:  | 5.6                | 5.6               | 4.6159             |                |          |                |

=====  
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/02/2010  
 Sample ID: 246974014|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.299              | 0.299             | 0.0035             | 0.0085         | 09:38:09 | No             |
| 2      | 0.281              | 0.281             | 0.0033             | 0.0083         | 09:38:44 | No             |
| Mean:  | 0.290              | 0.290             | 0.0034             |                |          |                |
| SD :   | 0.0123             | 0.0123            | 0.0001             |                |          |                |
| %RSD:  | 4.2                | 4.2               | 3.6474             |                |          |                |

=====  
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 5.207              | 5.207             | 0.0535             | 0.0585         | 09:40:11 | No             |
| 2      | 5.207              | 5.207             | 0.0535             | 0.0585         | 09:40:46 | No             |
| Mean:  | 5.207              | 5.207             | 0.0535             |                |          |                |
| SD :   | 0.0001             | 0.0001            | 0.0000             |                |          |                |
| %RSD:  |                    |                   |                    |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | -0.060             | -0.060            | -0.0001            | 0.0048         | 09:42:14 | No             |
| 2      | -0.068             | -0.068            | -0.0002            | 0.0048         | 09:42:49 | No             |
| Mean:  | -0.064             | -0.064            | -0.0002            |                |          |                |
| SD :   | 0.0055             | 0.0055            | 0.0001             |                |          |                |
| %RSD:  | 8.6                | 8.6               | 32.2218            |                |          |                |

=====  
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/02/2010  
 Sample ID: 246974015|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.625              | 0.625             | 0.0068             | 0.0118         | 09:48:33 | No             |
| 2      | 0.615              | 0.615             | 0.0067             | 0.0117         | 09:49:08 | No             |
| Mean:  | 0.620              | 0.620             | 0.0068             |                |          |                |
| SD :   | 0.0072             | 0.0072            | 0.0001             |                |          |                |
| %RSD:  | 1.2                | 1.2               | 1.0753             |                |          |                |

=====  
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/02/2010  
 Sample ID: 246974016|i|||

```

=====
Element: Hg      Seq. No.: 43      AS Loc.: 39      Date: 03/02/2010
Sample ID: 1202055874|i|||MS
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      2.492      2.492      0.0259    0.0308    10:02:10  No
2      2.510      2.510      0.0260    0.0310    10:02:45  No
Mean:   2.501      2.501      0.0260
SD :    0.0128      0.0128      0.0001
%RSD:   0.5        0.5        0.5042

```

```

=====
Element: Hg      Seq. No.: 44      AS Loc.: 40      Date: 03/02/2010
Sample ID: 1202055876|i|||MSD
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      2.497      2.497      0.0259    0.0309    10:04:09  No
2      2.458      2.458      0.0255    0.0305    10:04:44  No
Mean:   2.478      2.478      0.0257
SD :    0.0277      0.0277      0.0003
%RSD:   1.1        1.1        1.0962

```

```

=====
Element: Hg      Seq. No.: 45      AS Loc.: 41      Date: 03/02/2010
Sample ID: 1202055875|i|5||SDILT
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.158      -0.158      -0.0011    0.0038    10:06:08  No
2      -0.174      -0.174      -0.0013    0.0037    10:06:43  No
Mean:  -0.166      -0.166      -0.0012
SD :    0.0114      0.0114      0.0001
%RSD:   6.9        6.9        9.5625

```

```

=====
Element: Hg      Seq. No.: 46      AS Loc.: 7       Date: 03/02/2010
Sample ID: CCV
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      4.937      4.937      0.0508    0.0557    10:08:08  No
2      5.072      5.072      0.0521    0.0571    10:08:43  No
Mean:   5.005      5.005      0.0514
SD :    0.0956      0.0956      0.0010
%RSD:   1.9        1.9        1.8929
QC value within specified limits.

```

```

=====
Element: Hg      Seq. No.: 47      AS Loc.: 8       Date: 03/02/2010
Sample ID: CCB
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.061      -0.061      -0.0001    0.0048    10:10:11  No
2      -0.058      -0.058      -0.0001    0.0049    10:10:46  No
Mean:  -0.060      -0.060      -0.0001
SD :    0.0021      0.0021      0.0000
%RSD:   3.5        3.5        16.4149
QC value within specified limits.

```

```

=====
Element: Hg      Seq. No.: 48      AS Loc.: 42      Date: 03/02/2010
Sample ID: 246982002|i|||
-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      0.256      0.256      0.0031    0.0081    10:12:12  No

```

Sample ID: 247097001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.026             | -0.026          | 0.0002            | 0.0052         | 10:24:15 | No             |
| 2      | -0.022             | -0.022          | 0.0003            | 0.0052         | 10:24:50 | No             |
| Mean:  | -0.024             | -0.024          | 0.0002            |                |          |                |
| SD :   | 0.0030             | 0.0030          | 0.0000            |                |          |                |
| %RSD:  | 12.8               | 12.8            | 13.0146           |                |          |                |

=====  
 Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 03/02/2010  
 Sample ID: 247097002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.602              | 0.602           | 0.0066            | 0.0116         | 10:26:10 | No             |
| 2      | 0.576              | 0.576           | 0.0063            | 0.0113         | 10:26:45 | No             |
| Mean:  | 0.589              | 0.589           | 0.0065            |                |          |                |
| SD :   | 0.0189             | 0.0189          | 0.0002            |                |          |                |
| %RSD:  | 3.2                | 3.2             | 2.9714            |                |          |                |

=====  
 Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 03/02/2010  
 Sample ID: 247097003|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.167              | 0.167           | 0.0022            | 0.0071         | 10:28:05 | No             |
| 2      | 0.152              | 0.152           | 0.0020            | 0.0070         | 10:28:40 | No             |
| Mean:  | 0.159              | 0.159           | 0.0021            |                |          |                |
| SD :   | 0.0107             | 0.0107          | 0.0001            |                |          |                |
| %RSD:  | 6.7                | 6.7             | 5.1973            |                |          |                |

=====  
 Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 03/02/2010  
 Sample ID: 247097004|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.003              | 0.003           | 0.0005            | 0.0055         | 10:30:01 | No             |
| 2      | -0.017             | -0.017          | 0.0003            | 0.0053         | 10:30:36 | No             |
| Mean:  | -0.007             | -0.007          | 0.0004            |                |          |                |
| SD :   | 0.0145             | 0.0145          | 0.0001            |                |          |                |
| %RSD:  | 213.5              | 213.5           | 36.0254           |                |          |                |

=====  
 Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.059              | 5.059           | 0.0520            | 0.0570         | 10:32:00 | No             |
| 2      | 5.110              | 5.110           | 0.0525            | 0.0575         | 10:32:34 | No             |
| Mean:  | 5.084              | 5.084           | 0.0523            |                |          |                |
| SD :   | 0.0358             | 0.0358          | 0.0004            |                |          |                |
| %RSD:  | 0.7                | 0.7             | 0.6977            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.063             | -0.063          | -0.0002           | 0.0048         | 10:34:02 | No             |
| 2      | -0.081             | -0.081          | -0.0003           | 0.0046         | 10:34:37 | No             |

Mean: -0.072 -0.072 -0.0003  
 SD : 0.0124 0.0124 0.0001  
 %RSD: 17.2 17.2 49.2422  
 QC value within specified limits.

=====  
 Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 03/02/2010  
 Sample ID: 247097005|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 1.705              | 1.705           | 0.0178            | 0.0228         | 10:36:02 | No             |
| 2      | 1.692              | 1.692           | 0.0177            | 0.0227         | 10:36:37 | No             |
| Mean:  | 1.699              | 1.699           | 0.0178            |                |          |                |
| SD :   | 0.0091             | 0.0091          | 0.0001            |                |          |                |
| %RSD:  | 0.5                | 0.5             | 0.5195            |                |          |                |

=====  
 Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 03/02/2010  
 Sample ID: 247097006|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.023             | -0.023          | 0.0002            | 0.0052         | 10:37:59 | No             |
| 2      | -0.029             | -0.029          | 0.0002            | 0.0051         | 10:38:34 | No             |
| Mean:  | -0.026             | -0.026          | 0.0002            |                |          |                |
| SD :   | 0.0047             | 0.0047          | 0.0000            |                |          |                |
| %RSD:  | 18.1               | 18.1            | 22.2486           |                |          |                |

=====  
 Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 03/02/2010  
 Sample ID: 247097007|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.405              | 0.405           | 0.0046            | 0.0096         | 10:39:56 | No             |
| 2      | 0.416              | 0.416           | 0.0047            | 0.0097         | 10:40:31 | No             |
| Mean:  | 0.411              | 0.411           | 0.0047            |                |          |                |
| SD :   | 0.0073             | 0.0073          | 0.0001            |                |          |                |
| %RSD:  | 1.8                | 1.8             | 1.5981            |                |          |                |

=====  
 Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 03/02/2010  
 Sample ID: 247097008|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.676              | 0.676           | 0.0074            | 0.0123         | 10:41:54 | No             |
| 2      | 0.647              | 0.647           | 0.0071            | 0.0120         | 10:42:29 | No             |
| Mean:  | 0.661              | 0.661           | 0.0072            |                |          |                |
| SD :   | 0.0205             | 0.0205          | 0.0002            |                |          |                |
| %RSD:  | 3.1                | 3.1             | 2.8985            |                |          |                |

=====  
 Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 03/02/2010  
 Sample ID: 247097009|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.546              | 0.546           | 0.0060            | 0.0110         | 10:43:52 | No             |
| 2      | 0.568              | 0.568           | 0.0063            | 0.0112         | 10:44:28 | No             |
| Mean:  | 0.557              | 0.557           | 0.0062            |                |          |                |
| SD :   | 0.0156             | 0.0156          | 0.0002            |                |          |                |
| %RSD:  | 2.8                | 2.8             | 2.5883            |                |          |                |

=====  
 Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 03/02/2010

Sample ID: 1202055890|i||958612|MB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.082             | -0.082          | -0.0004           | 0.0046         | 10:45:52 | No             |
| 2      | -0.096             | -0.096          | -0.0005           | 0.0045         | 10:46:27 | No             |
| Mean:  | -0.089             | -0.089          | -0.0004           |                |          |                |
| SD :   | 0.0094             | 0.0094          | 0.0001            |                |          |                |
| %RSD:  | 10.6               | 10.6            | 22.3827           |                |          |                |

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 03/02/2010  
 Sample ID: 1202055891|i||10|LCS

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.226              | 4.226           | 0.0435            | 0.0485         | 10:47:51 | No             |
| 2      | 4.168              | 4.168           | 0.0429            | 0.0479         | 10:48:26 | No             |
| Mean:  | 4.197              | 4.197           | 0.0432            |                |          |                |
| SD :   | 0.0409             | 0.0409          | 0.0004            |                |          |                |
| %RSD:  | 1.0                | 1.0             | 0.9648            |                |          |                |

Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 03/02/2010  
 Sample ID: 247094002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.179              | 0.179           | 0.0023            | 0.0073         | 10:49:50 | No             |
| 2      | 0.148              | 0.148           | 0.0020            | 0.0070         | 10:50:24 | No             |
| Mean:  | 0.163              | 0.163           | 0.0021            |                |          |                |
| SD :   | 0.0216             | 0.0216          | 0.0002            |                |          |                |
| %RSD:  | 13.2               | 13.2            | 10.2726           |                |          |                |

Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 03/02/2010  
 Sample ID: 247103001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.689              | 0.689           | 0.0075            | 0.0125         | 10:51:49 | No             |
| 2      | 0.688              | 0.688           | 0.0075            | 0.0125         | 10:52:24 | No             |
| Mean:  | 0.689              | 0.689           | 0.0075            |                |          |                |
| SD :   | 0.0005             | 0.0005          | 0.0000            |                |          |                |
| %RSD:  |                    |                 |                   |                |          |                |

Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 03/02/2010  
 Sample ID: 1202055892|i|||DUP

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.686              | 0.686           | 0.0075            | 0.0124         | 10:53:50 | No             |
| 2      | 0.646              | 0.646           | 0.0071            | 0.0120         | 10:54:24 | No             |
| Mean:  | 0.666              | 0.666           | 0.0073            |                |          |                |
| SD :   | 0.0283             | 0.0283          | 0.0003            |                |          |                |
| %RSD:  | 4.3                | 4.3             | 3.9750            |                |          |                |

Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.248              | 5.248           | 0.0539            | 0.0589         | 10:55:50 | No             |
| 2      | 5.183              | 5.183           | 0.0533            | 0.0582         | 10:56:26 | No             |
| Mean:  | 5.216              | 5.216           | 0.0536            |                |          |                |

SD : 0.0466 0.0466 0.0005  
 %RSD: 0.9 0.9 0.8863  
 QC value within specified limits.

=====  
 Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.070             | -0.070          | -0.0002           | 0.0047         | 10:57:54 | No             |
| 2      | -0.077             | -0.077          | -0.0003           | 0.0047         | 10:58:29 | No             |
| Mean:  | -0.073             | -0.073          | -0.0003           |                |          |                |
| SD :   | 0.0053             | 0.0053          | 0.0001            |                |          |                |
| %RSD:  | 7.2                | 7.2             | 20.0130           |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 03/02/2010  
 Sample ID: 1202055893|i||MS

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.319              | 3.319           | 0.0343            | 0.0392         | 10:59:56 | No             |
| 2      | 3.304              | 3.304           | 0.0341            | 0.0391         | 11:00:31 | No             |
| Mean:  | 3.311              | 3.311           | 0.0342            |                |          |                |
| SD :   | 0.0109             | 0.0109          | 0.0001            |                |          |                |
| %RSD:  | 0.3                | 0.3             | 0.3250            |                |          |                |

=====  
 Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 03/02/2010  
 Sample ID: 1202055895|i||MSD

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.919              | 2.919           | 0.0302            | 0.0352         | 11:01:54 | No             |
| 2      | 2.929              | 2.929           | 0.0303            | 0.0353         | 11:02:29 | No             |
| Mean:  | 2.924              | 2.924           | 0.0303            |                |          |                |
| SD :   | 0.0070             | 0.0070          | 0.0001            |                |          |                |
| %RSD:  | 0.2                | 0.2             | 0.2360            |                |          |                |

=====  
 Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 03/02/2010  
 Sample ID: 1202055894|i|5||SDILT

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.068             | -0.068          | -0.0002           | 0.0048         | 11:03:49 | No             |
| 2      | -0.085             | -0.085          | -0.0004           | 0.0046         | 11:04:23 | No             |
| Mean:  | -0.076             | -0.076          | -0.0003           |                |          |                |
| SD :   | 0.0125             | 0.0125          | 0.0001            |                |          |                |
| %RSD:  | 16.3               | 16.3            | 42.5035           |                |          |                |

=====  
 Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 03/02/2010  
 Sample ID: 247103002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.985              | 2.985           | 0.0309            | 0.0358         | 11:05:42 | No             |
| 2      | 2.978              | 2.978           | 0.0308            | 0.0358         | 11:06:17 | No             |
| Mean:  | 2.982              | 2.982           | 0.0308            |                |          |                |
| SD :   | 0.0046             | 0.0046          | 0.0000            |                |          |                |
| %RSD:  | 0.2                | 0.2             | 0.1521            |                |          |                |

=====  
 Element: Hg Seq. No.: 76 AS Loc.: 66 Date: 03/02/2010

|       |        |        |        |        |          |    |
|-------|--------|--------|--------|--------|----------|----|
| 1     | 0.244  | 0.244  | 0.0030 | 0.0079 | 11:17:22 | No |
| 2     | 0.243  | 0.243  | 0.0030 | 0.0079 | 11:17:57 | No |
| Mean: | 0.243  | 0.243  | 0.0030 |        |          |    |
| SD :  | 0.0003 | 0.0003 | 0.0000 |        |          |    |
| %RSD: | 0.1    | 0.1    | 0.1092 |        |          |    |

=====  
 Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.194              | 5.194           | 0.0534            | 0.0583         | 11:19:23 | No             |
| 2      | 5.124              | 5.124           | 0.0527            | 0.0576         | 11:19:58 | No             |
| Mean:  | 5.159              | 5.159           | 0.0530            |                |          |                |
| SD :   | 0.0493             | 0.0493          | 0.0005            |                |          |                |
| %RSD:  | 1.0                | 1.0             | 0.9475            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.094             | -0.094          | -0.0005           | 0.0045         | 11:21:25 | No             |
| 2      | -0.091             | -0.091          | -0.0005           | 0.0045         | 11:22:00 | No             |
| Mean:  | -0.093             | -0.093          | -0.0005           |                |          |                |
| SD :   | 0.0020             | 0.0020          | 0.0000            |                |          |                |
| %RSD:  | 2.1                | 2.1             | 4.3424            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 03/02/2010  
 Sample ID: 247103009|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.094              | 0.094           | 0.0014            | 0.0064         | 11:23:26 | No             |
| 2      | 0.084              | 0.084           | 0.0013            | 0.0063         | 11:24:01 | No             |
| Mean:  | 0.089              | 0.089           | 0.0014            |                |          |                |
| SD :   | 0.0069             | 0.0069          | 0.0001            |                |          |                |
| %RSD:  | 7.7                | 7.7             | 5.0487            |                |          |                |

=====  
 Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 03/02/2010  
 Sample ID: 247103010|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.606              | 2.606           | 0.0270            | 0.0320         | 11:25:25 | No             |
| 2      | 2.539              | 2.539           | 0.0263            | 0.0313         | 11:25:59 | No             |
| Mean:  | 2.573              | 2.573           | 0.0267            |                |          |                |
| SD :   | 0.0473             | 0.0473          | 0.0005            |                |          |                |
| %RSD:  | 1.8                | 1.8             | 1.8069            |                |          |                |

=====  
 Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 03/02/2010  
 Sample ID: 247103011|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.315              | 0.315           | 0.0037            | 0.0087         | 11:27:23 | No             |
| 2      | 0.312              | 0.312           | 0.0037            | 0.0086         | 11:27:58 | No             |
| Mean:  | 0.314              | 0.314           | 0.0037            |                |          |                |
| SD :   | 0.0020             | 0.0020          | 0.0000            |                |          |                |
| %RSD:  | 0.6                | 0.6             | 0.5478            |                |          |                |



SD : 0.0284 0.0284 0.0003  
 %RSD: 0.7 0.7 0.6860

=====  
 Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 03/02/2010  
 Sample ID: 247040001|i|||

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 0.314              | 0.314            | 0.0037             | 0.0086         | 11:41:05 | No             |
| 2      | 0.301              | 0.301            | 0.0035             | 0.0085         | 11:41:40 | No             |
| Mean:  | 0.308              | 0.308            | 0.0036             |                |          |                |
| SD :   | 0.0097             | 0.0097           | 0.0001             |                |          |                |
| %RSD:  | 3.2                | 3.2              | 2.7324             |                |          |                |

=====  
 Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 5.271              | 5.271            | 0.0542             | 0.0591         | 11:43:05 | No             |
| 2      | 5.193              | 5.193            | 0.0534             | 0.0583         | 11:43:40 | No             |
| Mean:  | 5.232              | 5.232            | 0.0538             |                |          |                |
| SD :   | 0.0554             | 0.0554           | 0.0006             |                |          |                |
| %RSD:  | 1.1                | 1.1              | 1.0491             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | -0.113             | -0.113           | -0.0007            | 0.0043         | 11:45:08 | No             |
| 2      | -0.114             | -0.114           | -0.0007            | 0.0043         | 11:45:43 | No             |
| Mean:  | -0.114             | -0.114           | -0.0007            |                |          |                |
| SD :   | 0.0003             | 0.0003           | 0.0000             |                |          |                |
| %RSD:  | 0.2                | 0.2              | 0.4007             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 03/02/2010  
 Sample ID: 1202055883|i|||DUP

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 0.144              | 0.144            | 0.0019             | 0.0069         | 11:47:07 | No             |
| 2      | 0.150              | 0.150            | 0.0020             | 0.0070         | 11:47:42 | No             |
| Mean:  | 0.147              | 0.147            | 0.0020             |                |          |                |
| SD :   | 0.0040             | 0.0040           | 0.0000             |                |          |                |
| %RSD:  | 2.7                | 2.7              | 2.0372             |                |          |                |

=====  
 Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 03/02/2010  
 Sample ID: 1202055884|i|||MS

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 2.505              | 2.505            | 0.0260             | 0.0310         | 11:49:03 | No             |
| 2      | 2.495              | 2.495            | 0.0259             | 0.0309         | 11:49:38 | No             |
| Mean:  | 2.500              | 2.500            | 0.0259             |                |          |                |
| SD :   | 0.0073             | 0.0073           | 0.0001             |                |          |                |
| %RSD:  | 0.3                | 0.3              | 0.2850             |                |          |                |

=====  
 Element: Hg Seq. No.: 98 AS Loc.: 84 Date: 03/02/2010

SD : 0.0797 0.0797 0.0008  
 %RSD: 1.5 1.5 1.4431

=====  
 Element: Hg Seq. No.: 104 AS Loc.: 90 Date: 03/02/2010  
 Sample ID: 247040006|i|||

| Repl #  | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|---|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1   | 24.73              | 24.73           | 0.2523            | 0.2573         | 12:02:50 | No             |
| Sample absorbance is greater than that of the highest standard. |                    |                 |                   |                |          |                |
| 2   | 23.90              | 23.90           | 0.2439            | 0.2489         | 12:03:25 | No             |
| Sample absorbance is greater than that of the highest standard. |                    |                 |                   |                |          |                |
| Mean:   | 24.32              | 24.32           | 0.2481            |                |          |                |
| SD :  | 0.5874             | 0.5874          | 0.0060            |                |          |                |
| %RSD:   | 2.4                | 2.4             | 2.4109            |                |          |                |
| Sample absorbance is greater than that of the highest standard. |                    |                 |                   |                |          |                |

=====  
 Element: Hg Seq. No.: 105 AS Loc.: 91 Date: 03/02/2010  
 Sample ID: 247040007|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.021              | 0.021           | 0.0007            | 0.0057         | 12:04:50 | No             |
| 2      | 0.019              | 0.019           | 0.0007            | 0.0056         | 12:05:25 | No             |
| Mean:  | 0.020              | 0.020           | 0.0007            |                |          |                |
| SD :   | 0.0020             | 0.0020          | 0.0000            |                |          |                |
| %RSD:  | 10.0               | 10.0            | 2.9704            |                |          |                |

=====  
 Element: Hg Seq. No.: 106 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl #   | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1  | 3.121              | 3.121           | 0.0323            | 0.0372         | 12:06:52 | No             |
| 2  | 3.211              | 3.211           | 0.0332            | 0.0381         | 12:07:27 | No             |
| Mean:  | 3.166              | 3.166           | 0.0327            |                |          |                |
| SD :   | 0.0635             | 0.0635          | 0.0006            |                |          |                |
| %RSD:  | 2.0                | 2.0             | 1.9764            |                |          |                |
| QC failed, value less than lower limit for Hg.<br>Current analysis method being continued. |                    |                 |                   |                |          |                |

=====  
 Element: Hg Seq. No.: 107 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl #                            | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|-----------------------------------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1                                 | -0.077             | -0.077          | -0.0003           | 0.0047         | 12:08:55 | No             |
| 2                                 | -0.079             | -0.079          | -0.0003           | 0.0046         | 12:09:29 | No             |
| Mean:                             | -0.078             | -0.078          | -0.0003           |                |          |                |
| SD :                              | 0.0009             | 0.0009          | 0.0000            |                |          |                |
| %RSD:                             | 1.1                | 1.1             | 2.8257            |                |          |                |
| QC value within specified limits. |                    |                 |                   |                |          |                |

=====  
 Element: Hg Seq. No.: 108 AS Loc.: 92 Date: 03/02/2010  
 Sample ID: 247040008|i|||

| Repl #  | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|---|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1   | 31.34              | 31.34           | 0.3196            | 0.3246         | 12:10:52 | No             |
| Sample absorbance is greater than that of the highest standard. |                    |                 |                   |                |          |                |
| 2   | 30.05              | 30.05           | 0.3065            | 0.3115         | 12:11:27 | No             |
| Sample absorbance is greater than that of the highest standard. |                    |                 |                   |                |          |                |

Mean: 30.69 30.69 0.3131  
 SD : 0.9113 0.9113 0.0093  
 %RSD: 3.0 3.0 2.9646

Sample absorbance is greater than that of the highest standard.

=====  
 Element: Hg Seq. No.: 109 AS Loc.: 93 Date: 03/02/2010  
 Sample ID: 247040009|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.090             | -0.090          | -0.0004           | 0.0045         | 12:12:46 | No             |
| 2      | -0.091             | -0.091          | -0.0004           | 0.0045         | 12:13:20 | No             |
| Mean:  | -0.090             | -0.090          | -0.0004           |                |          |                |
| SD :   | 0.0009             | 0.0009          | 0.0000            |                |          |                |
| %RSD:  | 1.0                | 1.0             | 2.0063            |                |          |                |

=====  
 Element: Hg Seq. No.: 110 AS Loc.: 94 Date: 03/02/2010  
 Sample ID: 247040010|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 67.21              | 67.21           | 0.6849            | 0.6899         | 12:14:40 | No             |
| 2      | 63.17              | 63.17           | 0.6438            | 0.6488         | 12:15:15 | No             |
| Mean:  | 65.19              | 65.19           | 0.6644            |                |          |                |
| SD :   | 2.856              | 2.856           | 0.0291            |                |          |                |
| %RSD:  | 4.4                | 4.4             | 4.3778            |                |          |                |

Sample absorbance is greater than that of the highest standard.

=====  
 Element: Hg Seq. No.: 111 AS Loc.: 95 Date: 03/02/2010  
 Sample ID: 247040011|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.161             | -0.161          | -0.0012           | 0.0038         | 12:16:36 | No             |
| 2      | -0.137             | -0.137          | -0.0009           | 0.0041         | 12:17:11 | No             |
| Mean:  | -0.149             | -0.149          | -0.0010           |                |          |                |
| SD :   | 0.0168             | 0.0168          | 0.0002            |                |          |                |
| %RSD:  | 11.3               | 11.3            | 16.4844           |                |          |                |

=====  
 Element: Hg Seq. No.: 112 AS Loc.: 96 Date: 03/02/2010  
 Sample ID: 247040012|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.884              | 3.884           | 0.0400            | 0.0450         | 12:26:15 | No             |
| 2      | 3.875              | 3.875           | 0.0399            | 0.0449         | 12:26:49 | No             |
| Mean:  | 3.880              | 3.880           | 0.0400            |                |          |                |
| SD :   | 0.0065             | 0.0065          | 0.0001            |                |          |                |
| %RSD:  | 0.2                | 0.2             | 0.1658            |                |          |                |

=====  
 Element: Hg Seq. No.: 112 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.884              | 3.884           | 0.0400            | 0.0450         | 12:26:15 | No             |
| 2      | 3.875              | 3.875           | 0.0399            | 0.0449         | 12:26:49 | No             |
| Mean:  | 3.880              | 3.880           | 0.0400            |                |          |                |
| SD :   | 0.0065             | 0.0065          | 0.0001            |                |          |                |
| %RSD:  | 0.2                | 0.2             | 0.1658            |                |          |                |

QC failed, value less than lower limit for Hg.  
 Current analysis method being continued.

=====  
 Element: Hg Seq. No.: 113 AS Loc.: 8 Date: 03/02/2010

Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.026              | 0.026           | 0.0007            | 0.0057         | 12:28:17 | No             |
| 2      | 0.009              | 0.009           | 0.0006            | 0.0055         | 12:28:53 | No             |
| Mean:  | 0.018              | 0.018           | 0.0007            |                |          |                |
| SD :   | 0.0118             | 0.0118          | 0.0001            |                |          |                |
| %RSD:  | 66.4               | 66.4            | 18.2467           |                |          |                |

=====

Element: Hg      Seq. No.: 114      AS Loc.: 7      Date: 03/02/2010

Sample ID: Sample007

=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.326              | 4.326           | 0.0445            | 0.0495         | 12:30:50 | No             |
| 2      | 4.268              | 4.268           | 0.0440            | 0.0489         | 12:31:24 | No             |
| Mean:  | 4.297              | 4.297           | 0.0442            |                |          |                |
| SD :   | 0.0405             | 0.0405          | 0.0004            |                |          |                |
| %RSD:  | 0.9                | 0.9             | 0.9322            |                |          |                |

=====  
Element: Hg Seq. No.: 115 AS Loc.: 7 Date: 03/02/2010  
Sample ID: CCV  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.297              | 4.297           | 0.0442            | 0.0492         | 12:33:18 | No             |
| 2      | 4.260              | 4.260           | 0.0439            | 0.0488         | 12:33:53 | No             |
| Mean:  | 4.279              | 4.279           | 0.0441            |                |          |                |
| SD :   | 0.0259             | 0.0259          | 0.0003            |                |          |                |
| %RSD:  | 0.6                | 0.6             | 0.5976            |                |          |                |

QC value within specified limits.

=====  
Element: Hg Seq. No.: 116 AS Loc.: 8 Date: 03/02/2010  
Sample ID: CCB  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.025              | 0.025           | 0.0007            | 0.0057         | 12:35:21 | No             |
| 2      | 0.021              | 0.021           | 0.0007            | 0.0057         | 12:35:55 | No             |
| Mean:  | 0.023              | 0.023           | 0.0007            |                |          |                |
| SD :   | 0.0031             | 0.0031          | 0.0000            |                |          |                |
| %RSD:  | 13.2               | 13.2            | 4.3654            |                |          |                |

QC value within specified limits.

=====  
Element: Hg Seq. No.: 117 AS Loc.: 66 Date: 03/02/2010  
Sample ID: 247103003|i|20|958612|  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 1.432              | 1.432           | 0.0151            | 0.0200         | 12:37:19 | No             |
| 2      | 1.392              | 1.392           | 0.0147            | 0.0196         | 12:37:54 | No             |
| Mean:  | 1.412              | 1.412           | 0.0149            |                |          |                |
| SD :   | 0.0279             | 0.0279          | 0.0003            |                |          |                |
| %RSD:  | 2.0                | 2.0             | 1.9125            |                |          |                |

=====  
Element: Hg Seq. No.: 118 AS Loc.: 82 Date: 03/02/2010  
Sample ID: 1202055883|i||958606|  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.007              | 0.007           | 0.0005            | 0.0055         | 12:39:16 | No             |
| 2      | -0.008             | -0.008          | 0.0004            | 0.0054         | 12:39:51 | No             |
| Mean:  | -0.001             | -0.001          | 0.0005            |                |          |                |
| SD :   | 0.0105             | 0.0105          | 0.0001            |                |          |                |
| %RSD:  | 1166               | 1166            | 22.7192           |                |          |                |

=====  
Element: Hg Seq. No.: 119 AS Loc.: 83 Date: 03/02/2010  
Sample ID: 1202055884|i||MS  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 1.853              | 1.853           | 0.0194            | 0.0243         | 12:41:12 | No             |
| 2      | 1.817              | 1.817           | 0.0190            | 0.0239         | 12:41:47 | No             |
| Mean:  | 1.835              | 1.835           | 0.0192            |                |          |                |
| SD :   | 0.0257             | 0.0257          | 0.0003            |                |          |                |
| %RSD:  | 1.4                | 1.4             | 1.3668            |                |          |                |

=====  
Element: Hg Seq. No.: 120 AS Loc.: 84 Date: 03/02/2010  
Sample ID: 1202055886|i||MSD  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 1.922              | 1.922           | 0.0201            | 0.0250         | 12:43:09 | No             |

Sample ID: 247040006|i|10||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.459              | 3.459           | 0.0357            | 0.0407         | 12:54:59 | No             |
| 2      | 3.400              | 3.400           | 0.0351            | 0.0401         | 12:55:34 | No             |
| Mean:  | 3.430              | 3.430           | 0.0354            |                |          |                |
| SD :   | 0.0419             | 0.0419          | 0.0004            |                |          |                |
| %RSD:  | 1.2                | 1.2             | 1.2063            |                |          |                |

=====

Element: Hg Seq. No.: 127 AS Loc.: 7 Date: 03/02/2010

Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.617              | 4.617           | 0.0475            | 0.0525         | 12:57:00 | No             |
| 2      | 4.558              | 4.558           | 0.0469            | 0.0519         | 12:57:35 | No             |
| Mean:  | 4.587              | 4.587           | 0.0472            |                |          |                |
| SD :   | 0.0415             | 0.0415          | 0.0004            |                |          |                |
| %RSD:  | 0.9                | 0.9             | 0.8963            |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 128 AS Loc.: 8 Date: 03/02/2010

Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.014             | -0.014          | 0.0003            | 0.0053         | 12:59:03 | No             |
| 2      | -0.003             | -0.003          | 0.0005            | 0.0054         | 12:59:38 | No             |
| Mean:  | -0.008             | -0.008          | 0.0004            |                |          |                |
| SD :   | 0.0083             | 0.0083          | 0.0001            |                |          |                |
| %RSD:  | 98.0               | 98.0            | 21.5451           |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 129 AS Loc.: 91 Date: 03/02/2010

Sample ID: 247040007|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.116              | 0.116           | 0.0017            | 0.0066         | 13:01:04 | No             |
| 2      | 0.091              | 0.091           | 0.0014            | 0.0064         | 13:01:39 | No             |
| Mean:  | 0.103              | 0.103           | 0.0015            |                |          |                |
| SD :   | 0.0179             | 0.0179          | 0.0002            |                |          |                |
| %RSD:  | 17.3               | 17.3            | 11.8762           |                |          |                |

=====

Element: Hg Seq. No.: 130 AS Loc.: 92 Date: 03/02/2010

Sample ID: 247040008|i|10||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.065              | 4.065           | 0.0419            | 0.0468         | 13:03:02 | No             |
| 2      | 4.079              | 4.079           | 0.0420            | 0.0470         | 13:03:36 | No             |
| Mean:  | 4.072              | 4.072           | 0.0419            |                |          |                |
| SD :   | 0.0095             | 0.0095          | 0.0001            |                |          |                |
| %RSD:  | 0.2                | 0.2             | 0.2299            |                |          |                |

=====

Element: Hg Seq. No.: 131 AS Loc.: 93 Date: 03/02/2010

Sample ID: 247040009|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.002              | 0.002           | 0.0005            | 0.0055         | 13:04:57 | No             |

=====  
Element: Hg Seq. No.: 137 AS Loc.: 99 Date: 03/02/2010  
Sample ID: 247040015|i|||  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.169             | -0.169          | -0.0012           | 0.0037         | 13:16:33 | No             |
| 2      | -0.158             | -0.158          | -0.0011           | 0.0038         | 13:17:07 | No             |
| Mean:  | -0.164             | -0.164          | -0.0012           |                |          |                |
| SD :   | 0.0079             | 0.0079          | 0.0001            |                |          |                |
| %RSD:  | 4.8                | 4.8             | 6.7951            |                |          |                |

=====

=====  
Element: Hg Seq. No.: 138 AS Loc.: 100 Date: 03/02/2010  
Sample ID: 247040016|i|||  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.182             | -0.182          | -0.0014           | 0.0036         | 13:18:29 | No             |
| 2      | -0.192             | -0.192          | -0.0015           | 0.0035         | 13:19:03 | No             |
| Mean:  | -0.187             | -0.187          | -0.0014           |                |          |                |
| SD :   | 0.0070             | 0.0070          | 0.0001            |                |          |                |
| %RSD:  | 3.8                | 3.8             | 5.0299            |                |          |                |

=====

=====  
Element: Hg Seq. No.: 139 AS Loc.: 7 Date: 03/02/2010  
Sample ID: CCV  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 4.558              | 4.558           | 0.0469            | 0.0519         | 13:20:27 | No             |
| 2      | 4.451              | 4.451           | 0.0458            | 0.0508         | 13:21:02 | No             |
| Mean:  | 4.504              | 4.504           | 0.0464            |                |          |                |
| SD :   | 0.0754             | 0.0754          | 0.0008            |                |          |                |
| %RSD:  | 1.7                | 1.7             | 1.6559            |                |          |                |

QC value within specified limits.

=====

=====  
Element: Hg Seq. No.: 140 AS Loc.: 8 Date: 03/02/2010  
Sample ID: CCB  
=====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.017             | -0.017          | 0.0003            | 0.0053         | 13:22:30 | No             |
| 2      | -0.022             | -0.022          | 0.0003            | 0.0052         | 13:23:05 | No             |
| Mean:  | -0.019             | -0.019          | 0.0003            |                |          |                |
| SD :   | 0.0041             | 0.0041          | 0.0000            |                |          |                |
| %RSD:  | 21.1               | 21.1            | 14.8483           |                |          |                |

QC value within specified limits.

=====

Element: Hg      Seq. No.: 141      AS Loc.: 97      Date: 03/02/2010

Sample ID: 247040013|i|100||

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| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 0.833              | 0.833            | 0.0090             | 0.0139         | 13:25:25 | No             |
| 2      | 0.827              | 0.827            | 0.0089             | 0.0139         | 13:26:00 | No             |
| Mean:  | 0.830              | 0.830            | 0.0089             |                |          |                |
| SD :   | 0.0040             | 0.0040           | 0.0000             |                |          |                |
| %RSD:  | 0.5                | 0.5              | 0.4600             |                |          |                |

=====

Element: Hg      Seq. No.: 142      AS Loc.: 7      Date: 03/02/2010

Sample ID: CCV

-----

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | 4.802              | 4.802            | 0.0494             | 0.0544         | 13:27:25 | No             |
| 2      | 4.671              | 4.671            | 0.0480             | 0.0530         | 13:28:00 | No             |
| Mean:  | 4.737              | 4.737            | 0.0487             |                |          |                |
| SD :   | 0.0932             | 0.0932           | 0.0009             |                |          |                |
| %RSD:  | 2.0                | 2.0              | 1.9485             |                |          |                |

QC value within specified limits.

=====

Element: Hg      Seq. No.: 143      AS Loc.: 8      Date: 03/02/2010

Sample ID: CCB

-----

| Repl # | SampleConc<br>µg/L | StndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|------------------|--------------------|----------------|----------|----------------|
| 1      | -0.006             | -0.006           | 0.0004             | 0.0054         | 13:29:28 | No             |
| 2      | 0.006              | 0.006            | 0.0005             | 0.0055         | 13:30:03 | No             |
| Mean:  | 0.000              | 0.000            | 0.0005             |                |          |                |
| SD :   | 0.0087             | 0.0087           | 0.0001             |                |          |                |
| %RSD:  | 3573               | 3573             | 18.5720            |                |          |                |

QC value within specified limits.



=====  
 Element: Hg Seq. No.: 144 AS Loc.: 12 Date: 03/02/2010  
 Sample ID: 1202055902|i||958620|MB  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.178             | -0.178          | -0.0013           | 0.0036         | 13:34:40 | No             |
| 2      | -0.192             | -0.192          | -0.0015           | 0.0035         | 13:35:15 | No             |
| Mean:  | -0.185             | -0.185          | -0.0014           |                |          |                |
| SD :   | 0.0102             | 0.0102          | 0.0001            |                |          |                |
| %RSD:  | 5.5                | 5.5             | 7.4258            |                |          |                |

=====  
 Element: Hg Seq. No.: 145 AS Loc.: 13 Date: 03/02/2010  
 Sample ID: 1202055903|i||10|LCS  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.400              | 3.400           | 0.0351            | 0.0401         | 13:36:40 | No             |
| 2      | 3.466              | 3.466           | 0.0358            | 0.0407         | 13:37:15 | No             |
| Mean:  | 3.433              | 3.433           | 0.0354            |                |          |                |
| SD :   | 0.0467             | 0.0467          | 0.0005            |                |          |                |
| %RSD:  | 1.4                | 1.4             | 1.3433            |                |          |                |

=====  
 Element: Hg Seq. No.: 146 AS Loc.: 14 Date: 03/02/2010  
 Sample ID: 247188001|i||  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.183             | -0.183          | -0.0014           | 0.0036         | 13:38:41 | No             |
| 2      | -0.193             | -0.193          | -0.0015           | 0.0035         | 13:39:16 | No             |
| Mean:  | -0.188             | -0.188          | -0.0014           |                |          |                |
| SD :   | 0.0067             | 0.0067          | 0.0001            |                |          |                |
| %RSD:  | 3.6                | 3.6             | 4.7682            |                |          |                |

=====  
 Element: Hg Seq. No.: 147 AS Loc.: 15 Date: 03/02/2010  
 Sample ID: 1202055904|i||DUP  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.124             | -0.124          | -0.0008           | 0.0042         | 13:40:42 | No             |
| 2      | -0.130             | -0.130          | -0.0008           | 0.0041         | 13:41:17 | No             |
| Mean:  | -0.127             | -0.127          | -0.0008           |                |          |                |
| SD :   | 0.0045             | 0.0045          | 0.0000            |                |          |                |
| %RSD:  | 3.6                | 3.6             | 5.6444            |                |          |                |

=====  
 Element: Hg Seq. No.: 148 AS Loc.: 16 Date: 03/02/2010  
 Sample ID: 1202055905|i||MS  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.035              | 2.035           | 0.0212            | 0.0262         | 13:42:45 | No             |
| 2      | 2.014              | 2.014           | 0.0210            | 0.0260         | 13:43:20 | No             |
| Mean:  | 2.024              | 2.024           | 0.0211            |                |          |                |
| SD :   | 0.0146             | 0.0146          | 0.0001            |                |          |                |
| %RSD:  | 0.7                | 0.7             | 0.7051            |                |          |                |

=====  
 Element: Hg Seq. No.: 149 AS Loc.: 17 Date: 03/02/2010  
 Sample ID: 1202055907|i||MSD  
 =====

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 1.928              | 1.928           | 0.0201            | 0.0251         | 13:44:44 | No             |
| 2      | 1.933              | 1.933           | 0.0202            | 0.0251         | 13:45:19 | No             |
| Mean:  | 1.931              | 1.931           | 0.0201            |                |          |                |

SD : 0.0035 0.0035 0.0000  
 %RSD: 0.2 0.2 0.1784

=====  
 Element: Hg Seq. No.: 150 AS Loc.: 18 Date: 03/02/2010  
 Sample ID: 1202055906|i|5||SDILT  
 =====

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlnkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | -0.244             | -0.244            | -0.0020            | 0.0030         | 13:46:40 | No             |
| 2      | -0.251             | -0.251            | -0.0021            | 0.0029         | 13:47:15 | No             |
| Mean:  | -0.248             | -0.248            | -0.0020            |                |          |                |
| SD :   | 0.0048             | 0.0048            | 0.0000             |                |          |                |
| %RSD:  | 1.9                | 1.9               | 2.3962             |                |          |                |

=====  
 Element: Hg Seq. No.: 151 AS Loc.: 19 Date: 03/02/2010  
 Sample ID: 247188002|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlnkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | -0.113             | -0.113            | -0.0007            | 0.0043         | 13:48:37 | No             |
| 2      | -0.131             | -0.131            | -0.0009            | 0.0041         | 13:49:12 | No             |
| Mean:  | -0.122             | -0.122            | -0.0008            |                |          |                |
| SD :   | 0.0126             | 0.0126            | 0.0001             |                |          |                |
| %RSD:  | 10.3               | 10.3              | 16.7515            |                |          |                |

=====  
 Element: Hg Seq. No.: 152 AS Loc.: 20 Date: 03/02/2010  
 Sample ID: 247188003|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlnkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | -0.200             | -0.200            | -0.0016            | 0.0034         | 13:50:35 | No             |
| 2      | -0.192             | -0.192            | -0.0015            | 0.0035         | 13:51:10 | No             |
| Mean:  | -0.196             | -0.196            | -0.0015            |                |          |                |
| SD :   | 0.0058             | 0.0058            | 0.0001             |                |          |                |
| %RSD:  | 3.0                | 3.0               | 3.9102             |                |          |                |

=====  
 Element: Hg Seq. No.: 153 AS Loc.: 21 Date: 03/02/2010  
 Sample ID: 247188004|i|||  
 =====

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlnkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | -0.118             | -0.118            | -0.0007            | 0.0042         | 13:52:32 | No             |
| 2      | -0.140             | -0.140            | -0.0009            | 0.0040         | 13:53:06 | No             |
| Mean:  | -0.129             | -0.129            | -0.0008            |                |          |                |
| SD :   | 0.0154             | 0.0154            | 0.0002             |                |          |                |
| %RSD:  | 12.0               | 12.0              | 18.8977            |                |          |                |

=====  
 Element: Hg Seq. No.: 154 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV  
 =====

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlnkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 5.269              | 5.269             | 0.0541             | 0.0591         | 13:54:31 | No             |
| 2      | 5.257              | 5.257             | 0.0540             | 0.0590         | 13:55:06 | No             |
| Mean:  | 5.263              | 5.263             | 0.0541             |                |          |                |
| SD :   | 0.0085             | 0.0085            | 0.0001             |                |          |                |
| %RSD:  | 0.2                | 0.2               | 0.1602             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 155 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB  
 =====

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      0.036      0.036      0.0008    0.0058    13:56:34  No
2      0.031      0.031      0.0008    0.0058    13:57:08  No
Mean:   0.033      0.033      0.0008
SD :    0.0035     0.0035     0.0000
%RSD:   10.4      10.4      4.3417
QC value within specified limits.

```

```

=====
Element: Hg      Seq. No.: 156      AS Loc.: 22      Date: 03/02/2010
Sample ID: 247188005|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.150     -0.150     -0.0010    0.0039    13:58:33  No
2      -0.152     -0.152     -0.0011    0.0039    13:59:08  No
Mean:   -0.151     -0.151     -0.0011
SD :    0.0018     0.0018     0.0000
%RSD:    1.2       1.2       1.6962

```

```

=====
Element: Hg      Seq. No.: 157      AS Loc.: 23      Date: 03/02/2010
Sample ID: 247188006|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.175     -0.175     -0.0013    0.0037    14:00:31  No
2      -0.174     -0.174     -0.0013    0.0037    14:01:07  No
Mean:   -0.175     -0.175     -0.0013
SD :    0.0006     0.0006     0.0000
%RSD:    0.4       0.4       0.5001

```

```

=====
Element: Hg      Seq. No.: 158      AS Loc.: 24      Date: 03/02/2010
Sample ID: 247188007|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.092     -0.092     -0.0005    0.0045    14:02:31  No
2      -0.107     -0.107     -0.0006    0.0044    14:03:06  No
Mean:   -0.099     -0.099     -0.0005
SD :    0.0106     0.0106     0.0001
%RSD:   10.7      10.7      20.4251

```

```

=====
Element: Hg      Seq. No.: 159      AS Loc.: 25      Date: 03/02/2010
Sample ID: 247188008|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.088     -0.088     -0.0004    0.0046    14:04:30  No
2      -0.089     -0.089     -0.0004    0.0045    14:05:05  No
Mean:   -0.089     -0.089     -0.0004
SD :    0.0011     0.0011     0.0000
%RSD:    1.2       1.2       2.6041

```

```

=====
Element: Hg      Seq. No.: 160      AS Loc.: 26      Date: 03/02/2010
Sample ID: 247188009|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      µg/L       µg/L       Signal    Height    Stored
1      -0.063     -0.063     -0.0002    0.0048    14:06:30  No
2      -0.065     -0.065     -0.0002    0.0048    14:07:05  No
Mean:   -0.064     -0.064     -0.0002

```

SD : 0.0013 0.0013 0.0000  
 %RSD: 2.1 2.1 7.8918

=====  
 Element: Hg Seq. No.: 161 AS Loc.: 27 Date: 03/02/2010  
 Sample ID: 247188010|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.089             | -0.089          | -0.0004           | 0.0045         | 14:08:31 | No             |
| 2      | -0.086             | -0.086          | -0.0004           | 0.0046         | 14:09:05 | No             |
| Mean:  | -0.087             | -0.087          | -0.0004           |                |          |                |
| SD :   | 0.0021             | 0.0021          | 0.0000            |                |          |                |
| %RSD:  | 2.5                | 2.5             | 5.3347            |                |          |                |

=====  
 Element: Hg Seq. No.: 162 AS Loc.: 28 Date: 03/02/2010  
 Sample ID: 247188011|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.131             | -0.131          | -0.0009           | 0.0041         | 14:10:31 | No             |
| 2      | -0.130             | -0.130          | -0.0008           | 0.0041         | 14:11:07 | No             |
| Mean:  | -0.130             | -0.130          | -0.0008           |                |          |                |
| SD :   | 0.0009             | 0.0009          | 0.0000            |                |          |                |
| %RSD:  | 0.7                | 0.7             | 1.1095            |                |          |                |

=====  
 Element: Hg Seq. No.: 163 AS Loc.: 29 Date: 03/02/2010  
 Sample ID: 247188012|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.145             | -0.145          | -0.0010           | 0.0040         | 14:12:33 | No             |
| 2      | -0.146             | -0.146          | -0.0010           | 0.0040         | 14:13:08 | No             |
| Mean:  | -0.145             | -0.145          | -0.0010           |                |          |                |
| SD :   | 0.0011             | 0.0011          | 0.0000            |                |          |                |
| %RSD:  | 0.8                | 0.8             | 1.1577            |                |          |                |

=====  
 Element: Hg Seq. No.: 164 AS Loc.: 30 Date: 03/02/2010  
 Sample ID: 247188013|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.105             | -0.105          | -0.0006           | 0.0044         | 14:14:34 | No             |
| 2      | -0.117             | -0.117          | -0.0007           | 0.0043         | 14:15:09 | No             |
| Mean:  | -0.111             | -0.111          | -0.0007           |                |          |                |
| SD :   | 0.0079             | 0.0079          | 0.0001            |                |          |                |
| %RSD:  | 7.1                | 7.1             | 12.2764           |                |          |                |

=====  
 Element: Hg Seq. No.: 165 AS Loc.: 31 Date: 03/02/2010  
 Sample ID: 247188014|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.132             | -0.132          | -0.0009           | 0.0041         | 14:16:37 | No             |
| 2      | -0.142             | -0.142          | -0.0010           | 0.0040         | 14:17:12 | No             |
| Mean:  | -0.137             | -0.137          | -0.0009           |                |          |                |
| SD :   | 0.0069             | 0.0069          | 0.0001            |                |          |                |
| %RSD:  | 5.0                | 5.0             | 7.6508            |                |          |                |

=====  
 Element: Hg Seq. No.: 166 AS Loc.: 7 Date: 03/02/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.298              | 5.298           | 0.0544            | 0.0594         | 14:18:39 | No             |
| 2      | 5.401              | 5.401           | 0.0555            | 0.0604         | 14:19:14 | No             |
| Mean:  | 5.349              | 5.349           | 0.0550            |                |          |                |
| SD :   | 0.0723             | 0.0723          | 0.0007            |                |          |                |
| %RSD:  | 1.4                | 1.4             | 1.3393            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 167 AS Loc.: 8 Date: 03/02/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.011              | 0.011           | 0.0006            | 0.0056         | 14:20:42 | No             |
| 2      | 0.016              | 0.016           | 0.0006            | 0.0056         | 14:21:17 | No             |
| Mean:  | 0.013              | 0.013           | 0.0006            |                |          |                |
| SD :   | 0.0034             | 0.0034          | 0.0000            |                |          |                |
| %RSD:  | 25.5               | 25.5            | 5.5975            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 168 AS Loc.: 32 Date: 03/02/2010  
 Sample ID: 1202055973|i|958657|MB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.410              | 0.410           | 0.0047            | 0.0096         | 14:22:42 | No             |
| 2      | 0.407              | 0.407           | 0.0046            | 0.0096         | 14:23:17 | No             |
| Mean:  | 0.408              | 0.408           | 0.0046            |                |          |                |
| SD :   | 0.0017             | 0.0017          | 0.0000            |                |          |                |
| %RSD:  | 0.4                | 0.4             | 0.3768            |                |          |                |

=====  
 Element: Hg Seq. No.: 169 AS Loc.: 33 Date: 03/02/2010  
 Sample ID: 1202055974|i|10|LCS

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 3.523              | 3.523           | 0.0364            | 0.0413         | 14:24:36 | No             |
| 2      | 3.444              | 3.444           | 0.0356            | 0.0405         | 14:25:11 | No             |
| Mean:  | 3.483              | 3.483           | 0.0360            |                |          |                |
| SD :   | 0.0558             | 0.0558          | 0.0006            |                |          |                |
| %RSD:  | 1.6                | 1.6             | 1.5817            |                |          |                |

=====  
 Element: Hg Seq. No.: 170 AS Loc.: 34 Date: 03/02/2010  
 Sample ID: 247558001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.041             | -0.041          | 0.0001            | 0.0050         | 14:26:32 | No             |
| 2      | -0.043             | -0.043          | 0.0000            | 0.0050         | 14:27:07 | No             |
| Mean:  | -0.042             | -0.042          | 0.0001            |                |          |                |
| SD :   | 0.0019             | 0.0019          | 0.0000            |                |          |                |
| %RSD:  | 4.5                | 4.5             | 36.7291           |                |          |                |

=====  
 Element: Hg Seq. No.: 171 AS Loc.: 35 Date: 03/02/2010  
 Sample ID: 1202055975|i|||DUP

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.088             | -0.088          | -0.0004           | 0.0046         | 14:28:29 | No             |
| 2      | -0.088             | -0.088          | -0.0004           | 0.0045         | 14:29:03 | No             |
| Mean:  | -0.088             | -0.088          | -0.0004           |                |          |                |

# Miscellaneous

# Prep Logbook

## Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 954677.0      Verified by: \_\_\_\_\_      Lab SOP: GL-MA-E-009 REV# 19  
 Analyst: Anthony Green      Instrument: BAL-001  
 Method: SW846 3050B

| Sample ID                     | Run Date             | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check |
|-------------------------------|----------------------|--------------------|-------------------|--------------------|----------|
| 1202046593 MB                 | 23-FEB-2010 08:00:00 | 0.503              | 50                | 99.40358           |          |
| 1202046598 LCS                | 23-FEB-2010 08:00:00 | 0.507              | 50                | 98.61933           |          |
| 247188001                     | 23-FEB-2010 08:00:00 | 0.513              | 50                | 97.46589           |          |
| 1202046594 DUP (247188001)    | 23-FEB-2010 08:00:00 | 0.504              | 50                | 99.20635           |          |
| 1202046595 SDIL.T (247188001) | 23-FEB-2010 08:00:00 | 0.513              | 50                | 97.46589           |          |
| 1202046596 MS (247188001)     | 23-FEB-2010 08:00:00 | 0.5                | 50                | 100                |          |
| 1202046597 MSD (247188001)    | 23-FEB-2010 08:00:00 | 0.52               | 50                | 96.15385           |          |
| 247188002                     | 23-FEB-2010 08:00:00 | 0.501              | 50                | 99.8004            |          |
| 247188003                     | 23-FEB-2010 08:00:00 | 0.516              | 50                | 96.89922           |          |
| 247188004                     | 23-FEB-2010 08:00:00 | 0.538              | 50                | 92.9368            |          |
| 247188005                     | 23-FEB-2010 08:00:00 | 0.529              | 50                | 94.51796           |          |
| 247188006                     | 23-FEB-2010 08:00:00 | 0.514              | 50                | 97.27626           |          |
| 247188007                     | 23-FEB-2010 08:00:00 | 0.514              | 50                | 97.27626           |          |
| 247188008                     | 23-FEB-2010 08:00:00 | 0.523              | 50                | 95.60229           |          |
| 247188009                     | 23-FEB-2010 08:00:00 | 0.508              | 50                | 98.4252            |          |
| 247188010                     | 23-FEB-2010 08:00:00 | 0.503              | 50                | 99.40358           |          |
| 247188011                     | 23-FEB-2010 08:00:00 | 0.53               | 50                | 94.33962           |          |
| 247188012                     | 23-FEB-2010 08:00:00 | 0.529              | 50                | 94.51796           |          |
| 247188013                     | 23-FEB-2010 08:00:00 | 0.507              | 50                | 98.61933           |          |
| 247188014                     | 23-FEB-2010 08:00:00 | 0.538              | 50                | 92.9368            |          |

| Type      | Sample Id  | Description                     | Serial Number | Spike Amt | Units | Comments: |
|-----------|------------|---------------------------------|---------------|-----------|-------|-----------|
| LCS       | 1202046598 | Metals Soil LCS SRM ICPMS       | UI062540-MS   | .507      | g     |           |
| MS        | 1202046596 | ICP-MS Spike for soil products. | UI091015-A    | .5        | mL    |           |
| MS        | 1202046596 | ICP-MS Spike for Soil Products  | UI091015-B    | .5        | mL    |           |
| MSD       | 1202046597 | ICP-MS Spike for soil products. | UI091015-A    | .5        | mL    |           |
| MSD       | 1202046597 | ICP-MS Spike for Soil Products  | UI091015-B    | .5        | mL    |           |
| REGNT All |            | Hydrogen Peroxide 30%           | 1250038-02    | 1.5       | mL    |           |
| REGNT All |            | Nitric Acid CONC.               | 1268732       | .5        | mL    |           |

# Prep Logbook

## Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 954675.0

Analyst: Anthony Green

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: BAL-001

Verified by:

| Type | Sample Id  | Description                | Serial Number | Spike Amount | Spike Units |
|------|------------|----------------------------|---------------|--------------|-------------|
| LCS  | 1202046592 | Metals Soil LCS SRM ICP/Hg | U1062540-1    | .513         | g           |
| MS   | 1202046590 | Metals Spike Mix I         | U1100205-01   | .25          | mL          |
| MS   | 1202046590 | Metals Spike Mix II        | U1100205-06   | .25          | mL          |
| MSD  | 1202046591 | Metals Spike Mix I         | U1100205-01   | .25          | mL          |
| MSD  | 1202046591 | Metals Spike Mix II        | U1100205-06   | .25          | mL          |

| Sample ID                    | Run Date             | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check I |
|------------------------------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 1202046587 MB                | 23-FEB-2010 10:00:00 | Soil   | 0.502              | 50                | 99.60159           |            |
| 1202046592 LCS               | 23-FEB-2010 10:00:00 | Soil   | 0.513              | 50                | 97.46589           |            |
| 247188001                    | 23-FEB-2010 10:00:00 | Soil   | 0.531              | 50                | 94.16196           |            |
| 1202046588 DUP (247188001)   | 23-FEB-2010 10:00:00 | Soil   | 0.515              | 50                | 97.08738           |            |
| 1202046589 SDILT (247188001) | 23-FEB-2010 10:00:00 | Soil   | 0.531              | 50                | 94.16196           |            |
| 1202046590 MS (247188001)    | 23-FEB-2010 10:00:00 | Soil   | 0.5                | 50                | 100                |            |
| 1202046591 MSD (247188001)   | 23-FEB-2010 10:00:00 | Soil   | 0.518              | 50                | 96.5251            |            |
| 247188002                    | 23-FEB-2010 10:00:00 | Soil   | 0.508              | 50                | 98.4252            |            |
| 247188003                    | 23-FEB-2010 10:00:00 | Soil   | 0.509              | 50                | 98.23183           |            |
| 247188004                    | 23-FEB-2010 10:00:00 | Soil   | 0.541              | 50                | 92.42144           |            |
| 247188005                    | 23-FEB-2010 10:00:00 | Soil   | 0.51               | 50                | 98.03922           |            |
| 247188006                    | 23-FEB-2010 10:00:00 | Soil   | 0.5                | 50                | 100                |            |
| 247188007                    | 23-FEB-2010 10:00:00 | Soil   | 0.53               | 50                | 94.33962           |            |
| 247188008                    | 23-FEB-2010 10:00:00 | Soil   | 0.536              | 50                | 93.28358           |            |
| 247188009                    | 23-FEB-2010 10:00:00 | Soil   | 0.538              | 50                | 92.9368            |            |
| 247188010                    | 23-FEB-2010 10:00:00 | Soil   | 0.555              | 50                | 90.09009           |            |
| 247188011                    | 23-FEB-2010 10:00:00 | Soil   | 0.519              | 50                | 96.33911           |            |
| 247188012                    | 23-FEB-2010 10:00:00 | Soil   | 0.521              | 50                | 95.96929           |            |
| 247188013                    | 23-FEB-2010 10:00:00 | Soil   | 0.525              | 50                | 95.2381            |            |
| 247188014                    | 23-FEB-2010 10:00:00 | Soil   | 0.54               | 50                | 92.59259           |            |

| Reagent/Solvent Lot ID | Description       | Amount | Comments:                                     |
|------------------------|-------------------|--------|---|
| 1265209                | HYDROCHLORIC ACID | 10 mL  | Sample 247188001 consist of rocky, gray soil. |

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC



# Prep Logbook

## Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

|                                     |              |      |            |   |               |              |             |
|-------------------------------------|--------------|------|------------|---|---------------|--------------|-------------|
| <b>Batch ID:</b> 958619.0           | Verified by: | Type | Sample Id  | Description                                       | Serial Number | Spike Amount | Spike Units |
| <b>Analyst:</b> Tara Griffin        |              | LCS  | 1202055903 | Metals LCS Soil SRM                               | U1031809A     | .205         | g           |
| <b>Method:</b> SW846 7471A Prep     |              | MS   | 1202055905 | Mercury soil working intermediate standard for MS | WHG100301-14  | .3           | mL          |
| <b>Lab SOP:</b> GL-MA-E-010 REV# 23 |              | MSD  | 1202055907 | Mercury soil working intermediate standard for MS | WHG100301-14  | .3           | mL          |
| <b>Instrument:</b> BAL-002          |              |      |            |   |               |              |             |

| Sample ID                    | Run Date             | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check | I |
|------------------------------|----------------------|--------|--------------------|-------------------|--------------------|----------|---|
| 1202055902 MB                | 01-MAR-2010 18:30:00 | Soil   | 0.5                | 30                | 60                 |          |   |
| 1202055903 LCS               | 01-MAR-2010 18:30:00 | Soil   | 0.205              | 30                | 146.34146          |          |   |
| 247188001                    | 01-MAR-2010 18:30:00 | Soil   | 0.581              | 30                | 51.63511           |          |   |
| 1202055904 DUP (247188001)   | 01-MAR-2010 18:30:00 | Soil   | 0.552              | 30                | 54.34783           |          |   |
| 1202055905 MS (247188001)    | 01-MAR-2010 18:30:00 | Soil   | 0.587              | 30                | 51.10733           |          |   |
| 1202055907 MSD (247188001)   | 01-MAR-2010 18:30:00 | Soil   | 0.515              | 30                | 58.25243           |          |   |
| 1202055906 SDILT (247188001) | 01-MAR-2010 18:30:00 | Soil   | 0.581              | 30                | 51.63511           |          |   |
| 247188002                    | 01-MAR-2010 18:30:00 | Soil   | 0.518              | 30                | 57.91506           |          |   |
| 247188003                    | 01-MAR-2010 18:30:00 | Soil   | 0.549              | 30                | 54.64481           |          |   |
| 247188004                    | 01-MAR-2010 18:30:00 | Soil   | 0.515              | 30                | 58.25243           |          |   |
| 247188005                    | 01-MAR-2010 18:30:00 | Soil   | 0.51               | 30                | 58.82353           |          |   |
| 247188006                    | 01-MAR-2010 18:30:00 | Soil   | 0.555              | 30                | 54.05405           |          |   |
| 247188007                    | 01-MAR-2010 18:30:00 | Soil   | 0.514              | 30                | 58.36576           |          |   |
| 247188008                    | 01-MAR-2010 18:30:00 | Soil   | 0.533              | 30                | 56.28518           |          |   |
| 247188009                    | 01-MAR-2010 18:30:00 | Soil   | 0.568              | 30                | 52.8169            |          |   |
| 247188010                    | 01-MAR-2010 18:30:00 | Soil   | 0.527              | 30                | 56.926             |          |   |
| 247188011                    | 01-MAR-2010 18:30:00 | Soil   | 0.534              | 30                | 56.17978           |          |   |
| 247188012                    | 01-MAR-2010 18:30:00 | Soil   | 0.587              | 30                | 51.10733           |          |   |
| 247188013                    | 01-MAR-2010 18:30:00 | Soil   | 0.517              | 30                | 58.02708           |          |   |
| 247188014                    | 01-MAR-2010 18:30:00 | Soil   | 0.555              | 30                | 54.05405           |          |   |

| Reagent/Solvent Lot ID | Description             | Amount   | Comments:                                     |
|------------------------|-------------------------|----------|---|
| 1255532-C              | Hg reducing agent       | 2 mL     | Sample 247188001 is a rocky light brown soil. |
| 1274391-1              | NITRIC ACID             | .375 mL  | Digestion Start Date: 01-MAR-10 18:30         |
| 1274394-A              | Hydrochloric Acid Conc. | 1.125 mL | Digestion End Date: 01-MAR-10 19:00           |
| 1274397-C              | 5% KMnO4 solution       | 7.5 mL   |   |

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

### DATA EXCEPTION REPORT

|  |  |   |                             |
|--|--|---|-----------------------------|
| <b>Mo.Day Yr.</b><br>15-MAR-10   | <b>Division:</b><br>Industrial             | <b>Quality Criteria:</b><br>Specifications  | <b>Type:</b><br>Process     |
| <b>Instrument Type:</b><br>ICP   | <b>Test / Method:</b><br>SW846 3050B/6010B | <b>Matrix Type:</b><br>Solid  | <b>Client Code:</b><br>LANL |
| <b>Batch ID:</b><br>954676   | <b>Sample Numbers:</b><br>See Below        |   |                             |
| <p><b>Potentially affected work order(s)(SDG): 247188(10-1863)</b></p> <p><b>Application Issues:</b></p> <p>Failed Recovery for MS/PS</p> <p>Failed RPD for DUP</p> <p>Failed Recovery for LCS/LCSD</p> <p>Failed Recovery for MSD/PSD</p>       |  |   |                             |
| <b>Specification and Requirements</b>  |  | <b>DER Disposition:</b>   |                             |
| <b>Exception Description:</b>  |  |   |                             |
| <p>1. Failed Recovery for MS/PS:</p> <p>QC 1202046590MS</p> <p>2. Failed RPD for DUP:</p> <p>QC 1202046588DUP</p> <p>3. Failed Recovery for LCS/LCSD:</p> <p>QC 1202046592LCS</p> <p>4. Failed Recovery for MSD/PSD:</p> <p>QC 1202046591MSD</p> |  | <p>1./4. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for aluminum,chromium,potassium and sodium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.</p> <p>2. The sample and sample duplicate % RPD failed outside the control limits for aluminum,calcium,chromium and sodium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.</p> <p>3. Silver and/or antimony did not meet the recovery acceptance criteria for the LCS. Per the DOE-AL statement of work, page forty, silver and antimony are exempt from the re-digestion requirement for LCS failures.</p> |                             |

**Originator's Name:**

Helen Camello 15-MAR-10

**Data Validator/Group Leader:**

Louise Smith 15-MAR-10

# Standard Logbook

**Serial ID:** UHG1167639-01      **Opened:** 13-AUG-09      **Amount :** 125 mL  
**Name:** MHGSTOCK1      **Received:** 13-AUG-09      **Catalog Number :** PLHG4-2Y  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 15-37HG  
**Employee:** Bryan Davis      **Solvent :** 10% HNO3  
**Supplier:** Spex  
**Description:** Mercury Source Standard #1 1,000 mg/L  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Mercury | 1000 mg/L     |         |               |

**Serial ID:** UHG1167641-02      **Opened:** 13-AUG-09      **Amount :** 100 mL  
**Name:** MHGSTOCK2      **Received:** 13-AUG-09      **Catalog Number :** AHG1KN-100  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 4905530  
**Employee:** Bryan Davis      **Solvent :** 3% HNO3  
**Supplier:** Ricca Chemical Company  
**Description:** Mercury Source Standard #2 1,000 mg/L  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Mercury | 999.7 mg/L    |         |               |

**Serial ID:** UI031809A      **Opened:** 18-MAR-09      **Catalog Number :** 540  
**Name:** METALSOILSRM      **Received:** 18-MAR-09      **Lot Number :** D061-540  
**Type:** Source Material      **Expires:** 10-OCT-10  
**Employee:** Jamie Johnson  
**Supplier:** ERA  
**Description:** Metals LCS Soil SRM  
**Comments:** None

| Analyte    | Concentration | Analyte   | Concentration |
|------------|---------------|-----------|---------------|
| Aluminum   | 10600 mg/kg   | Antimony  | 126 mg/kg     |
| Arsenic    | 225 mg/kg     | Barium    | 565 mg/kg     |
| Beryllium  | 162 mg/kg     | Boron     | 107 mg/kg     |
| Cadmium    | 69.1 mg/kg    | Calcium   | 10000 mg/kg   |
| Chromium   | 124 mg/kg     | Cobalt    | 115 mg/kg     |
| Copper     | 66.7 mg/kg    | Iron      | 17600 mg/kg   |
| Lead       | 223 mg/kg     | Magnesium | 4260 mg/kg    |
| Manganese  | 368 mg/kg     | Mercury   | 5.15 mg/kg    |
| Molybdenum | 107 mg/kg     | Nickel    | 172 mg/kg     |
| Potassium  | 4090 mg/kg    | Selenium  | 147 mg/kg     |
| Silver     | 35.2 mg/kg    | Sodium    | 538 mg/kg     |
| Strontium  | 117 mg/kg     | Thallium  | 173 mg/kg     |
| Tin        | 164 mg/kg     | Titanium  | 381 mg/kg     |
| Vanadium   | 93.9 mg/kg    | Zinc      | 349 mg/kg     |

# Standard Logbook

**Serial ID:** UI062540-I      **Opened:** 12-JUN-09      **Amount :** 80 g  
**Name:** ICP SOIL SRM      **Received:** 12-JUN-09      **Lot Number :** D062-540  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICP/Hg  
**Comments:** None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 10500 mg/kg   | Antimony  | 173 mg/kg     |
| Arsenic     | 104 mg/kg     | Barium    | 198 mg/kg     |
| Beryllium   | 77.6 mg/kg    | Boron     | 141 mg/kg     |
| Cadmium     | 60.7 mg/kg    | Calcium   | 9870 mg/kg    |
| Chromium    | 236 mg/kg     | Cobalt    | 91.2 mg/kg    |
| Copper      | 174 mg/kg     | Iron      | 18000 mg/kg   |
| Lead        | 86 mg/kg      | Magnesium | 4000 mg/kg    |
| Manganese   | 558 mg/kg     | Mercury   | 8.46 mg/kg    |
| Molybdenum  | 48.6 mg/kg    | Nickel    | 134 mg/kg     |
| Phosphorous | 736 mg/kg     | Potassium | 4300 mg/kg    |
| Selenium    | 286 mg/kg     | Silica    | 2591 mg/kg    |
| Silicon     | 1211 mg/kg    | Silver    | 30.1 mg/kg    |
| Sodium      | 1020 mg/kg    | Strontium | 227 mg/kg     |
| Sulfur      | 385 mg/kg     | Thallium  | 121 mg/kg     |
| Tin         | 104 mg/kg     | Titanium  | 462 mg/kg     |
| Vanadium    | 115 mg/kg     | Zinc      | 594 mg/kg     |

**Serial ID:** UI062540-MS      **Opened:** 12-JUN-09      **Lot Number :** D062-540  
**Name:** ICPMS SOIL SRM      **Received:** 12-JUN-09  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICPMS  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 10500 mg/kg   | Antimony    | 67.4 mg/kg    |
| Arsenic   | 104 mg/kg     | Barium      | 198 mg/kg     |
| Beryllium | 77.6 mg/kg    | Boron       | 141 mg/kg     |
| Cadmium   | 60.6 mg/kg    | Calcium     | 9870 mg/kg    |
| Chromium  | 236 mg/kg     | Cobalt      | 91.2 mg/kg    |
| Copper    | 174 mg/kg     | Iron        | 18000 mg/kg   |
| Lead      | 86 mg/kg      | Lithium     | 10.6 mg/kg    |
| Magnesium | 4000 mg/kg    | Manganese   | 558 mg/kg     |
| Mercury   | 8.46 mg/kg    | Molybdenum  | 48.6 mg/kg    |
| Nickel    | 134 mg/kg     | Phosphorous | 755 mg/kg     |
| Potassium | 4300 mg/kg    | Selenium    | 286 mg/kg     |
| Silver    | 30.1 mg/kg    | Sodium      | 1020 mg/kg    |

# Standard Logbook

| Analyte     | Concentration | Analyte     | Concentration |
|-------------|---------------|-------------|---------------|
| Strontium   | 227 mg/kg     | Thallium    | 121 mg/kg     |
| Thorium     | 9.84 mg/kg    | Tin         | 104 mg/kg     |
| Titanium    | 462 mg/kg     | Uranium     | 2.13 mg/kg    |
| Uranium-235 | .0153 mg/kg   | Uranium-238 | 2.11 mg/kg    |
| Vanadium    | 92.4 mg/kg    | Zinc        | 594 mg/kg     |
| Zirconium   | 10.6 mg/kg    |             |               |

**Serial ID:** UI090421-40      **Opened:** 09-OCT-09      **Amount :** 250 mL  
**Name:** TRACE ICP Na-1000SOUR      **Received:** 21-APR-09      **Catalog Number :** HP100052-1  
**Type:** Source Material      **Expires:** 09-OCT-10      **Lot Number :** 0830227  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** ENVIRONMENTAL EXPRESS  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Sodium  | 1000 ug/mL    |         |               |

**Serial ID:** UI090422-40      **Opened:** 04-MAY-09      **Amount :** 500 mL  
**Name:** TRACE ICP ICSA SOLN A      **Received:** 22-APR-09      **Catalog Number :** 160005-01-03  
**Type:** Source Material      **Expires:** 04-MAY-10      **Lot Number :** 1013357  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** o2si  
**Description:** TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Aluminum | 5000 mg/L     | Calcium   | 5000 mg/L     |
| Iron     | 2000 mg/L     | Magnesium | 5000 mg/L     |

**Serial ID:** UI090612-02      **Opened:** 12-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **Received:** 12-JUN-09      **Lot Number :** 1016377  
**Type:** Source Material      **Expires:** 12-JUN-10      **Solvent :** 2% HNO3  
**Employee:** Paul Boyd  
**Supplier:** O2SI  
**Description:** ICPMS Tungsten standard SPIKE - 10mg/L  
**Comments:** None

| Analyte  | Concentration | Analyte | Concentration |
|----------|---------------|---------|---------------|
| Tungsten | 10 mg/L       |         |               |

# Standard Logbook

**Serial ID:** UI090701-09      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #1      **Received:** 01-JUL-09      **Catalog Number :** 160044-09-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016477  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Master Soln #1  
**Comments:** None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 15 mg/L       | Arsenic   | 5 mg/L        |
| Barium      | 2 mg/L        | Beryllium | .5 mg/L       |
| Boron       | 15 mg/L       | Cadmium   | 1 mg/L        |
| Calcium     | 100 mg/L      | Chromium  | 3 mg/L        |
| Cobalt      | 1 mg/L        | Copper    | 1 mg/L        |
| Iron        | 25 mg/L       | Lead      | 2 mg/L        |
| Lithium     | 10 mg/L       | Magnesium | 15 mg/L       |
| Manganese   | 5 mg/L        | Nickel    | 2 mg/L        |
| Phosphorous | 50 mg/L       | Potassium | 300 mg/L      |
| Selenium    | 5 mg/L        | Sodium    | 250 mg/L      |
| Strontium   | 10 mg/L       | Thallium  | 1 mg/L        |
| Thorium     | 1 mg/L        | Uranium   | .2 mg/L       |
| Vanadium    | 10 mg/L       | Zinc      | 10 mg/L       |

**Serial ID:** UI090701-10      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #2      **Received:** 01-JUL-09      **Catalog Number :** 160044-08-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016476  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Soln #2  
**Comments:** None

| Analyte   | Concentration | Analyte    | Concentration |
|-----------|---------------|------------|---------------|
| Antimony  | 2 mg/L        | Molybdenum | .5 mg/L       |
| Silver    | 1 mg/L        | Tin        | 2 mg/L        |
| Titanium  | 10 mg/L       | Tungsten   | 5 mg/L        |
| Zirconium | 2 mg/L        |            |               |

**Serial ID:** UI090701-40      **Opened:** 01-JUL-09      **Amount :** 500 mL  
**Name:** TRACE ICP Stock PQL St      **Received:** 30-JUN-09      **Catalog Number :** 160543-01-03  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016475  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** 02si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
|---------|---------------|---------|---------------|

# Standard Logbook

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 100 mg/L      | Antimony    | 5 mg/L        |
| Arsenic   | 15 mg/L       | Barium      | 2.5 mg/L      |
| Beryllium | 2.5 mg/L      | Boron       | 25 mg/L       |
| Cadmium   | 2.5 mg/L      | Calcium     | 100 mg/L      |
| Chromium  | 2.5 mg/L      | Cobalt      | 2.5 mg/L      |
| Copper    | 5 mg/L        | Iron        | 50 mg/L       |
| Lead      | 5 mg/L        | Magnesium   | 150 mg/L      |
| Manganese | 5 mg/L        | Molybdenum  | 5 mg/L        |
| Nickel    | 2.5 mg/L      | Phosphorous | 75 mg/L       |
| Potassium | 75 mg/L       | Selenium    | 15 mg/L       |
| Silicon   | 50 mg/L       | Silver      | 2.5 mg/L      |
| Sodium    | 150 mg/L      | Strontium   | 2.5 mg/L      |
| Sulfur    | 50 mg/L       | Thallium    | 10 mg/L       |
| Tin       | 5 mg/L        | Titanium    | 2.5 mg/L      |
| Uranium   | 25 mg/L       | Vanadium    | 2.5 mg/L      |
| Zinc      | 5 mg/L        |             |               |

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 1000 mg/L     | Arsenic     | 100 mg/L      |
| Barium    | 100 mg/L      | Boron       | 100 mg/L      |
| Cadmium   | 100 mg/L      | Calcium     | 1000 mg/L     |
| Chromium  | 100 mg/L      | Cobalt      | 100 mg/L      |
| Copper    | 100 mg/L      | Iron        | 1000 mg/L     |
| Lead      | 100 mg/L      | Phosphorous | 500 mg/L      |
| Potassium | 500 mg/L      | Selenium    | 500 mg/L      |
| Sodium    | 500 mg/L      | Strontium   | 100 mg/L      |

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR,HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Antimony | 100 mg/L      | Beryllium | 50 mg/L       |

# Standard Logbook

| Analyte    | Concentration | Analyte   | Concentration |
|------------|---------------|-----------|---------------|
| Magnesium  | 1000 mg/L     | Manganese | 100 mg/L      |
| Molybdenum | 100 mg/L      | Nickel    | 100 mg/L      |
| Silver     | 50 mg/L       | Sulfur    | 500 mg/L      |
| Thallium   | 100 mg/L      | Tin       | 100 mg/L      |
| Titanium   | 100 mg/L      | Uranium   | 100 mg/L      |
| Vanadium   | 100 mg/L      | Zinc      | 100 mg/L      |

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L +/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Silica  | 2139 mg/L     | Silicon | 1000 mg/L     |

**Serial ID:** UI091015-A      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 02si  
**Description:** ICP-MS Spike for soil products.  
**Comments:** None

| Analyte                | Concentration | Analyte     | Concentration |
|------------------------|---------------|-------------|---------------|
| Aluminum               | 200 mg/L      | Arsenic     | 8 mg/L        |
| Barium                 | 5 mg/L        | Beryllium   | 5 mg/L        |
| Boron                  | 10 mg/L       | Cadmium     | 1 mg/L        |
| Calcium                | 200 mg/L      | Chromium    | 5 mg/L        |
| Cobalt                 | 5 mg/L        | Copper      | 5 mg/L        |
| Iron                   | 200 mg/L      | Lead        | 20 mg/L       |
| Lithium                | 5 mg/L        | Magnesium   | 200 mg/L      |
| Manganese              | 5 mg/L        | Nickel      | 5 mg/L        |
| Phosphorus, Total as P | 200 mg/L      | Potassium   | 200 mg/L      |
| Selenium               | 2 mg/L        | Sodium      | 200 mg/L      |
| Strontium              | 5 mg/L        | Thallium    | 10 mg/L       |
| Thorium                | 5 mg/L        | Uranium     | 5 mg/L        |
| Uranium-235            | .036 mg/L     | Uranium-238 | 4.964 mg/L    |
| Vanadium               | 5 mg/L        | Zinc        | 5 mg/L        |



# Standard Logbook

**Serial ID:** UI091015-B      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 02si  
**Description:** ICP-MS Spike for Soil Products  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 20 mg/L       | Molybdenum | 5 mg/L        |
| Silicon  | 200 mg/L      | Silver     | 5 mg/L        |
| Tin      | 5 mg/L        | Zirconium  | 5 mg/L        |

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 2000 mg/L     | Arsenic     | 200 mg/L      |
| Barium    | 200 mg/L      | Beryllium   | 200 mg/L      |
| Boron     | 200 mg/L      | Cadmium     | 200 mg/L      |
| Calcium   | 2000 mg/L     | Chromium    | 200 mg/L      |
| Cobalt    | 200 mg/L      | Copper      | 200 mg/L      |
| Iron      | 2000 mg/L     | Lead        | 200 mg/L      |
| Magnesium | 2000 mg/L     | Manganese   | 200 mg/L      |
| Nickel    | 200 mg/L      | Phosphorous | 1000 mg/L     |
| Potassium | 2000 mg/L     | Selenium    | 200 mg/L      |
| Sodium    | 2000 mg/L     | Strontium   | 200 mg/L      |
| Thallium  | 200 mg/L      | Uranium     | 200 mg/L      |
| Vanadium  | 200 mg/L      | Zinc        | 200 mg/L      |

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 200 mg/L      | Molybdenum | 200 mg/L      |
| Silver   | 200 mg/L      | Sulfur     | 400 mg/L      |

# Standard Logbook

| Analyte | Concentration | Analyte  | Concentration |
|---------|---------------|----------|---------------|
| Tin     | 200 mg/L      | Titanium | 200 mg/L      |

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRNMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Silica  | 2139 mg/L     | Silicon | 1000 mg/L     |

**Serial ID:** UI091217-06      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master A      **Received:** 17-DEC-09      **Catalog Number :** 160055-01  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018209  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2Si  
**Description:** ICPMS ICV/CCV SOLN A - 10ppm  
**Comments:** None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 2020 mg/L     | Calcium   | 2000 mg/L     |
| Iron        | 2000 mg/L     | Magnesium | 2000 mg/L     |
| Phosphorous | 2000 mg/L     | Potassium | 2000 mg/L     |
| Sodium      | 2000 mg/L     |           |               |

**Serial ID:** UI091217-07      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master B      **Received:** 17-DEC-09      **Catalog Number :** 160054-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018210  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2Si  
**Description:** ICPMS ICV/CCV Soln B - 10ppm  
**Comments:** None

| Analyte   | Concentration | Analyte   | Concentration |
|-----------|---------------|-----------|---------------|
| Arsenic   | 20 mg/L       | Barium    | 20 mg/L       |
| Beryllium | 20 mg/L       | Boron     | 40 mg/L       |
| Cadmium   | 20 mg/L       | Chromium  | 20 mg/L       |
| Cobalt    | 20 mg/L       | Copper    | 20 mg/L       |
| Lead      | 20 mg/L       | Lithium   | 20 mg/L       |
| Manganese | 20 mg/L       | Nickel    | 20 mg/L       |
| Selenium  | 20 mg/L       | Strontium | 20 mg/L       |
| Thallium  | 20 mg/L       | Thorium   | 20 mg/L       |

# Standard Logbook

| Analyte | Concentration | Analyte  | Concentration |
|---------|---------------|----------|---------------|
| Uranium | 20 mg/L       | Vanadium | 20 mg/L       |
| Zinc    | 20 mg/L       |          |               |

**Serial ID:** UI091217-08      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

| Analyte   | Concentration | Analyte    | Concentration |
|-----------|---------------|------------|---------------|
| Antimony  | 20 mg/L       | Molybdenum | 20 mg/L       |
| Silver    | 20 mg/L       | Tin        | 20 mg/L       |
| Titanium  | 20 mg/L       | Tungsten   | 20 mg/L       |
| Zirconium | 20 mg/L       |            |               |

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

| Analyte   | Concentration | Analyte   | Concentration |
|-----------|---------------|-----------|---------------|
| Arsenic   | 2 mg/L        | Barium    | 2 mg/L        |
| Beryllium | 2 mg/L        | Boron     | 2 mg/L        |
| Cadmium   | 2 mg/L        | Chromium  | 2 mg/L        |
| Cobalt    | 2 mg/L        | Copper    | 2 mg/L        |
| Lead      | 2 mg/L        | Lithium   | 2 mg/L        |
| Manganese | 2 mg/L        | Nickel    | 2 mg/L        |
| Selenium  | 2 mg/L        | Strontium | 2 mg/L        |
| Thallium  | 2 mg/L        | Thorium   | 2 mg/L        |
| Uranium   | 2 mg/L        | Vanadium  | 2 mg/L        |
| Zinc      | 2 mg/L        |           |               |

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master C  
**Comments:** None

# Standard Logbook

| Analyte   | Concentration | Analyte  | Concentration |
|-----------|---------------|----------|---------------|
| Antimony  | 2 mg/L        | Silver   | 2 mg/L        |
| Tin       | 2 mg/L        | Tungsten | 2 mg/L        |
| Zirconium | 2 mg/L        |          |               |

**Serial ID:** UI100205-01      **Opened:** 05-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 1000 ug/mL    | Arsenic     | 100 ug/mL     |
| Barium    | 100 ug/mL     | Beryllium   | 100 ug/mL     |
| Boron     | 100 ug/mL     | Cadmium     | 100 ug/mL     |
| Calcium   | 1000 ug/mL    | Cobalt      | 100 ug/mL     |
| Iron      | 1000 ug/mL    | Lead        | 100 ug/mL     |
| Magnesium | 1000 ug/mL    | Phosphorous | 100 ug/mL     |
| Potassium | 1000 ug/mL    | Silver      | 100 ug/mL     |
| Sodium    | 1000 ug/mL    | Strontium   | 100 ug/mL     |

**Serial ID:** UI100205-06      **Opened:** 05-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

| Analyte     | Concentration | Analyte     | Concentration |
|-------------|---------------|-------------|---------------|
| Antimony    | 100 ug/mL     | Chromium    | 100 ug/mL     |
| Copper      | 100 ug/mL     | Manganese   | 100 ug/mL     |
| Molybdenum  | 100 ug/mL     | Nickel      | 100 ug/mL     |
| Selenium    | 100 ug/mL     | Silica      | 2141 ug/mL    |
| Silicon     | 1000 ug/mL    | Sulfur      | 1000 ug/mL    |
| Thallium    | 100 ug/mL     | Tin         | 100 ug/mL     |
| Titanium    | 100 ug/mL     | Uranium     | 100 ug/mL     |
| Uranium-235 | .72 ug/mL     | Uranium-238 | 99.28 ug/mL   |
| Vanadium    | 100 ug/mL     | Zinc        | 100 ug/mL     |

# Standard Logbook

**Serial ID:** UI100217-48      **Opened:** 04-MAR-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 17-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-11      **Lot Number :** 1018878  
**Employee:** Helen Camello      **Solvent :** 3% HCl + 1% HNO3  
**Supplier:** o2si  
**Description:** Trace ICP Interferent Check Standard A  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Aluminum | 500000 UG/L   | Calcium   | 500000 UG/L   |
| Iron     | 200000 UG/L   | Magnesium | 500000 UG/L   |

**Serial ID:** UI100217-49.18      **Opened:** 11-MAR-10      **Amount :** 100 ml  
**Name:** Trace ICP ICSAB      **Received:** 17-FEB-10      **Catalog Number :** 160066-04  
**Type:** Source Material      **Expires:** 12-MAR-10      **Lot Number :** 1018879  
**Employee:** Helen Camello      **Solvent :** 3% HCl + 1% HNO3  
**Supplier:** o2si  
**Description:** Trace ICP Inteferent Check Standard AB  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 500000 ug/L   | Antimony    | 500 ug/L      |
| Arsenic   | 500 ug/L      | Barium      | 500 ug/L      |
| Beryllium | 250 ug/L      | Boron       | 500 ug/L      |
| Cadmium   | 500 ug/L      | Calcium     | 500000 ug/L   |
| Chromium  | 500 ug/L      | Cobalt      | 500 ug/L      |
| Copper    | 500 ug/L      | Iron        | 200000 ug/L   |
| Lead      | 500 ug/L      | Magnesium   | 500000 ug/L   |
| Manganese | 500 ug/L      | Molybdenum  | 500 ug/L      |
| Nickel    | 500 ug/L      | Phosphorous | 2500 ug/L     |
| Potassium | 5000 ug/L     | Selenium    | 2500 ug/L     |
| Silica    | 10696.5 ug/L  | Silicon     | 5000 ug/L     |
| Silver    | 250 ug/L      | Sodium      | 5000 ug/L     |
| Strontium | 500 ug/L      | Sulfur      | 2500 ug/L     |
| Thallium  | 500 ug/L      | Tin         | 500 ug/L      |
| Titanium  | 500 ug/L      | Uranium     | 500 ug/L      |
| Vanadium  | 500 ug/L      | Zinc        | 500 ug/L      |

**Serial ID:** UI100217-49.20      **Opened:** 15-MAR-10      **Amount :** 100 ml  
**Name:** Trace ICP ICSAB      **Received:** 17-FEB-10      **Catalog Number :** 160066-04  
**Type:** Source Material      **Expires:** 16-MAR-10      **Lot Number :** 1018879  
**Employee:** Helen Camello      **Solvent :** 3% HCl + 1% HNO3  
**Supplier:** o2si  
**Description:** Trace ICP Inteferent Check Standard AB  
**Comments:** None

# Standard Logbook

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 500000 ug/L   | Antimony    | 500 ug/L      |
| Arsenic   | 500 ug/L      | Barium      | 500 ug/L      |
| Beryllium | 250 ug/L      | Boron       | 500 ug/L      |
| Cadmium   | 500 ug/L      | Calcium     | 500000 ug/L   |
| Chromium  | 500 ug/L      | Cobalt      | 500 ug/L      |
| Copper    | 500 ug/L      | Iron        | 200000 ug/L   |
| Lead      | 500 ug/L      | Magnesium   | 500000 ug/L   |
| Manganese | 500 ug/L      | Molybdenum  | 500 ug/L      |
| Nickel    | 500 ug/L      | Phosphorous | 2500 ug/L     |
| Potassium | 5000 ug/L     | Selenium    | 2500 ug/L     |
| Silica    | 10696.5 ug/L  | Silicon     | 5000 ug/L     |
| Silver    | 250 ug/L      | Sodium      | 5000 ug/L     |
| Strontium | 500 ug/L      | Sulfur      | 2500 ug/L     |
| Thallium  | 500 ug/L      | Tin         | 500 ug/L      |
| Titanium  | 500 ug/L      | Uranium     | 500 ug/L      |
| Vanadium  | 500 ug/L      | Zinc        | 500 ug/L      |

**Serial ID:** UI100219-11      **Opened:** 19-FEB-10      **Amount :** 1000 mL  
**Name:** ICP-MS ICSA Master A      **Received:** 19-FEB-10      **Catalog Number :** 160013-01-01L  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018321  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3  
**Supplier:** Q2SI  
**Description:** ICP-MS ICSA Master A  
**Comments:** None

| Analyte    | Concentration | Analyte     | Concentration |
|------------|---------------|-------------|---------------|
| Aluminum   | 1000 mg/L     | Calcium     | 1000 mg/L     |
| Carbon     | 2000 mg/L     | Chloride    | 10000 mg/L    |
| Iron       | 1000 mg/L     | Magnesium   | 1000 mg/L     |
| Molybdenum | 20 mg/L       | Phosphorous | 1000 mg/L     |
| Potassium  | 1000 mg/L     | Sodium      | 1000 mg/L     |
| Sulfur     | 1000 mg/L     | Titanium    | 20 mg/L       |

**Serial ID:** UI100226-40      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Antimony | 10000 ug/L    | Arsenic   | 10000 ug/L    |
| Barium   | 15000 ug/L    | Beryllium | 3000 ug/L     |
| Boron    | 5000 ug/L     | Cadmium   | 10000 ug/L    |

# Standard Logbook

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Chromium  | 25000 ug/L    | Cobalt      | 10000 ug/L    |
| Copper    | 20000 ug/L    | Lead        | 25000 ug/L    |
| Manganese | 10000 ug/L    | Molybdenum  | 10000 ug/L    |
| Nickel    | 10000 ug/L    | Phosphorous | 15000 ug/L    |
| Potassium | 300000 ug/L   | Selenium    | 10000 ug/L    |
| Silica    | 107000 ug/L   | Silicon     | 50000 ug/L    |
| Silver    | 1000 ug/L     | Strontium   | 10000 ug/L    |
| Sulfur    | 50000 ug/L    | Thallium    | 10000 ug/L    |
| Tin       | 10000 ug/L    | Titanium    | 10000 ug/L    |
| Vanadium  | 10000 ug/L    | Zinc        | 15000 ug/L    |

**Serial ID:** UI100226-41      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Aluminum | 500000 ug/L   | Calcium   | 500000 ug/L   |
| Iron     | 500000 ug/L   | Magnesium | 500000 ug/L   |
| Sodium   | 500000 ug/L   | Uranium   | 15000 ug/L    |

**Serial ID:** UI100312-40      **Opened:** 14-MAR-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 12-MAR-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 14-MAR-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Antimony  | 10000 ug/L    | Arsenic     | 10000 ug/L    |
| Barium    | 15000 ug/L    | Beryllium   | 3000 ug/L     |
| Boron     | 5000 ug/L     | Cadmium     | 10000 ug/L    |
| Chromium  | 25000 ug/L    | Cobalt      | 10000 ug/L    |
| Copper    | 20000 ug/L    | Lead        | 25000 ug/L    |
| Manganese | 10000 ug/L    | Molybdenum  | 10000 ug/L    |
| Nickel    | 10000 ug/L    | Phosphorous | 15000 ug/L    |
| Potassium | 300000 ug/L   | Selenium    | 10000 ug/L    |
| Silica    | 107000 ug/L   | Silicon     | 50000 ug/L    |
| Silver    | 1000 ug/L     | Strontium   | 10000 ug/L    |
| Sulfur    | 50000 ug/L    | Thallium    | 10000 ug/L    |
| Tin       | 10000 ug/L    | Titanium    | 10000 ug/L    |

# Standard Logbook

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Vanadium       | 10000 ug/L           | Zinc           | 15000 ug/L           |

**Serial ID:** UI100312-41      **Opened:** 14-MAR-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 12-MAR-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 14-MAR-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Aluminum       | 500000 ug/L          | Calcium        | 500000 ug/L          |
| Iron           | 500000 ug/L          | Magnesium      | 500000 ug/L          |
| Sodium         | 500000 ug/L          | Uranium        | 15000 ug/L           |

**Serial ID:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCaSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution B  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Arsenic        | 10 mg/L              | Barium         | 10 mg/L              |
| Beryllium      | 10 mg/L              | Boron          | 20 mg/L              |
| Cadmium        | 10 mg/L              | Chromium       | 10 mg/L              |
| Cobalt         | 10 mg/L              | Copper         | 10 mg/L              |
| Lead           | 10 mg/L              | Lithium        | 10 mg/L              |
| Manganese      | 10 mg/L              | Nickel         | 10 mg/L              |
| Selenium       | 10 mg/L              | Silver         | 10 mg/L              |
| Strontium      | 10 mg/L              | Thallium       | 10 mg/L              |
| Thorium        | 10 mg/L              | Uranium        | 10 mg/L              |
| Vanadium       | 10 mg/L              | Zinc           | 10 mg/L              |

**Serial ID:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCaSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
|----------------|----------------------|----------------|----------------------|



# Standard Logbook

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 1000 mg/L     | Calcium   | 1000 mg/L     |
| Iron        | 1000 mg/L     | Magnesium | 1000 mg/L     |
| Phosphorous | 1000 mg/L     | Potassium | 1000 mg/L     |
| Sodium      | 1000 mg/L     |           |               |

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

| Analyte   | Concentration | Analyte    | Concentration |
|-----------|---------------|------------|---------------|
| Antimony  | 10 mg/L       | Molybdenum | 10 mg/L       |
| Tin       | 10 mg/L       | Titanium   | 10 mg/L       |
| Zirconium | 10 mg/L       |            |               |

**Serial ID:** IHG100301-01      **Opened:** 01-MAR-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 01-MAR-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 02-MAR-10      **Solvent :** 1mL HNO3 + TypeI H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167639-01   | Mercury | 1000 mg/L    | .05 mL  | 250 mL     | 200 ug/L    |

**Serial ID:** IHG100301-02      **Opened:** 01-MAR-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Intermediate      **Expires:** 02-MAR-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167641-02   | Mercury | 999.7 mg/L   | .05 mL  | 250 mL     | 200 ug/L    |

# Standard Logbook

**Serial ID:** WHG100301-07      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS0.2CRA      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working Standard 1st Source CAL S 0.2/CRA  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-01    | Mercury | 200 ug/L     | 30 uL   | 30 mL      | .2 ug/L     |

**Serial ID:** WHG100301-08      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS0.5      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working Standard 1st Source CAL S 0.5  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-01    | Mercury | 200 ug/L     | 75 uL   | 30 mL      | .5 ug/L     |

**Serial ID:** WHG100301-09      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS2.0      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL S 2.0  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-01    | Mercury | 200 ug/L     | 300 uL  | 30 mL      | 2 ug/L      |

**Serial ID:** WHG100301-10      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS5.0CCV      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL S 5.0/CCV  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-01    | Mercury | 200 ug/L     | 750 uL  | 30 mL      | 5 ug/L      |

# Standard Logbook

**Serial ID:** WHG100301-11      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL510.0      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL S 10.0  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-01    | Mercury | 200 ug/L     | 1.5 mL  | 30 mL      | 10 ug/L     |

**Serial ID:** WHG100301-12      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKS5.0ICV      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 2nd Source S 5.0/ICV  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100301-02    | Mercury | 200 ug/L     | 750 uL  | 30 mL      | 5 ug/L      |

**Serial ID:** WHG100301-14      **Opened:** 01-MAR-10      **Pipet Id :** Hg1289245  
**Name:** MHGSOILMSSPIKE      **Received:** 01-MAR-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 08-MAR-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury soil working intermediate standard for MS  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167639-01   | Mercury | 1000 mg/L    | .05 mL  | 250 mL     | 200 ug/L    |

**Serial ID:** WI100311-42      **Opened:** 11-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.1 PPM CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte  | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| WI100311-44     | Aluminum | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Antimony | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Arsenic  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Barium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WI100311-44     | Beryllium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Boron       | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Cadmium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Calcium     | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Chromium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Cobalt      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Copper      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Iron        | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Lead        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Magnesium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Manganese   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Molybdenum  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Nickel      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Phosphorous | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100311-44     | Potassium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Selenium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Silica      | 10698 ug/L   | 10 mL   | 100 mL     | 1069 ug/L   |
| WI100311-44     | Silicon     | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100311-44     | Silver      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Sodium      | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100311-44     | Strontium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Sulfur      | 2000 ug/L    | 10 mL   | 100 mL     | 200 ug/L    |
| WI100311-44     | Thallium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Tin         | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Titanium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Uranium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Vanadium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100311-44     | Zinc        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |

**Serial ID:** WI100311-43      **Opened:** 11-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-----------|--------------|---------|------------|--------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 5 mL    | 1000 mL    | 5000 UG/L    |
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL  | 1000 mL    | 5348.25 UG/L |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL  | 1000 mL    | 2500 UG/L    |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L    |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091102-40     | Boron       | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Cadmium     | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Calcium     | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Chromium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Cobalt      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL  | 1000 mL    | 2500 UG/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL  | 1000 mL    | 1000 UG/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |

**Serial ID:** WI100311-44      **Opened:** 11-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-MAR-10      **Solvent :** 3%HCL and 1 %HNO3-1281689  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL  | 500 mL     | 10698 ug/L  |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Boron     | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cadmium   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Calcium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091102-40     | Chromium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cobalt      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL  | 500 mL     | 2000 ug/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |

**Serial ID:** WI100311-45      **Opened:** 11-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 10 mL   | 500 mL     | 20000 UG/L  |
| UI090422-40     | Aluminum  | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Calcium   | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Iron      | 2000 mg/L    | 5 mL    | 500 mL     | 20000 UG/L  |
| UI090422-40     | Magnesium | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |

**Serial ID:** WI100311-46      **Opened:** 11-MAR-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 12-MAR-10      **Solvent :** 3%HCL AND 1%HNO3-1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals

# Standard Logbook

Comments: None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090925-40     | Aluminum    | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Arsenic     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Barium      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Boron       | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cadmium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Calcium     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Chromium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cobalt      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Copper      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Iron        | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Lead        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Phosphorous | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Potassium   | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Selenium    | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Sodium      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Strontium   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Antimony    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Beryllium   | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Magnesium   | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-41     | Manganese   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Molybdenum  | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Nickel      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Silver      | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Sulfur      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-41     | Thallium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Tin         | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Titanium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Uranium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Vanadium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Zinc        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI091102-42     | Silica      | 2139 mg/L    | 2.5 mL  | 500 mL     | 10695 ug/L  |
| UI091102-42     | Silicon     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |

Serial ID: WI100311-47

Opened: 11-MAR-10

Balance Id : 216

Name: PQL Working Standard

Received: 30-JUN-09

Pipet Id : 3581809

Type: Working

Expires: 12-MAR-10

Solvent : 3%HCL & 1%HNO3-1281689

Employee: Helen Camello

Supplier: 02si

Description: PQL Working Standard

Comments: None

| Parent Material | Analyte  | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| UI090701-40     | Aluminum | 100 mg/L     | 2 mL    | 1000 mL    | 200 ug/L    |
| UI090701-40     | Antimony | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090701-40     | Arsenic     | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |
| UI090701-40     | Barium      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Beryllium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Boron       | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Cadmium     | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Calcium     | 100 mg/L     | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Chromium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Cobalt      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Copper      | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Iron        | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Lead        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Magnesium   | 150 mg/L     | 2 mL    | 1000 mL    | 300 ug/L    |
| UI090701-40     | Manganese   | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Molybdenum  | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Nickel      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Phosphorous | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Potassium   | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Selenium    | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |
| UI090701-40     | Silicon     | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Silver      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sodium      | 150 mg/L     | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Strontium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sulfur      | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Thallium    | 10 mg/L      | 2 mL    | 1000 mL    | 20 ug/L     |
| UI090701-40     | Tin         | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Titanium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Uranium     | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Vanadium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Zinc        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |

**Serial ID:** WI100315-42      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 16-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1285629  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.1 PPM CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| WI100315-44     | Aluminum  | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Antimony  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Arsenic   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Barium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Beryllium | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Boron     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |



# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WI100315-44     | Cadmium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Calcium     | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Chromium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Cobalt      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Copper      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Iron        | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Lead        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Magnesium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Manganese   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Molybdenum  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Nickel      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Phosphorous | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100315-44     | Potassium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Selenium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Silica      | 10698 ug/L   | 10 mL   | 100 mL     | 1069 ug/L   |
| WI100315-44     | Silicon     | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100315-44     | Silver      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Sodium      | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100315-44     | Strontium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Sulfur      | 2000 ug/L    | 10 mL   | 100 mL     | 200 ug/L    |
| WI100315-44     | Thallium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Tin         | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Titanium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Uranium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Vanadium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100315-44     | Zinc        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |

**Serial ID:** WI100315-43      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 16-MAR-10      **Solvent :** 3%HCL and 1%HNO3 --1285629  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-----------|--------------|---------|------------|--------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 5 mL    | 1000 mL    | 5000 UG/L    |
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL  | 1000 mL    | 5348.25 UG/L |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL  | 1000 mL    | 2500 UG/L    |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L    |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Boron     | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Cadmium   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |

## Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|-------------|
| UI091102-40     | Calcium     | 2000 mg/L    | 2.5 mL   | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Chromium    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Cobalt      | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL   | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL   | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL   | 1000 mL    | 2500 UG/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL   | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL   | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL   | 1000 mL    | 1000 UG/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL   | 1000 mL    | 500 UG/L    |

**Serial ID:** WI100315-44      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 3%HCL and 1 %HNO3-1285629  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|----------|------------|-------------|
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL   | 500 mL     | 10698 ug/L  |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL   | 500 mL     | 5000 ug/L   |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL   | 500 mL     | 10000 ug/L  |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Boron     | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cadmium   | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Calcium   | 2000 mg/L    | 2.5 mL   | 500 mL     | 10000 ug/L  |
| UI091102-40     | Chromium  | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cobalt    | 200 mg/L     | 2.5 mL   | 500 mL     | 1000 ug/L   |

## Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL  | 500 mL     | 2000 ug/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |

**Serial ID:** WI100315-45      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1285629  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 10 mL   | 500 mL     | 20000 UG/L  |
| UI090422-40     | Aluminum  | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Calcium   | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Iron      | 2000 mg/L    | 5 mL    | 500 mL     | 20000 UG/L  |
| UI090422-40     | Magnesium | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |

**Serial ID:** WI100315-46      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 3%HCL AND 1%HNO3-1285629  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090925-40     | Aluminum    | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Arsenic     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Barium      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Boron       | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cadmium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Calcium     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Chromium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cobalt      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Copper      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Iron        | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Lead        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Phosphorous | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Potassium   | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Selenium    | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Sodium      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Strontium   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Antimony    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Beryllium   | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Magnesium   | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-41     | Manganese   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Molybdenum  | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Nickel      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Silver      | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Sulfur      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-41     | Thallium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Tin         | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Titanium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Uranium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Vanadium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Zinc        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI091102-42     | Silica      | 2139 mg/L    | 2.5 mL  | 500 mL     | 10695 ug/L  |
| UI091102-42     | Silicon     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |

**Serial ID:** WI100315-47      **Opened:** 15-MAR-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 3%HCL & 1%HNO3-1285629  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

| Parent Material | Analyte  | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| UI090701-40     | Aluminum | 100 mg/L     | 2 mL    | 1000 mL    | 200 ug/L    |
| UI090701-40     | Antimony | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Arsenic  | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090701-40     | Barium      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Beryllium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Boron       | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Cadmium     | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Calcium     | 100 mg/L     | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Chromium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Cobalt      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Copper      | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Iron        | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Lead        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Magnesium   | 150 mg/L     | 2 mL    | 1000 mL    | 300 ug/L    |
| UI090701-40     | Manganese   | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Molybdenum  | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Nickel      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Phosphorous | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Potassium   | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Selenium    | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |
| UI090701-40     | Silicon     | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Silver      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sodium      | 150 mg/L     | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Strontium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sulfur      | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Thallium    | 10 mg/L      | 2 mL    | 1000 mL    | 20 ug/L     |
| UI090701-40     | Tin         | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Titanium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Uranium     | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Vanadium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Zinc        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |

**Serial ID:** WMS100314-04      **Opened:** 14-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 14-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 15-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl-1281622  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090612-02     | Tungsten  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/L    |
| UMS100226-01    | Arsenic   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Barium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Beryllium | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Boron     | 20 mg/L      | .5 mL   | 50 mL      | 200 ug/l    |
| UMS100226-01    | Cadmium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Chromium  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |

## Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UMS100226-01    | Cobalt      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Copper      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lead        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lithium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Manganese   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Nickel      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Selenium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Silver      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Strontium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thallium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thorium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Uranium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Vanadium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Zinc        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-02    | Aluminum    | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Calcium     | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Iron        | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Magnesium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Phosphorous | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Potassium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Sodium      | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-03    | Antimony    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Molybdenum  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Tin         | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Titanium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Zirconium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |

**Serial ID:** WMS100314-04A      **Opened:** 14-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 14-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 15-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| WMS100314-04    | Aluminum  | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Antimony  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Arsenic   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Barium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Beryllium | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Boron     | 200 ug/l     | 5 mL    | 50 mL      | 20 ug/l     |
| WMS100314-04    | Cadmium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Calcium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Chromium  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WMS100314-04    | Cobalt      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Copper      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Iron        | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Lead        | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Lithium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Magnesium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Manganese   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Molybdenum  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Nickel      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Phosphorous | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Potassium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Selenium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Silver      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Sodium      | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100314-04    | Strontium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Thallium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Thorium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Tin         | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Titanium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Tungsten    | 100 ug/L     | 5 mL    | 50 mL      | 10 ug/L     |
| WMS100314-04    | Uranium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Vanadium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Zinc        | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100314-04    | Zirconium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |

**Serial ID:** WMS100314-05      **Opened:** 14-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 14-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 15-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091217-06     | Aluminum    | 2020 mg/L    | .125 mL | 50 mL      | 5050 ug/L   |
| UI091217-06     | Calcium     | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Iron        | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Magnesium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Phosphorous | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Potassium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Sodium      | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-07     | Arsenic     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Barium      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Beryllium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Boron       | 40 mg/L      | .125 mL | 50 mL      | 100 ug/L    |

# Standard Logbook

| Parent Material | Analyte    | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|------------|--------------|---------|------------|-------------|
| UI091217-07     | Cadmium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Chromium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Cobalt     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Copper     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lead       | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lithium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Manganese  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Nickel     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Selenium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Strontium  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thallium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thorium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Uranium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Vanadium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Zinc       | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Antimony   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Molybdenum | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Silver     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tin        | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Titanium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tungsten   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Zirconium  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |

**Serial ID:** WMS100314-06      **Opened:** 14-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 14-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 15-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090701-09     | Aluminum  | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Arsenic   | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Barium    | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Beryllium | .5 mg/L      | .05 mL  | 50 mL      | .5 ug/L     |
| UI090701-09     | Boron     | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Cadmium   | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Calcium   | 100 mg/L     | .05 mL  | 50 mL      | 100 ug/L    |
| UI090701-09     | Chromium  | 3 mg/L       | .05 mL  | 50 mL      | 3 ug/L      |
| UI090701-09     | Cobalt    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Copper    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Iron      | 25 mg/L      | .05 mL  | 50 mL      | 25 ug/L     |
| UI090701-09     | Lead      | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Lithium   | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |



# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090701-09     | Magnesium   | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Manganese   | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Nickel      | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Phosphorous | 50 mg/L      | .05 mL  | 50 mL      | 50 ug/L     |
| UI090701-09     | Potassium   | 300 mg/L     | .05 mL  | 50 mL      | 300 ug/L    |
| UI090701-09     | Selenium    | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Sodium      | 250 mg/L     | .05 mL  | 50 mL      | 250 ug/L    |
| UI090701-09     | Strontium   | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Thallium    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Thorium     | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Uranium     | .2 mg/L      | .05 mL  | 50 mL      | .2 ug/L     |
| UI090701-09     | Vanadium    | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Zinc        | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-10     | Antimony    | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-10     | Molybdenum  | .5 mg/L      | .05 mL  | 50 mL      | .5 ug/L     |
| UI090701-10     | Silver      | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-10     | Tin         | 2 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-10     | Titanium    | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-10     | Tungsten    | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-10     | Zirconium   | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |

**Serial ID:** WMS100314-07      **Opened:** 14-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 14-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 15-MAR-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL    | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |

# Standard Logbook

**Serial ID:** WMS100314-08      **Opened:** 14-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 14-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 15-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI091217-12     | Arsenic     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Barium      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Beryllium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Boron       | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Cadmium     | 2 mg/L       | .5 mL   | 50 mL      | 20.2 ug/L    |
| UI091217-12     | Chromium    | 2 mg/L       | .5 mL   | 50 mL      | 22.2 ug/L    |
| UI091217-12     | Cobalt      | 2 mg/L       | .5 mL   | 50 mL      | 20.4 ug/L    |
| UI091217-12     | Copper      | 2 mg/L       | .5 mL   | 50 mL      | 23.4 ug/L    |
| UI091217-12     | Lead        | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Lithium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Manganese   | 2 mg/L       | .5 mL   | 50 mL      | 22.7 ug/L    |
| UI091217-12     | Nickel      | 2 mg/L       | .5 mL   | 50 mL      | 22.4 ug/L    |
| UI091217-12     | Selenium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Strontium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Thallium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Thorium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Uranium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Vanadium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Zinc        | 2 mg/L       | .5 mL   | 50 mL      | 27 ug/L      |
| UI091217-13     | Antimony    | 2 mg/L       | .5 mL   | 50 mL      | 20.5 ug/L    |
| UI091217-13     | Silver      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tin         | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tungsten    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Zirconium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL    | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |

# Standard Logbook

**Serial ID:** WMS100315-04      **Opened:** 15-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 15-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 16-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1285348  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| U1090612-02     | Tungsten    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/L    |
| UMS100226-01    | Arsenic     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Barium      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Beryllium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Boron       | 20 mg/L      | .5 mL   | 50 mL      | 200 ug/l    |
| UMS100226-01    | Cadmium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Chromium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Cobalt      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Copper      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lead        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lithium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Manganese   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Nickel      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Selenium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Silver      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Strontium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thallium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thorium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Uranium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Vanadium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Zinc        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-02    | Aluminum    | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Calcium     | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Iron        | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Magnesium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Phosphorous | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Potassium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Sodium      | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-03    | Antimony    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Molybdenum  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Tin         | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Titanium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Zirconium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |

# Standard Logbook

**Serial ID:** WMS100315-04A      **Opened:** 15-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 15-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1285348  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|-------------|
| WMS100315-04    | Aluminum    | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Antimony    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Arsenic     | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Barium      | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Beryllium   | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Boron       | 200 ug/l     | 5 mL     | 50 mL      | 20 ug/l     |
| WMS100315-04    | Cadmium     | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Calcium     | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Chromium    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Cobalt      | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Copper      | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Iron        | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Lead        | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Lithium     | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Magnesium   | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Manganese   | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Molybdenum  | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Nickel      | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Phosphorous | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Potassium   | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Selenium    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Silver      | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Sodium      | 10000 ug/l   | 5 mL     | 50 mL      | 1000 ug/l   |
| WMS100315-04    | Strontium   | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Thallium    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Thorium     | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Tin         | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Titanium    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Tungsten    | 100 ug/L     | 5 mL     | 50 mL      | 10 ug/L     |
| WMS100315-04    | Uranium     | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Vanadium    | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Zinc        | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |
| WMS100315-04    | Zirconium   | 100 ug/l     | 5 mL     | 50 mL      | 10 ug/l     |

# Standard Logbook

**Serial ID:** WMS100315-05      **Opened:** 15-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 15-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1285348  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091217-06     | Aluminum    | 2020 mg/L    | .125 mL | 50 mL      | 5050 ug/L   |
| UI091217-06     | Calcium     | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Iron        | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Magnesium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Phosphorous | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Potassium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Sodium      | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-07     | Arsenic     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Barium      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Beryllium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Boron       | 40 mg/L      | .125 mL | 50 mL      | 100 ug/L    |
| UI091217-07     | Cadmium     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Chromium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Cobalt      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Copper      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lead        | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lithium     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Manganese   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Nickel      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Selenium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Strontium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thallium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thorium     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Uranium     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Vanadium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Zinc        | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Antimony    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Molybdenum  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Silver      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tin         | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Titanium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tungsten    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Zirconium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |

# Standard Logbook

**Serial ID:** WMS100315-06      **Opened:** 15-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 15-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1285348  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090701-09     | Aluminum    | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Arsenic     | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Barium      | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Beryllium   | .5 mg/L      | .05 mL  | 50 mL      | .5 ug/L     |
| UI090701-09     | Boron       | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Cadmium     | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Calcium     | 100 mg/L     | .05 mL  | 50 mL      | 100 ug/L    |
| UI090701-09     | Chromium    | 3 mg/L       | .05 mL  | 50 mL      | 3 ug/L      |
| UI090701-09     | Cobalt      | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Copper      | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Iron        | 25 mg/L      | .05 mL  | 50 mL      | 25 ug/L     |
| UI090701-09     | Lead        | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Lithium     | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Magnesium   | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Manganese   | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Nickel      | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Phosphorous | 50 mg/L      | .05 mL  | 50 mL      | 50 ug/L     |
| UI090701-09     | Potassium   | 300 mg/L     | .05 mL  | 50 mL      | 300 ug/L    |
| UI090701-09     | Selenium    | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Sodium      | 250 mg/L     | .05 mL  | 50 mL      | 250 ug/L    |
| UI090701-09     | Strontium   | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Thallium    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Thorium     | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Uranium     | .2 mg/L      | .05 mL  | 50 mL      | .2 ug/L     |
| UI090701-09     | Vanadium    | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Zinc        | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-10     | Antimony    | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-10     | Molybdenum  | .5 mg/L      | .05 mL  | 50 mL      | .5 ug/L     |
| UI090701-10     | Silver      | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-10     | Tin         | 2 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-10     | Titanium    | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-10     | Tungsten    | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-10     | Zirconium   | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |

# Standard Logbook

**Serial ID:** WMS100315-07      **Opened:** 15-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 15-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 16-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1285348  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL    | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |

**Serial ID:** WMS100315-08      **Opened:** 15-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 15-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 16-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1285348  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI091217-12     | Arsenic   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Barium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Beryllium | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Boron     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Cadmium   | 2 mg/L       | .5 mL   | 50 mL      | 20.2 ug/L   |
| UI091217-12     | Chromium  | 2 mg/L       | .5 mL   | 50 mL      | 22.2 ug/L   |
| UI091217-12     | Cobalt    | 2 mg/L       | .5 mL   | 50 mL      | 20.4 ug/L   |
| UI091217-12     | Copper    | 2 mg/L       | .5 mL   | 50 mL      | 23.4 ug/L   |
| UI091217-12     | Lead      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Lithium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Manganese | 2 mg/L       | .5 mL   | 50 mL      | 22.7 ug/L   |
| UI091217-12     | Nickel    | 2 mg/L       | .5 mL   | 50 mL      | 22.4 ug/L   |
| UI091217-12     | Selenium  | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Strontium | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Thallium  | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Thorium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |
| UI091217-12     | Uranium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI091217-12     | Vanadium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Zinc        | 2 mg/L       | .5 mL   | 50 mL      | 27 ug/L      |
| UI091217-13     | Antimony    | 2 mg/L       | .5 mL   | 50 mL      | 20.5 ug/L    |
| UI091217-13     | Silver      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tin         | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tungsten    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Zirconium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL    | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |

**Serial ID:** 100202      **Opened:** 02-FEB-10      **Lot Number :** 200930201  
**Name:** I-HCL      **Received:** 02-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 02-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

**Serial ID:** 1100721TCLP      **Opened:** 16-APR-09      **Lot Number :** H02026 L  
**Name:** I-HNO3      **Received:** 02-APR-09  
**Type:** Reagent/Solvent      **Expires:** 02-APR-10  
**Employee:** Clifford Postell  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

**Serial ID:** 1156689-A      **Opened:** 20-JUL-09      **Lot Number :** 41226920  
**Name:** B-KMnO4(VWR)-MER      **Received:** 20-JUL-09  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin      **Verified:** 07-AUG-07  
**Supplier:** VWR  
**Description:** Potassium Permanganate  
**Comments:** None



# Standard Logbook

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCI-MER      **Received:** 12-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 12-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** Fisher Scientific  
**Description:** Hydroxylamine Hydrochloride  
**Comments:** None

**Serial ID:** 1250038-02      **Opened:** 04-JAN-10      **Lot Number :** ZU74081198 mL  
**Name:** B-H2O2      **Received:** 04-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 04-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** EM SCIENCE  
**Description:** Hydrogen Peroxide 30%  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCI-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

| Parent Material | Analyte         | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------------|--------------|---------|------------|-------------|
| 1228372-A       | B-NH2OH.HCI-MER | N/A          | 120 g   | 1000 mL    | N/A         |

**Serial ID:** 1265209      **Opened:** 04-FEB-10      **Lot Number :** J02039  
**Name:** I-HCL      **Received:** 04-FEB-10      **Preservative\_Id :** 5 none  
**Type:** Reagent/Solvent      **Expires:** 04-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

**Serial ID:** 1268732      **Opened:** 11-FEB-10      **Lot Number :** H12022 L  
**Name:** I-HNO3      **Received:** 11-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

# Standard Logbook

**Serial ID:** 1274391-1      **Opened:** 24-FEB-10      **Instrument Id :** MERCURY  
**Name:** B-HNO3-MER      **Received:** 24-FEB-10      **Lot Number :** H44025  
**Type:** Reagent/Solvent      **Expires:** 24-FEB-11  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt Chemicals  
**Description:** NITRIC ACID  
**Comments:** None

**Serial ID:** 1274394-A      **Opened:** 24-FEB-10      **Lot Number :** J02039  
**Name:** B-HCl-MER      **Received:** 24-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 01-MAR-10  
**Employee:** Tara Griffin  
**Supplier:** J T Baker  
**Description:** Hydrochloric Acid Conc.  
**Comments:** None

**Serial ID:** 1274397-C      **Opened:** 24-FEB-10      **Balance Id :** BAL-002  
**Name:** B-KMnO4-MER      **Received:** 24-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% KMnO4 solution  
**Comments:** None

| Parent Material | Analyte          | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|------------------|--------------|---------|------------|-------------|
| 1156689-A       | B-KMnO4(VWR)-MER | Crystals     | 50 g    | 1000 mL    | 3%          |

**Serial ID:** 1281622      **Opened:** 08-MAR-10      **Solvent :** Type I Water  
**Name:** B-2%HNO3/1%HCl-ICPMS      **Received:** 08-MAR-10  
**Type:** Reagent/Solvent      **Expires:** 15-MAR-10  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** 2%HNO3/1%HCl Solution (Type I Water)  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| 100202          | I-HCL   | 36.5-38.0    | 90 mL   | 9 l        | N/A         |
| 1100721TCLP     | I-HNO3  | 69.0-70.0    | 180 mL  | 9 l        | N/A         |

**Serial ID:** 1281689      **Opened:** 08-MAR-10      **Amount :** 20 L  
**Name:** B-ICP-RINSE SOLN      **Received:** 01-MAR-10      **Lot Number :** H04040+G34050  
**Type:** Reagent/Solvent      **Expires:** 14-MAR-10      **Solvent :** 3%HCL+1%HNO3  
**Employee:** Helen Camello  
**Supplier:** GEL

## Standard Logbook

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

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Serial ID: 1285348      Opened: 15-MAR-10      Solvent :      Type I Water

Name: B-2%HNO3/1%HCl-ICPMS      Received: 15-MAR-10

Type: Reagent/Solvent      Expires: 22-MAR-10

Employee: Paul Boyd

Supplier: GEL

Description: 2%HNO3/1%HCl Solution (Type I Water)

Comments: None

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| Parent Material | Analyte | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| 100202          | I-HCL   | 36.5-38.0    | 90 mL   | 9 l        | N/A         |
| 1100721TCLP     | I-HNO3  | 69.0-70.0    | 180 mL  | 9 l        | N/A         |

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Serial ID: 1285629      Opened: 15-MAR-10      Amount :      20 L

Name: B-ICP-RINSE SOLN      Received: 05-MAR-10      Lot Number :      H04040+G34050

Type: Reagent/Solvent      Expires: 21-MAR-10      Solvent :      3%HCL+1%HNO3

Employee: Helen Camello

Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

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# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1863-1**

**Sample Analysis**

| <b>Sample ID</b> | <b>Client ID</b>                                 |
|------------------|--|
| 247192001        | RE15-10-8235                                     |
| 1202046565       | Method Blank (MB) ICP                            |
| 1202046566       | Laboratory Control Sample (LCS)                  |
| 1202046569       | 247192001(RE15-10-8235L) Serial Dilution (SD)    |
| 1202046567       | 247192001(RE15-10-8235D) Sample Duplicate (DUP)  |
| 1202046568       | 247192001(RE15-10-8235S) Matrix Spike (MS)       |
| 1202046570       | Method Blank (MB) ICP-MS                         |
| 1202046571       | Laboratory Control Sample (LCS)                  |
| 1202046574       | 247192001(RE15-10-8235L) Serial Dilution (SD)    |
| 1202046572       | 247192001(RE15-10-8235D) Sample Duplicate (DUP)  |
| 1202046573       | 247192001(RE15-10-8235S) Matrix Spike (MS)       |
| 1202052034       | Method Blank (MB) CVAA                           |
| 1202052035       | Laboratory Control Sample (LCS)                  |
| 1202052041       | 247548001(RE46-10-13373L) Serial Dilution (SD)   |
| 1202052036       | 247548001(RE46-10-13373D) Sample Duplicate (DUP) |
| 1202052037       | 247548001(RE46-10-13373S) Matrix Spike (MS)      |

The samples in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

**Analytical Batch:** 954668, 954670 and 957034

**Prep Batch :** 954667, 954669 and 957032

**Standard Operating Procedures:** GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23

**Analytical Method:** SW846 3005/6010B, SW846 3005/6020 and SW846 7470A

**Prep Method :** SW846 3005A and SW846 7470A Prep

#### **Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

#### **System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

#### **Calibration Information**

##### **Instrument Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

##### **CRDL Requirements**

All CRDL standards met the advisory control limits with the exceptions of thallium and iron, which recovered outside of the advisory limits of 70-130%.

**ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 247192001 (RE15-10-8235) and 247548001 (RE46-10-13373).

**Matrix Spike (MS) Recovery Statement**

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

**Duplicate Relative Percent Difference (RPD) Statement**

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

**Serial Dilution % Difference Statement**

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

**Technical Information****Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.



**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information****Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

Reviewer: Kristen Parson Date: 3/15/10

# Sample Data Summary

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1863-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247192001

BASIS: As Received

DATE COLLECTED 10-FEB-10

CLIENT ID: RE15-10-8235

LEVEL: Low

DATE RECEIVED 16-FEB-10

MATRIX: WATER

%SOLIDS: 0

| CAS No.   | Analyte   | Result | Units | Qual | MDL   | PQL | CRDL | DF | M* | Analyst | Run Date       | Analytical Run | Analytical Batch |
|-----------|-----------|--------|-------|------|-------|-----|------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum  | 200    | ug/L  | U    | 68    | 200 | 200  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-36-0 | Antimony  | 3      | ug/L  | U    | 1     | 3   | 3    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-38-2 | Arsenic   | 30     | ug/L  | U    | 5     | 30  | 30   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-39-3 | Barium    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-41-7 | Beryllium | 0.50   | ug/L  | U    | 0.1   | 0.5 | 0.5  | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-43-9 | Cadmium   | 1      | ug/L  | U    | 0.11  | 1   | 1    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-70-2 | Calcium   | 200    | ug/L  | U    | 50    | 200 | 200  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-47-3 | Chromium  | 1.62   | ug/L  | J    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-48-4 | Cobalt    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-50-8 | Copper    | 10     | ug/L  | U    | 3     | 10  | 10   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-89-6 | Iron      | 100    | ug/L  | U    | 30    | 100 | 100  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-92-1 | Lead      | 2      | ug/L  | U    | 0.5   | 2   | 2    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7439-95-4 | Magnesium | 300    | ug/L  | U    | 85    | 300 | 300  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7439-96-5 | Manganese | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | MS | BAJ     | 03/14/10 09:52 | 100313-5       | 954670           |
| 7439-97-6 | Mercury   | 0.20   | ug/L  | U    | 0.066 | 0.2 | 0.2  | 1  | AV | JXL1    | 02/25/10 12:52 | 022510W1-6     | 957034           |
| 7440-02-0 | Nickel    | 5      | ug/L  | U    | 1.5   | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-09-7 | Potassium | 204    | ug/L  |      | 50    | 150 | 150  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7782-49-2 | Selenium  | 30     | ug/L  | U    | 5     | 30  | 30   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-22-4 | Silver    | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-23-5 | Sodium    | 251    | ug/L  | J    | 100   | 300 | 300  | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-28-0 | Thallium  | 1      | ug/L  | U    | 0.3   | 1   | 1    | 1  | MS | BAJ     | 03/14/10 05:19 | 100313-2       | 954670           |
| 7440-62-2 | Vanadium  | 5      | ug/L  | U    | 1     | 5   | 5    | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |
| 7440-66-6 | Zinc      | 10     | ug/L  | U    | 3.3   | 10  | 10   | 1  | P  | HSC     | 03/10/10 20:26 | 031010-1       | 954668           |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method      | Initial wt./vol. | Units | Final wt./vol. | Units | Date     | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 954668           | 954667     | SW846 3005A      | 50               | mL    | 50             | mL    | 02/24/10 | AXG2    |
| 954670           | 954669     | SW846 3005A      | 50               | mL    | 50             | mL    | 02/24/10 | AXG2    |
| 957034           | 957032     | SW846 7470A Prep | 20               | mL    | 20             | mL    | 02/24/10 | TXB3    |

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| ICV01            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.12          | ug/L         | 5                 | ug/L         | 102.5             | 90.0 – 110.0                  | AV       | 25-FEB-10 11:07           | 022510W1-6        |
|                  | Aluminum       | 4920          | ug/L         | 5000              | ug/L         | 98.4              | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Arsenic        | 480           | ug/L         | 500               | ug/L         | 96.1              | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Barium         | 510           | ug/L         | 500               | ug/L         | 101.9             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Calcium        | 5040          | ug/L         | 5000              | ug/L         | 100.9             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Chromium       | 489           | ug/L         | 500               | ug/L         | 97.8              | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Cobalt         | 518           | ug/L         | 500               | ug/L         | 103.6             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Copper         | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Iron           | 5060          | ug/L         | 5000              | ug/L         | 101.2             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Magnesium      | 5270          | ug/L         | 5000              | ug/L         | 105.4             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Nickel         | 511           | ug/L         | 500               | ug/L         | 102.2             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Potassium      | 2450          | ug/L         | 2500              | ug/L         | 97.9              | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Selenium       | 2580          | ug/L         | 2500              | ug/L         | 103.1             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Silver         | 258           | ug/L         | 250               | ug/L         | 103.3             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Sodium         | 2370          | ug/L         | 2500              | ug/L         | 94.7              | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Vanadium       | 512           | ug/L         | 500               | ug/L         | 102.4             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Zinc           | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:06           | 031010-1          |
|                  | Antimony       | 52.3          | ug/L         | 50                | ug/L         | 104.6             | 90.0 – 110.0                  | MS       | 14-MAR-10 03:39           | 100313-2          |
|                  | Beryllium      | 49.8          | ug/L         | 50                | ug/L         | 99.5              | 90.0 – 110.0                  | MS       | 14-MAR-10 03:39           | 100313-2          |
|                  | Cadmium        | 50.5          | ug/L         | 50                | ug/L         | 100.9             | 90.0 – 110.0                  | MS       | 14-MAR-10 03:39           | 100313-2          |
|                  | Lead           | 51.8          | ug/L         | 50                | ug/L         | 103.7             | 90.0 – 110.0                  | MS       | 14-MAR-10 03:39           | 100313-2          |
|                  | Thallium       | 50.7          | ug/L         | 50                | ug/L         | 101.3             | 90.0 – 110.0                  | MS       | 14-MAR-10 03:39           | 100313-2          |
|                  | Manganese      | 49.8          | ug/L         | 50                | ug/L         | 99.6              | 90.0 – 110.0                  | MS       | 14-MAR-10 09:16           | 100313-5          |
| CCV01            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 4.94          | ug/L         | 5                 | ug/L         | 98.7              | 80.0 – 120.0                  | AV       | 25-FEB-10 11:13           | 022510W1-6        |
|                  | Aluminum       | 4850          | ug/L         | 5000              | ug/L         | 97                | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Arsenic        | 528           | ug/L         | 500               | ug/L         | 105.5             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Barium         | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Calcium        | 5150          | ug/L         | 5000              | ug/L         | 103               | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Chromium       | 504           | ug/L         | 500               | ug/L         | 100.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Cobalt         | 515           | ug/L         | 500               | ug/L         | 103               | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Copper         | 497           | ug/L         | 500               | ug/L         | 99.4              | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Iron           | 5040          | ug/L         | 5000              | ug/L         | 100.7             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Magnesium      | 5310          | ug/L         | 5000              | ug/L         | 106.3             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Nickel         | 514           | ug/L         | 500               | ug/L         | 102.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Potassium      | 5590          | ug/L         | 5000              | ug/L         | 111.8             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Selenium       | 526           | ug/L         | 500               | ug/L         | 105.1             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Silver         | 505           | ug/L         | 500               | ug/L         | 100.9             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Sodium         | 9360          | ug/L         | 10000             | ug/L         | 93.6              | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Vanadium       | 507           | ug/L         | 500               | ug/L         | 101.5             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Zinc           | 502           | ug/L         | 500               | ug/L         | 100.3             | 90.0 – 110.0                  | P        | 10-MAR-10 17:55           | 031010-1          |
|                  | Antimony       | 49.5          | ug/L         | 50                | ug/L         | 99                | 90.0 – 110.0                  | MS       | 14-MAR-10 03:59           | 100313-2          |
|                  | Beryllium      | 46.8          | ug/L         | 50                | ug/L         | 93.7              | 90.0 – 110.0                  | MS       | 14-MAR-10 03:59           | 100313-2          |
|                  | Cadmium        | 48.4          | ug/L         | 50                | ug/L         | 96.8              | 90.0 – 110.0                  | MS       | 14-MAR-10 03:59           | 100313-2          |
|                  | Lead           | 48.9          | ug/L         | 50                | ug/L         | 97.9              | 90.0 – 110.0                  | MS       | 14-MAR-10 03:59           | 100313-2          |
|                  | Thallium       | 48.8          | ug/L         | 50                | ug/L         | 97.6              | 90.0 – 110.0                  | MS       | 14-MAR-10 03:59           | 100313-2          |
|                  | Manganese      | 48.4          | ug/L         | 50                | ug/L         | 96.9              | 90.0 – 110.0                  | MS       | 14-MAR-10 09:27           | 100313-5          |
| CCV02            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.03          | ug/L         | 5                 | ug/L         | 100.6             | 80.0 – 120.0                  | AV       | 25-FEB-10 11:37           | 022510W1-6        |
|                  | Aluminum       | 4790          | ug/L         | 5000              | ug/L         | 95.9              | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Arsenic        | 506           | ug/L         | 500               | ug/L         | 101.1             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Barium         | 503           | ug/L         | 500               | ug/L         | 100.6             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Calcium        | 5130          | ug/L         | 5000              | ug/L         | 102.6             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Chromium       | 503           | ug/L         | 500               | ug/L         | 100.7             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Cobalt         | 514           | ug/L         | 500               | ug/L         | 102.9             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Copper         | 496           | ug/L         | 500               | ug/L         | 99.1              | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Iron           | 5020          | ug/L         | 5000              | ug/L         | 100.4             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Magnesium      | 5070          | ug/L         | 5000              | ug/L         | 101.4             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Nickel         | 513           | ug/L         | 500               | ug/L         | 102.7             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Potassium      | 5050          | ug/L         | 5000              | ug/L         | 101               | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Selenium       | 518           | ug/L         | 500               | ug/L         | 103.6             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Silver         | 504           | ug/L         | 500               | ug/L         | 100.7             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Sodium         | 9270          | ug/L         | 10000             | ug/L         | 92.7              | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Vanadium       | 506           | ug/L         | 500               | ug/L         | 101.3             | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Zinc           | 499           | ug/L         | 500               | ug/L         | 99.7              | 90.0 – 110.0                  | P        | 10-MAR-10 18:15           | 031010-1          |
|                  | Antimony       | 53.1          | ug/L         | 50                | ug/L         | 106.1             | 90.0 – 110.0                  | MS       | 14-MAR-10 04:35           | 100313-2          |
|                  | Beryllium      | 48.8          | ug/L         | 50                | ug/L         | 97.7              | 90.0 – 110.0                  | MS       | 14-MAR-10 04:35           | 100313-2          |
|                  | Cadmium        | 51.5          | ug/L         | 50                | ug/L         | 103               | 90.0 – 110.0                  | MS       | 14-MAR-10 04:35           | 100313-2          |
|                  | Lead           | 52.4          | ug/L         | 50                | ug/L         | 104.7             | 90.0 – 110.0                  | MS       | 14-MAR-10 04:35           | 100313-2          |
|                  | Thallium       | 51.7          | ug/L         | 50                | ug/L         | 103.4             | 90.0 – 110.0                  | MS       | 14-MAR-10 04:35           | 100313-2          |
|                  | Manganese      | 49.2          | ug/L         | 50                | ug/L         | 98.3              | 90.0 – 110.0                  | MS       | 14-MAR-10 09:45           | 100313-5          |
| CCV03            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.3           | ug/L         | 5                 | ug/L         | 106.1             | 80.0 – 120.0                  | AV       | 25-FEB-10 12:00           | 022510W1-6        |
|                  | Aluminum       | 4740          | ug/L         | 5000              | ug/L         | 94.8              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Arsenic        | 501           | ug/L         | 500               | ug/L         | 100.1             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Barium         | 499           | ug/L         | 500               | ug/L         | 99.8              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Calcium        | 5100          | ug/L         | 5000              | ug/L         | 102               | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Chromium       | 497           | ug/L         | 500               | ug/L         | 99.4              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Cobalt         | 508           | ug/L         | 500               | ug/L         | 101.6             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Copper         | 490           | ug/L         | 500               | ug/L         | 98                | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Iron           | 5010          | ug/L         | 5000              | ug/L         | 100.3             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Magnesium      | 5190          | ug/L         | 5000              | ug/L         | 103.9             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Nickel         | 508           | ug/L         | 500               | ug/L         | 101.6             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Potassium      | 5010          | ug/L         | 5000              | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Selenium       | 516           | ug/L         | 500               | ug/L         | 103.3             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Silver         | 499           | ug/L         | 500               | ug/L         | 99.7              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Sodium         | 8970          | ug/L         | 10000             | ug/L         | 89.7              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Vanadium       | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Zinc           | 493           | ug/L         | 500               | ug/L         | 98.7              | 90.0 – 110.0                  | P        | 10-MAR-10 18:44           | 031010-1          |
|                  | Antimony       | 49.6          | ug/L         | 50                | ug/L         | 99.3              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:07           | 100313-2          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Beryllium      | 47.8          | ug/L         | 50                | ug/L         | 95.6              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:07           | 100313-2          |
|                  | Cadmium        | 48.5          | ug/L         | 50                | ug/L         | 97                | 90.0 – 110.0                  | MS       | 14-MAR-10 05:07           | 100313-2          |
|                  | Lead           | 51            | ug/L         | 50                | ug/L         | 101.9             | 90.0 – 110.0                  | MS       | 14-MAR-10 05:07           | 100313-2          |
|                  | Thallium       | 48.3          | ug/L         | 50                | ug/L         | 96.7              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:07           | 100313-2          |
|                  | Manganese      | 48.2          | ug/L         | 50                | ug/L         | 96.3              | 90.0 – 110.0                  | MS       | 14-MAR-10 10:01           | 100313-5          |
| CCV04            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.03          | ug/L         | 5                 | ug/L         | 100.7             | 80.0 – 120.0                  | AV       | 25-FEB-10 12:24           | 022510W1-6        |
|                  | Aluminum       | 4820          | ug/L         | 5000              | ug/L         | 96.5              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Arsenic        | 499           | ug/L         | 500               | ug/L         | 99.9              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Barium         | 494           | ug/L         | 500               | ug/L         | 98.8              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Calcium        | 5050          | ug/L         | 5000              | ug/L         | 101               | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Chromium       | 493           | ug/L         | 500               | ug/L         | 98.7              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Cobalt         | 504           | ug/L         | 500               | ug/L         | 100.7             | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Copper         | 486           | ug/L         | 500               | ug/L         | 97.2              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Iron           | 4950          | ug/L         | 5000              | ug/L         | 99                | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Magnesium      | 5140          | ug/L         | 5000              | ug/L         | 102.9             | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Nickel         | 503           | ug/L         | 500               | ug/L         | 100.6             | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Potassium      | 4890          | ug/L         | 5000              | ug/L         | 97.9              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Selenium       | 514           | ug/L         | 500               | ug/L         | 102.7             | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Silver         | 495           | ug/L         | 500               | ug/L         | 99                | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Sodium         | 9320          | ug/L         | 10000             | ug/L         | 93.2              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Vanadium       | 497           | ug/L         | 500               | ug/L         | 99.3              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Zinc           | 489           | ug/L         | 500               | ug/L         | 97.7              | 90.0 – 110.0                  | P        | 10-MAR-10 19:06           | 031010-1          |
|                  | Antimony       | 49.2          | ug/L         | 50                | ug/L         | 98.4              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:35           | 100313-2          |
|                  | Beryllium      | 48.2          | ug/L         | 50                | ug/L         | 96.3              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:35           | 100313-2          |
|                  | Cadmium        | 48.3          | ug/L         | 50                | ug/L         | 96.7              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:35           | 100313-2          |
|                  | Lead           | 50.2          | ug/L         | 50                | ug/L         | 100.5             | 90.0 – 110.0                  | MS       | 14-MAR-10 05:35           | 100313-2          |
|                  | Thallium       | 47.4          | ug/L         | 50                | ug/L         | 94.8              | 90.0 – 110.0                  | MS       | 14-MAR-10 05:35           | 100313-2          |
| CCV05            |                |               |              |                   |              |                   |                               |          |                           |                   |
|                  | Mercury        | 5.08          | ug/L         | 5                 | ug/L         | 101.7             | 80.0 – 120.0                  | AV       | 25-FEB-10 12:48           | 022510W1-6        |



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
|                  | Aluminum       | 4900          | ug/L         | 5000              | ug/L         | 97.9              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Arsenic        | 494           | ug/L         | 500               | ug/L         | 98.8              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Barium         | 492           | ug/L         | 500               | ug/L         | 98.5              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Calcium        | 5040          | ug/L         | 5000              | ug/L         | 100.9             | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Chromium       | 492           | ug/L         | 500               | ug/L         | 98.4              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Cobalt         | 502           | ug/L         | 500               | ug/L         | 100.4             | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Copper         | 486           | ug/L         | 500               | ug/L         | 97.2              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Iron           | 5060          | ug/L         | 5000              | ug/L         | 101.2             | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Magnesium      | 5180          | ug/L         | 5000              | ug/L         | 103.7             | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Nickel         | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Potassium      | 4790          | ug/L         | 5000              | ug/L         | 95.8              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Selenium       | 515           | ug/L         | 500               | ug/L         | 103               | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Silver         | 495           | ug/L         | 500               | ug/L         | 99                | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Sodium         | 9800          | ug/L         | 10000             | ug/L         | 98                | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Vanadium       | 496           | ug/L         | 500               | ug/L         | 99.3              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
|                  | Zinc           | 488           | ug/L         | 500               | ug/L         | 97.7              | 90.0 – 110.0                  | P        | 10-MAR-10 20:04           | 031010-1          |
| CCV06            | Mercury        | 5.19          | ug/L         | 5                 | ug/L         | 103.9             | 80.0 – 120.0                  | AV       | 25-FEB-10 13:12           | 022510W1-6        |
|                  | Aluminum       | 4830          | ug/L         | 5000              | ug/L         | 96.7              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Arsenic        | 499           | ug/L         | 500               | ug/L         | 99.8              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Barium         | 491           | ug/L         | 500               | ug/L         | 98.3              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Calcium        | 5060          | ug/L         | 5000              | ug/L         | 101.2             | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Chromium       | 491           | ug/L         | 500               | ug/L         | 98.3              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Cobalt         | 501           | ug/L         | 500               | ug/L         | 100.2             | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Copper         | 484           | ug/L         | 500               | ug/L         | 96.7              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Iron           | 5020          | ug/L         | 5000              | ug/L         | 100.5             | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Magnesium      | 5230          | ug/L         | 5000              | ug/L         | 104.5             | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Nickel         | 500           | ug/L         | 500               | ug/L         | 100               | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Potassium      | 4840          | ug/L         | 5000              | ug/L         | 96.8              | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Selenium       | 514           | ug/L         | 500               | ug/L         | 102.7             | 90.0 – 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| CCV07            | Silver         | 493           | ug/L         | 500               | ug/L         | 98.6              | 90.0 - 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Sodium         | 9510          | ug/L         | 10000             | ug/L         | 95.1              | 90.0 - 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Vanadium       | 494           | ug/L         | 500               | ug/L         | 98.9              | 90.0 - 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Zinc           | 488           | ug/L         | 500               | ug/L         | 97.6              | 90.0 - 110.0                  | P        | 10-MAR-10 20:53           | 031010-1          |
|                  | Mercury        | 5.54          | ug/L         | 5                 | ug/L         | 110.8             | 80.0 - 120.0                  | AV       | 25-FEB-10 13:35           | 022510W1-6        |

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Advisory Limits (%R)</u> | <u>M</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-----------------------------|----------|---------------------------|-------------------|
| CRDL01           |                |               |              |                   |              |                   |                             |          |                           |                   |
|                  | Mercury        | .257          | ug/L         | .2                | ug/L         | 128.7             | 70.0 – 130.0                | AV       | 25-FEB-10 11:11           | 022510W1-6        |
|                  | Lead           | 2.44          | ug/L         | 2                 | ug/L         | 121.9             | 70.0 – 130.0                | MS       | 14-MAR-10 03:47           | 100313-2          |
|                  | Thallium       | 1.34          | ug/L         | 1                 | ug/L         | 133.8             | 70.0 – 130.0                | MS       | 14-MAR-10 03:47           | 100313-2          |
|                  | Antimony       | 3.52          | ug/L         | 3                 | ug/L         | 117.5             | 70.0 – 130.0                | MS       | 14-MAR-10 03:47           | 100313-2          |
|                  | Cadmium        | 1.2           | ug/L         | 1                 | ug/L         | 119.8             | 70.0 – 130.0                | MS       | 14-MAR-10 03:47           | 100313-2          |
|                  | Beryllium      | .583          | ug/L         | .5                | ug/L         | 116.6             | 70.0 – 130.0                | MS       | 14-MAR-10 03:47           | 100313-2          |
|                  | Manganese      | 5.24          | ug/L         | 5                 | ug/L         | 104.8             | 70.0 – 130.0                | MS       | 14-MAR-10 09:21           | 100313-5          |
| PQL01            |                |               |              |                   |              |                   |                             |          |                           |                   |
|                  | Selenium       | 35.3          | ug/L         | 30                | ug/L         | 117.7             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Aluminum       | 217           | ug/L         | 200               | ug/L         | 108.7             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Iron           | 55.7          | ug/L         | 100               | ug/L         | 55.7              | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Magnesium      | 381           | ug/L         | 300               | ug/L         | 126.9             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Nickel         | 5.66          | ug/L         | 5                 | ug/L         | 113.2             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Potassium      | 153           | ug/L         | 150               | ug/L         | 102.2             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Silver         | 5.05          | ug/L         | 5                 | ug/L         | 101.1             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Sodium         | 283           | ug/L         | 300               | ug/L         | 94.4              | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Arsenic        | 29            | ug/L         | 30                | ug/L         | 96.5              | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Barium         | 5.13          | ug/L         | 5                 | ug/L         | 102.6             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Chromium       | 5.14          | ug/L         | 5                 | ug/L         | 102.8             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Cobalt         | 5.23          | ug/L         | 5                 | ug/L         | 104.7             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Copper         | 9.95          | ug/L         | 10                | ug/L         | 99.5              | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Vanadium       | 4.54          | ug/L         | 5                 | ug/L         | 90.9              | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Zinc           | 12            | ug/L         | 10                | ug/L         | 120.2             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |
|                  | Calcium        | 204           | ug/L         | 200               | ug/L         | 102.1             | 70.0 – 130.0                | P        | 10-MAR-10 17:21           | 031010-1          |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ng/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| <b>ICB01</b>     |                |                              |                   |                            |            |            |               |          |                                     |            |
|                  | Mercury        | 0.066                        | +/-2              | U                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 11:09                     | 022510W1-6 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Arsenic        | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Calcium        | 50.0                         | +/-200            | U                          | 50.0       | 200        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Iron           | -44.09                       | +/-100            | J                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Magnesium      | -158.8                       | +/-300            | J                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Potassium      | 50.0                         | +/-150            | U                          | 50.0       | 150        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Selenium       | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 17:13                     | 031010-1   |
|                  | Antimony       | 1.0                          | +/-3              | U                          | 1.0        | 3.0        | LIQ           | MS       | 14-MAR-10 03:43                     | 100313-2   |
|                  | Beryllium      | 0.1                          | +/-5              | U                          | 0.1        | 0.5        | LIQ           | MS       | 14-MAR-10 03:43                     | 100313-2   |
|                  | Cadmium        | 0.11                         | +/-1              | U                          | 0.11       | 1.0        | LIQ           | MS       | 14-MAR-10 03:43                     | 100313-2   |
|                  | Lead           | 0.5                          | +/-2              | U                          | 0.5        | 2.0        | LIQ           | MS       | 14-MAR-10 03:43                     | 100313-2   |
|                  | Thallium       | 0.3                          | +/-1              | U                          | 0.3        | 1.0        | LIQ           | MS       | 14-MAR-10 03:43                     | 100313-2   |
|                  | Manganese      | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | MS       | 14-MAR-10 09:18                     | 100313-5   |
| <b>CCB01</b>     |                |                              |                   |                            |            |            |               |          |                                     |            |
|                  | Mercury        | 0.066                        | +/-2              | U                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 11:15                     | 022510W1-6 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Arsenic        | 9.71                         | +/-30             | J                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Calcium        | 50.0                         | +/-200            | U                          | 50.0       | 200        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Iron           | -30.46                       | +/-100            | J                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Magnesium      | -135.77                      | +/-300            | J                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Potassium      | 232.38                       | +/-150            |                            | 50.0       | 150        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Selenium       | 5.11                         | +/-30             | J                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 18:02                     | 031010-1   |
|                  | Antimony       | 1.0                          | +/-3              | U                          | 1.0        | 3.0        | LIQ           | MS       | 14-MAR-10 04:03                     | 100313-2   |
|                  | Beryllium      | 0.1                          | +/-5              | U                          | 0.1        | 0.5        | LIQ           | MS       | 14-MAR-10 04:03                     | 100313-2   |
|                  | Cadmium        | 0.11                         | +/-1              | U                          | 0.11       | 1.0        | LIQ           | MS       | 14-MAR-10 04:03                     | 100313-2   |
|                  | Lead           | 0.5                          | +/-2              | U                          | 0.5        | 2.0        | LIQ           | MS       | 14-MAR-10 04:03                     | 100313-2   |
|                  | Thallium       | 0.3                          | +/-1              | U                          | 0.3        | 1.0        | LIQ           | MS       | 14-MAR-10 04:03                     | 100313-2   |
|                  | Manganese      | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | MS       | 14-MAR-10 09:30                     | 100313-5   |
| <b>CCB02</b>     | Mercury        | 0.066                        | +/-2              | U                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 11:39                     | 022510W1-6 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Arsenic        | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Calcium        | 50.0                         | +/-200            | U                          | 50.0       | 200        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Iron           | 30.0                         | +/-100            | U                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Potassium      | 103.84                       | +/-150            | J                          | 50.0       | 150        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Selenium       | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |

Metals  
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| CCB03            | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 18:22                     | 031010-1   |
|                  | Antimony       | 1.0                          | +/-3              | U                          | 1.0        | 3.0        | LIQ           | MS       | 14-MAR-10 04:39                     | 100313-2   |
|                  | Beryllium      | 0.1                          | +/-5              | U                          | 0.1        | 0.5        | LIQ           | MS       | 14-MAR-10 04:39                     | 100313-2   |
|                  | Cadmium        | 0.11                         | +/-1              | U                          | 0.11       | 1.0        | LIQ           | MS       | 14-MAR-10 04:39                     | 100313-2   |
|                  | Lead           | 0.5                          | +/-2              | U                          | 0.5        | 2.0        | LIQ           | MS       | 14-MAR-10 04:39                     | 100313-2   |
|                  | Thallium       | 0.52                         | +/-1              | J                          | 0.3        | 1.0        | LIQ           | MS       | 14-MAR-10 04:39                     | 100313-2   |
|                  | Manganese      | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | MS       | 14-MAR-10 09:48                     | 100313-5   |
| CCB03            | Mercury        | 0.066                        | +/-2              | U                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 12:02                     | 022510W1-6 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Arsenic        | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Calcium        | 50.0                         | +/-200            | U                          | 50.0       | 200        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Iron           | -36.53                       | +/-100            | J                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Magnesium      | -92.61                       | +/-300            | J                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Potassium      | 50.0                         | +/-150            | U                          | 50.0       | 150        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Selenium       | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 18:51                     | 031010-1   |
|                  | Antimony       | 1.0                          | +/-3              | U                          | 1.0        | 3.0        | LIQ           | MS       | 14-MAR-10 05:11                     | 100313-2   |
|                  | Beryllium      | 0.1                          | +/-5              | U                          | 0.1        | 0.5        | LIQ           | MS       | 14-MAR-10 05:11                     | 100313-2   |
|                  | Cadmium        | 0.11                         | +/-1              | U                          | 0.11       | 1.0        | LIQ           | MS       | 14-MAR-10 05:11                     | 100313-2   |
|                  | Lead           | 0.5                          | +/-2              | U                          | 0.5        | 2.0        | LIQ           | MS       | 14-MAR-10 05:11                     | 100313-2   |

**Metals**  
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**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result<br/>ng/L</u> | <u>Acceptance</u> | <u>Conc<br/>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis<br/>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------|-------------------|----------------------|------------|------------|---------------|----------|-------------------------------|------------|
| CCB04            | Thallium       | 0.399                  | +/-1              | J                    | 0.3        | 1.0        | LIQ           | MS       | 14-MAR-10 05:11               | 100313-2   |
|                  | Manganese      | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | MS       | 14-MAR-10 10:04               | 100313-5   |
|                  | Mercury        | 0.066                  | +/-2              | U                    | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 12:26               | 022510W1-6 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Arsenic        | 5.0                    | +/-30             | U                    | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Calcium        | 50.0                   | +/-200            | U                    | 50.0       | 200        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Chromium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Cobalt         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Copper         | 3.0                    | +/-10             | U                    | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Iron           | -38.84                 | +/-100            | J                    | 30.0       | 100        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Magnesium      | 85.0                   | +/-300            | U                    | 85.0       | 300        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Nickel         | 1.5                    | +/-5              | U                    | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Potassium      | 50.0                   | +/-150            | U                    | 50.0       | 150        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Selenium       | 5.23                   | +/-30             | J                    | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Silver         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Sodium         | 100                    | +/-300            | U                    | 100        | 300        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Vanadium       | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Zinc           | 3.3                    | +/-10             | U                    | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 19:13               | 031010-1   |
|                  | Antimony       | 1.0                    | +/-3              | U                    | 1.0        | 3.0        | LIQ           | MS       | 14-MAR-10 05:39               | 100313-2   |
|                  | Beryllium      | 0.1                    | +/-5              | U                    | 0.1        | 0.5        | LIQ           | MS       | 14-MAR-10 05:39               | 100313-2   |
|                  | Cadmium        | 0.11                   | +/-1              | U                    | 0.11       | 1.0        | LIQ           | MS       | 14-MAR-10 05:39               | 100313-2   |
|                  | Lead           | 0.5                    | +/-2              | U                    | 0.5        | 2.0        | LIQ           | MS       | 14-MAR-10 05:39               | 100313-2   |
|                  | Thallium       | 0.989                  | +/-1              | J                    | 0.3        | 1.0        | LIQ           | MS       | 14-MAR-10 05:39               | 100313-2   |
| CCB05            | Mercury        | 0.066                  | +/-2              | U                    | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 12:50               | 022510W1-6 |
|                  | Aluminum       | 68.0                   | +/-200            | U                    | 68.0       | 200        | LIQ           | P        | 10-MAR-10 20:11               | 031010-1   |
|                  | Arsenic        | 5.0                    | +/-30             | U                    | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 20:11               | 031010-1   |
|                  | Barium         | 1.0                    | +/-5              | U                    | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 20:11               | 031010-1   |
|                  | Calcium        | 50.0                   | +/-200            | U                    | 50.0       | 200        | LIQ           | P        | 10-MAR-10 20:11               | 031010-1   |

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Iron           | 30.0                         | +/-100            | U                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Potassium      | 50.0                         | +/-150            | U                          | 50.0       | 150        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Selenium       | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 20:11                     | 031010-1   |
| <b>CCB06</b>     | Mercury        | 0.066                        | +/-2              | U                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 13:14                     | 022510W1-6 |
|                  | Aluminum       | 68.0                         | +/-200            | U                          | 68.0       | 200        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Arsenic        | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Barium         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Calcium        | 50.0                         | +/-200            | U                          | 50.0       | 200        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Chromium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Cobalt         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Copper         | 3.0                          | +/-10             | U                          | 3.0        | 10.0       | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Iron           | -51.86                       | +/-100            | J                          | 30.0       | 100        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Magnesium      | 85.0                         | +/-300            | U                          | 85.0       | 300        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Nickel         | 1.5                          | +/-5              | U                          | 1.5        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Potassium      | 50.0                         | +/-150            | U                          | 50.0       | 150        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Selenium       | 5.0                          | +/-30             | U                          | 5.0        | 30.0       | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Silver         | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Sodium         | 100                          | +/-300            | U                          | 100        | 300        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Vanadium       | 1.0                          | +/-5              | U                          | 1.0        | 5.0        | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |
|                  | Zinc           | 3.3                          | +/-10             | U                          | 3.3        | 10.0       | LIQ           | P        | 10-MAR-10 21:00                     | 031010-1   |



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Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

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| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u><br><u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u><br><u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u><br><u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| CCB07            | Mercury        | -0.069                       | +/- .2            | J                          | 0.066      | 0.2        | LIQ           | AV       | 25-FEB-10 13:37                     | 022510W1-6 |

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

SDG NO. 10-1863-1

Contract: LANL01004

Matrix: WATER

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>Acceptance Window</u> | <u>Conc Qual</u> | <u>M</u> | <u>MDL</u> | <u>RDL</u> |
|------------------|----------------|---------------|--------------|--------------------------|------------------|----------|------------|------------|
| 1202046565       | Magnesium      | -151          | ug/L         | +/-300                   | J                | P        | 85         | 300        |
|                  | Nickel         | 1.5           | ug/L         | +/-5                     | U                | P        | 1.5        | 5          |
|                  | Potassium      | 50            | ug/L         | +/-150                   | U                | P        | 50         | 150        |
|                  | Selenium       | 5             | ug/L         | +/-30                    | U                | P        | 5          | 30         |
|                  | Silver         | 1             | ug/L         | +/-5                     | U                | P        | 1          | 5          |
|                  | Sodium         | 100           | ug/L         | +/-300                   | U                | P        | 100        | 300        |
|                  | Vanadium       | 1             | ug/L         | +/-5                     | U                | P        | 1          | 5          |
|                  | Zinc           | 3.3           | ug/L         | +/-10                    | U                | P        | 3.3        | 10         |
|                  | Aluminum       | 68            | ug/L         | +/-200                   | U                | P        | 68         | 200        |
|                  | Iron           | -43.7         | ug/L         | +/-100                   | J                | P        | 30         | 100        |
|                  | Copper         | 3             | ug/L         | +/-10                    | U                | P        | 3          | 10         |
|                  | Cobalt         | 1             | ug/L         | +/-5                     | U                | P        | 1          | 5          |
|                  | Chromium       | 1             | ug/L         | +/-5                     | U                | P        | 1          | 5          |
|                  | Calcium        | 50            | ug/L         | +/-200                   | U                | P        | 50         | 200        |
|                  | Barium         | 1             | ug/L         | +/-5                     | U                | P        | 1          | 5          |
|                  | Arsenic        | 5             | ug/L         | +/-30                    | U                | P        | 5          | 30         |
| 1202046570       | Antimony       | 1             | ug/L         | +/-3                     | U                | MS       | 1          | 3          |
|                  | Beryllium      | 0.1           | ug/L         | +/-0.5                   | U                | MS       | 0.1        | 0.5        |
|                  | Cadmium        | 0.11          | ug/L         | +/-1                     | U                | MS       | 0.11       | 1          |
|                  | Lead           | 0.5           | ug/L         | +/-2                     | U                | MS       | 0.5        | 2          |
|                  | Manganese      | 1             | ug/L         | +/-5                     | U                | MS       | 1          | 5          |
|                  | Thallium       | 0.3           | ug/L         | +/-1                     | U                | MS       | 0.3        | 1          |
| 1202052034       | Mercury        | 0.066         | ug/L         | +/-0.2                   | U                | AV       | 0.066      | 0.2        |

## METALS

-4-

## Interference Check Sample

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| <b>ICSA01</b>    |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Aluminum       | 503000        | ug/L         | 500000            | ug/L         | 101               | 80.0 – 120.0                  | 10-MAR-10 17:27           | 031010-1          |
|                  | Arsenic        | 4.99          | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Barium         | 0.49          | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Calcium        | 469000        | ug/L         | 500000            | ug/L         | 93.7              | 80.0 – 120.0                  | 10-MAR-10 17:27           | 031010-1          |
|                  | Chromium       | -1.2          | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Cobalt         | -1.23         | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Copper         | 2.5           | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Iron           | 181000        | ug/L         | 200000            | ug/L         | 90.7              | 80.0 – 120.0                  | 10-MAR-10 17:27           | 031010-1          |
|                  | Magnesium      | 488000        | ug/L         | 500000            | ug/L         | 97.6              | 80.0 – 120.0                  | 10-MAR-10 17:27           | 031010-1          |
|                  | Nickel         | 2.71          | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Potassium      | -177.0        | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Selenium       | -21.1         | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Silver         | -1.05         | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Sodium         | 49.8          | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Vanadium       | 0.158         | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
|                  | Zinc           | 0.584         | ug/L         |                   |              |                   |                               | 10-MAR-10 17:27           | 031010-1          |
| <b>ICSAB01</b>   |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Aluminum       | 519000        | ug/L         | 500000            | ug/L         | 104               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Arsenic        | 529           | ug/L         | 500               | ug/L         | 106               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Barium         | 501           | ug/L         | 500               | ug/L         | 100               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Calcium        | 478000        | ug/L         | 500000            | ug/L         | 95.7              | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Chromium       | 486           | ug/L         | 500               | ug/L         | 97.2              | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Cobalt         | 450           | ug/L         | 500               | ug/L         | 90                | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Copper         | 561           | ug/L         | 500               | ug/L         | 112               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Iron           | 185000        | ug/L         | 200000            | ug/L         | 92.7              | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Magnesium      | 496000        | ug/L         | 500000            | ug/L         | 99.2              | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Nickel         | 453           | ug/L         | 500               | ug/L         | 90.5              | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Potassium      | 5610          | ug/L         | 5000              | ug/L         | 112               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Selenium       | 2540          | ug/L         | 2500              | ug/L         | 102               | 80.0 – 120.0                  | 10-MAR-10 17:34           | 031010-1          |

## METALS

-4-

## Interference Check Sample

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

ICS:

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| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
|                  | Silver         | 276           | ug/L         | 250               | ug/L         | 110               | 80.0 - 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Sodium         | 5400          | ug/L         | 5000              | ug/L         | 108               | 80.0 - 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Vanadium       | 516           | ug/L         | 500               | ug/L         | 103               | 80.0 - 120.0                  | 10-MAR-10 17:34           | 031010-1          |
|                  | Zinc           | 499           | ug/L         | 500               | ug/L         | 99.8              | 80.0 - 120.0                  | 10-MAR-10 17:34           | 031010-1          |

## METALS

-4-

## Interference Check Sample

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01           |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Antimony       | 0.109         | ug/L         |                   |              |                   |                               | 14-MAR-10 03:51           | 100313-2          |
|                  | Beryllium      | 0.049         | ug/L         |                   |              |                   |                               | 14-MAR-10 03:51           | 100313-2          |
|                  | Cadmium        | 0.45          | ug/L         |                   |              |                   |                               | 14-MAR-10 03:51           | 100313-2          |
|                  | Lead           | 0.21          | ug/L         |                   |              |                   |                               | 14-MAR-10 03:51           | 100313-2          |
|                  | Thallium       | 0.041         | ug/L         |                   |              |                   |                               | 14-MAR-10 03:51           | 100313-2          |
| ICSAB01          |                |               |              |                   |              |                   |                               |                           |                   |
|                  | Antimony       | 21.5          | ug/L         | 20                | ug/L         | 107               | 80.0 - 120.0                  | 14-MAR-10 03:55           | 100313-2          |
|                  | Beryllium      | 18.4          | ug/L         | 20                | ug/L         | 91.9              | 80.0 - 120.0                  | 14-MAR-10 03:55           | 100313-2          |
|                  | Cadmium        | 19.8          | ug/L         | 20.44             | ug/L         | 96.7              | 80.0 - 120.0                  | 14-MAR-10 03:55           | 100313-2          |
|                  | Lead           | 20.6          | ug/L         | 20.19             | ug/L         | 102               | 80.0 - 120.0                  | 14-MAR-10 03:55           | 100313-2          |
|                  | Thallium       | 20.5          | ug/L         | 20                | ug/L         | 102               | 80.0 - 120.0                  | 14-MAR-10 03:55           | 100313-2          |

## METALS

-4-

## Interference Check Sample

SDG No: 10-1863-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> | <u>Units</u> | <u>True Value</u> | <u>Units</u> | <u>% Recovery</u> | <u>Acceptance Window (%R)</u> | <u>Analysis Date/Time</u> | <u>Run Number</u> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01           | Manganese      | 5.79          | ug/L         |                   |              |                   |                               | 14-MAR-10 09:23           | 100313-5          |
| ICSAB01          | Manganese      | 26.6          | ug/L         | 25.8              | ug/L         | 103               | 80.0 - 120.0                  | 14-MAR-10 09:25           | 100313-5          |

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1863-1 Client ID RE15-10-8235S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247192001 Spike ID: 1202046573

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Beryllium      | ug/L         | 75-125                      | 48                       |          | 0.1                      | U        | 50                     | 96                    |             | MS       |
| Cadmium        | ug/L         | 75-125                      | 10.7                     |          | 0.11                     | U        | 10                     | 107                   |             | MS       |
| Lead           | ug/L         | 75-125                      | 42.3                     |          | 0.5                      | U        | 40                     | 106                   |             | MS       |
| Manganese      | ug/L         | 75-125                      | 50.1                     |          | 1                        | U        | 50                     | 98.2                  |             | MS       |
| Thallium       | ug/L         | 75-125                      | 81.1                     |          | 0.3                      | U        | 100                    | 81                    |             | MS       |
| Antimony       | ug/L         | 75-125                      | 208                      |          | 1                        | U        | 200                    | 104                   |             | MS       |

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1863-1

Client ID RE15-10-8235S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 247192001

Spike ID: 1202046568

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Copper         | ug/L         | 75-125                      | 507                      |          | 3                        | U        | 500                    | 101                   |             | P        |
| Iron           | ug/L         | 75-125                      | 5070                     |          | 30                       | U        | 5000                   | 101                   |             | P        |
| Magnesium      | ug/L         | 75-125                      | 5120                     |          | 85                       | U        | 5000                   | 102                   |             | P        |
| Nickel         | ug/L         | 75-125                      | 514                      |          | 1.5                      | U        | 500                    | 103                   |             | P        |
| Potassium      | ug/L         | 75-125                      | 5130                     |          | 204                      |          | 5000                   | 98.5                  |             | P        |
| Selenium       | ug/L         | 75-125                      | 514                      |          | 5                        | U        | 500                    | 103                   |             | P        |
| Silver         | ug/L         | 75-125                      | 486                      |          | 1                        | U        | 500                    | 97.2                  |             | P        |
| Sodium         | ug/L         | 75-125                      | 5360                     |          | 251                      | B        | 5000                   | 102                   |             | P        |
| Vanadium       | ug/L         | 75-125                      | 511                      |          | 1                        | U        | 500                    | 102                   |             | P        |
| Zinc           | ug/L         | 75-125                      | 494                      |          | 3.3                      | U        | 500                    | 98.2                  |             | P        |
| Aluminum       | ug/L         | 75-125                      | 5070                     |          | 68                       | U        | 5000                   | 100                   |             | P        |
| Arsenic        | ug/L         | 75-125                      | 497                      |          | 5                        | U        | 500                    | 99.2                  |             | P        |
| Barium         | ug/L         | 75-125                      | 501                      |          | 1                        | U        | 500                    | 100                   |             | P        |
| Calcium        | ug/L         | 75-125                      | 5070                     |          | 50                       | U        | 5000                   | 100                   |             | P        |
| Chromium       | ug/L         | 75-125                      | 502                      |          | 1.62                     | B        | 500                    | 100                   |             | P        |
| Cobalt         | ug/L         | 75-125                      | 494                      |          | 1                        | U        | 500                    | 98.9                  |             | P        |



## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1863-1 Client ID RE46-10-13373S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 247548001 Spike ID: 1202052037

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance<br/>Limit</u> | <u>Spiked<br/>Result</u> | <u>C</u> | <u>Sample<br/>Result</u> | <u>C</u> | <u>Spike<br/>Added</u> | <u>%<br/>Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Mercury        | ug/L         | 75-125                      | 2.25                     |          | 0.066                    | U        | 2                      | 113                   |             | AV       |

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8235D

Sample ID: 247192001

Duplicate ID: 1202046567

Percent Solids for Dup: N/A

| Analyte   | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD  | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|---|
| Aluminum  | ug/L  |                  | 68 U          |   | 68 U             |   |      |      | P |
| Arsenic   | ug/L  |                  | 5 U           |   | 5 U              |   |      |      | P |
| Barium    | ug/L  |                  | 1 U           |   | 1 U              |   |      |      | P |
| Calcium   | ug/L  |                  | 50 U          |   | 50 U             |   |      |      | P |
| Chromium  | ug/L  | +/-5             | 1.62 J        |   | 1.46 J           |   | 10.5 |      | P |
| Cobalt    | ug/L  |                  | 1 U           |   | 1 U              |   |      |      | P |
| Copper    | ug/L  |                  | 3 U           |   | 3 U              |   |      |      | P |
| Iron      | ug/L  |                  | 30 U          |   | 30 U             |   |      |      | P |
| Magnesium | ug/L  |                  | 85 U          |   | 85 U             |   |      |      | P |
| Nickel    | ug/L  |                  | 1.5 U         |   | 1.5 U            |   |      |      | P |
| Potassium | ug/L  | +/-150           | 204           |   | 198              |   | 3.25 |      | P |
| Selenium  | ug/L  |                  | 5 U           |   | 5 U              |   |      |      | P |
| Silver    | ug/L  |                  | 1 U           |   | 1 U              |   |      |      | P |
| Sodium    | ug/L  | +/-300           | 251 J         |   | 263 J            |   | 4.76 |      | P |
| Vanadium  | ug/L  |                  | 1 U           |   | 1 U              |   |      |      | P |
| Zinc      | ug/L  |                  | 3.3 U         |   | 3.3 U            |   |      |      | P |

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8235D

Sample ID: 247192001

Duplicate ID: 1202046572

Percent Solids for Dup: N/A

| Analyte   | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M  |
|-----------|-------|---------------------|------------------|---|---------------------|---|-----|------|----|
| Antimony  | ug/L  |                     | 1 U              |   | 1 U                 |   |     |      | MS |
| Beryllium | ug/L  |                     | 0.1 U            |   | 0.1 U               |   |     |      | MS |
| Cadmium   | ug/L  |                     | 0.11 U           |   | 0.11 U              |   |     |      | MS |
| Lead      | ug/L  |                     | 0.5 U            |   | 0.5 U               |   |     |      | MS |
| Manganese | ug/L  |                     | 1 U              |   | 1 U                 |   |     |      | MS |
| Thallium  | ug/L  |                     | 0.3 U            |   | 0.3 U               |   |     |      | MS |

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1863-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-13373D

Sample ID: 247548001

Duplicate ID: 1202052036

Percent Solids for Dup: N/A

| Analyte | Units | Acceptance<br>Limit | Sample<br>Result | C | Duplicate<br>Result | C | RPD | Qual | M  |
|---------|-------|---------------------|------------------|---|---------------------|---|-----|------|----|
| Mercury | ug/L  |                     | 0.066 U          |   | 0.066 U             |   |     |      | AV |

**METALS**  
-7-  
**Laboratory Control Sample Summary**

SDG NO. 10-1863-1

Contract: LANL01004

Aqueous LCS Source:OS21

Solid LCS Source:

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202046566       |                |              |                   |               |          |                   |                         |          |
|                  | Aluminum       | ug/L         | 5000              | 4680          |          | 93.5              | 80-120                  | P        |
|                  | Arsenic        | ug/L         | 500               | 482           |          | 96.4              | 80-120                  | P        |
|                  | Barium         | ug/L         | 500               | 481           |          | 96.2              | 80-120                  | P        |
|                  | Calcium        | ug/L         | 5000              | 4830          |          | 96.6              | 80-120                  | P        |
|                  | Chromium       | ug/L         | 500               | 481           |          | 96.1              | 80-120                  | P        |
|                  | Cobalt         | ug/L         | 500               | 475           |          | 95                | 80-120                  | P        |
|                  | Copper         | ug/L         | 500               | 484           |          | 96.8              | 80-120                  | P        |
|                  | Iron           | ug/L         | 5000              | 4740          |          | 94.8              | 80-120                  | P        |
|                  | Magnesium      | ug/L         | 5000              | 4890          |          | 97.7              | 80-120                  | P        |
|                  | Nickel         | ug/L         | 500               | 494           |          | 98.8              | 80-120                  | P        |
|                  | Potassium      | ug/L         | 5000              | 4660          |          | 93.3              | 80-120                  | P        |
|                  | Selenium       | ug/L         | 500               | 506           |          | 101               | 80-120                  | P        |
|                  | Silver         | ug/L         | 500               | 468           |          | 93.6              | 80-120                  | P        |
|                  | Sodium         | ug/L         | 5000              | 4490          |          | 89.8              | 80-120                  | P        |
|                  | Vanadium       | ug/L         | 500               | 490           |          | 97.9              | 80-120                  | P        |
|                  | Zinc           | ug/L         | 500               | 479           |          | 95.7              | 80-120                  | P        |

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1863-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202046571       |                |              |                   |               |          |                   |                         |          |
|                  | Antimony       | ug/L         | 50                | 53.2          |          | 106               | 80-120                  | MS       |
|                  | Beryllium      | ug/L         | 50                | 46.5          |          | 93.1              | 80-120                  | MS       |
|                  | Cadmium        | ug/L         | 50                | 49.5          |          | 99.1              | 80-120                  | MS       |
|                  | Lead           | ug/L         | 50                | 49.7          |          | 99.4              | 80-120                  | MS       |
|                  | Manganese      | ug/L         | 50                | 51.1          |          | 102               | 80-120                  | MS       |
|                  | Thallium       | ug/L         | 50                | 44.9          |          | 89.8              | 80-120                  | MS       |

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1863-1

Contract: LANL01004

Aqueous LCS Source:GEL

Solid LCS Source:

| <u>Sample ID</u> | <u>Analyte</u> | <u>Units</u> | <u>True Value</u> | <u>Result</u> | <u>C</u> | <u>% Recovery</u> | <u>Acceptance Limit</u> | <u>M</u> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202052035       | Mercury        | ug/L         | 2                 | 2.34          |          | 117               | 80-120                  | AV       |

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1863-1 Client ID RE15-10-8235L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247192001 Serial Dilution ID: 1202046569

| Analyte   | Initial<br>Value<br>ug/L | C | Serial<br>Value<br>ug/L | C | %<br>Difference | Qual | Acceptance<br>Limit | M |
|-----------|--------------------------|---|-------------------------|---|-----------------|------|---------------------|---|
| Aluminum  | 68                       | U | 340                     | U |                 |      |                     | P |
| Arsenic   | 5                        | U | 25                      | U |                 |      |                     | P |
| Barium    | 1                        | U | 5                       | U |                 |      |                     | P |
| Calcium   | 50                       | U | 250                     | U |                 |      |                     | P |
| Chromium  | 1.62                     | J | 5                       | U | 100             |      |                     | P |
| Cobalt    | 1                        | U | 5                       | U |                 |      |                     | P |
| Copper    | 3                        | U | 15                      | U |                 |      |                     | P |
| Iron      | 30                       | U | 150                     | U |                 |      |                     | P |
| Magnesium | 85                       | U | 425                     | U |                 |      |                     | P |
| Nickel    | 1.5                      | U | 7.5                     | U |                 |      |                     | P |
| Potassium | 204                      |   | 250                     | U | 100             |      |                     | P |
| Selenium  | 5                        | U | 25                      | U |                 |      |                     | P |
| Silver    | 1                        | U | 5                       | U |                 |      |                     | P |
| Sodium    | 251                      | J | 500                     | U | 100             |      |                     | P |
| Vanadium  | 1                        | U | 5                       | U |                 |      |                     | P |
| Zinc      | 3.3                      | U | 16.5                    | U |                 |      |                     | P |



## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1863-1 Client ID RE15-10-8235L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247192001 Serial Dilution ID: 1202046574

| Analyte   | Initial<br>Value<br>ug/L | C | Serial<br>Value<br>ug/L | C | %<br>Difference | Qual | Acceptance<br>Limit | M  |
|-----------|--------------------------|---|-------------------------|---|-----------------|------|---------------------|----|
| Antimony  | 1                        | U | 5                       | U |                 |      |                     | MS |
| Beryllium | .1                       | U | .5                      | U |                 |      |                     | MS |
| Cadmium   | .11                      | U | .55                     | U |                 |      |                     | MS |
| Lead      | .5                       | U | 2.5                     | U |                 |      |                     | MS |
| Manganese | 1                        | U | 5                       | U |                 |      |                     | MS |
| Thallium  | .3                       | U | 9.15                    |   |                 |      |                     | MS |

## METALS

-9-

## Serial Dilution Sample Summary

**SDG NO.** 10-1863-1 **Client ID** RE46-10-13373L**Contract:** LANL01004**Matrix:** LIQUID **Level:** Low**Sample ID:** 247548001 **Serial Dilution ID:** 1202052041

| <b>Analyte</b> | <b>Initial<br/>Value<br/>ug/L</b> | <b>C</b> | <b>Serial<br/>Value<br/>ug/L</b> | <b>C</b> | <b>%<br/>Difference</b> | <b>Qual</b> | <b>Acceptance<br/>Limit</b> | <b>M</b> |
|----------------|-----------------------------------|----------|----------------------------------|----------|-------------------------|-------------|-----------------------------|----------|
| Mercury        | .066                              | U        | .33                              | U        |                         |             |                             | AV       |

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1863-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

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| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 954667               |                    |               |                  |                            |                            |                       |
| 1202046565       | MB for batch 954667  | MB                 | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046566       | LCS for batch 954667 | LCS                | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046568       | RE15-10-8235S        | MS                 | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046567       | RE15-10-8235D        | DUP                | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 247192001        | RE15-10-8235         | SAMPLE             | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |

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SW846

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1863-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

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| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 954669               |                    |               |                  |                            |                            |                       |
| 1202046570       | MB for batch 954669  | MB                 | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046571       | LCS for batch 954669 | LCS                | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046573       | RE15-10-8235S        | MS                 | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 1202046572       | RE15-10-8235D        | DUP                | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |
| 247192001        | RE15-10-8235         | SAMPLE             | W             | 24-FEB-10        | 50mL                       | 50mL                       |                       |

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SW846

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

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SDG No: 10-1863-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

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| <u>Sample ID</u> | <u>Client ID</u>     | <u>Sample Type</u> | <u>Matrix</u> | <u>Prep Date</u> | <u>Initial Sample Size</u> | <u>Final Sample Volume</u> | <u>Percent Solids</u> |
|------------------|----------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| Batch Number     | 957032               |                    |               |                  |                            |                            |                       |
| 1202052034       | MB for batch 957032  | MB                 | W             | 24-FEB-10        | 20mL                       | 20mL                       |                       |
| 1202052035       | LCS for batch 957032 | LCS                | W             | 24-FEB-10        | 20mL                       | 20mL                       |                       |
| 1202052037       | RE46-10-13373S       | MS                 | W             | 24-FEB-10        | 20mL                       | 20mL                       |                       |
| 1202052036       | RE46-10-13373D       | DUP                | W             | 24-FEB-10        | 20mL                       | 20mL                       |                       |
| 247192001        | RE15-10-8235         | SAMPLE             | W             | 24-FEB-10        | 20mL                       | 20mL                       |                       |

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SW846

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 14-MAR-10

End Date: 14-MAR-10

Client Sdg: 10-1863-1

Method: MS

Data File: 100313-2

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Ti | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0       | 1   | 03:27    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| S10        | 1   | 03:31    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| S100       | 1   | 03:35    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ICV01      | 1   | 03:39    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ICB01      | 1   | 03:43    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CRDL01     | 1   | 03:47    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ICSA01     | 1   | 03:51    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ICSAB01    | 1   | 03:55    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCV01      | 1   | 03:59    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCB01      | 1   | 04:03    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ZZZZZZ     | 1   | 04:07    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:11    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:23    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:27    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 5   | 04:31    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV02      | 1   | 04:35    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCB02      | 1   | 04:39    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| 1202046570 | 1   | 04:43    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| 1202046571 | 1   | 04:47    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ZZZZZZ     | 1   | 04:51    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:55    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 04:59    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 05:03    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV03      | 1   | 05:07    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCB03      | 1   | 05:11    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| ZZZZZZ     | 1   | 05:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| 247192001  | 1   | 05:19    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| 1202046572 | 1   | 05:23    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| 1202046573 | 1   | 05:27    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| 1202046574 | 5   | 05:31    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCV04      | 1   | 05:35    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |
| CCB04      | 1   | 05:39    |    | X  |    |    | X  | X  |    |    |    |    | X  |    |    |    |    |    |   |    |    |    | X  |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 14-MAR-10

End Date: 14-MAR-10

Client Sdg: 10-1863-1

Method: MS

Data File: 100313-5

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0       | 1   | 09:09    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| S10        | 1   | 09:12    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| S100       | 1   | 09:14    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ICV01      | 1   | 09:16    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ICB01      | 1   | 09:18    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CRDL01     | 1   | 09:21    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ICSA01     | 1   | 09:23    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ICSA01     | 1   | 09:25    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CCV01      | 1   | 09:27    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CCB01      | 1   | 09:30    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| 1202046570 | 1   | 09:32    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| 1202046571 | 1   | 09:34    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 09:36    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 09:39    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 09:41    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 09:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV02      | 1   | 09:45    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CCB02      | 1   | 09:48    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 09:50    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| 247192001  | 1   | 09:52    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| 1202046572 | 1   | 09:55    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| 1202046573 | 1   | 09:57    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| 1202046574 | 5   | 09:59    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CCV03      | 1   | 10:01    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |
| CCB03      | 1   | 10:04    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |    |   |    |    |    |    |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 10-MAR-10

End Date: 10-MAR-10

Client Sdg: 10-1863-1

Method P

Data File: 031010-1

| Samp No.   | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0       | 1   | 16:32    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| S0.1       | 1   | 16:40    |    |    | X  | X  |    |    |    | X  | X  | X  |    |    |    |    |    | X  | X | X  | X  |    |    | X | X  |
| S0.5       | 1   | 16:47    | X  |    | X  | X  |    |    | X  | X  | X  | X  |    |    | X  |    |    | X  | X | X  | X  |    |    | X | X  |
| SCAL       | 1   | 16:54    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| S10        | 1   | 17:01    | X  |    |    |    |    |    | X  |    |    |    | X  |    | X  |    |    |    |   |    |    | X  |    |   |    |
| ICV01      | 1   | 17:06    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| ICB01      | 1   | 17:13    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| PQL01      | 1   | 17:21    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| ICSA01     | 1   | 17:27    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| ICSAB01    | 1   | 17:34    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| LR01       | 1   | 17:41    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| LR02       | 1   | 17:48    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCV01      | 1   | 17:55    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB01      | 1   | 18:02    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCV02      | 1   | 18:15    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB02      | 1   | 18:22    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| LR03       | 1   | 18:29    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| LR04       | 1   | 18:36    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCV03      | 1   | 18:44    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB03      | 1   | 18:51    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCV04      | 1   | 19:06    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB04      | 1   | 19:13    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| 1202046565 | 1   | 19:21    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| 1202046566 | 1   | 19:29    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| ZZZZZZ     | 1   | 19:36    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 19:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 19:50    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ     | 1   | 19:57    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV05      | 1   | 20:04    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB05      | 1   | 20:11    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| ZZZZZZ     | 1   | 20:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| 247192001  | 1   | 20:26    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| 1202046567 | 1   | 20:32    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| 1202046568 | 1   | 20:39    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| 1202046569 | 5   | 20:46    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCV06      | 1   | 20:53    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |
| CCB06      | 1   | 21:00    | X  |    | X  | X  |    |    | X  | X  | X  | X  | X  |    | X  |    |    | X  | X | X  | X  | X  |    | X | X  |



Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1863-1

Method AV

Data File: 022510W1-6

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| S0.0     | 1   | 10:55    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S0.2     | 1   | 10:57    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S0.5     | 1   | 10:59    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S2.0     | 1   | 11:01    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S5.0     | 1   | 11:03    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| S10      | 1   | 11:05    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ICV01    | 1   | 11:07    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ICB01    | 1   | 11:09    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CRDL01   | 1   | 11:11    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCV01    | 1   | 11:13    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB01    | 1   | 11:15    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:17    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:19    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:21    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:23    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:25    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 5   | 11:27    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:29    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:31    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:33    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:35    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV02    | 1   | 11:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB02    | 1   | 11:39    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:41    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:43    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:45    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:46    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:48    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:50    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:52    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:54    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:56    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 11:58    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV03    | 1   | 12:00    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB03    | 1   | 12:02    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:04    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:06    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:08    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:10    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| ZZZZZZ   | 1   | 12:12    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |

**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No.   | D/F | Run Time |
|------------|-----|----------|
| ZZZZZZ     | 1   | 12:14    |
| ZZZZZZ     | 1   | 12:16    |
| ZZZZZZ     | 1   | 12:18    |
| ZZZZZZ     | 1   | 12:20    |
| ZZZZZZ     | 1   | 12:22    |
| CCV04      | 1   | 12:24    |
| CCB04      | 1   | 12:26    |
| ZZZZZZ     | 1   | 12:28    |
| ZZZZZZ     | 1   | 12:30    |
| ZZZZZZ     | 1   | 12:32    |
| ZZZZZZ     | 5   | 12:34    |
| ZZZZZZ     | 1   | 12:36    |
| ZZZZZZ     | 1   | 12:38    |
| ZZZZZZ     | 1   | 12:40    |
| 1202052034 | 1   | 12:42    |
| 1202052035 | 1   | 12:44    |
| ZZZZZZ     | 1   | 12:46    |
| CCV05      | 1   | 12:48    |
| CCB05      | 1   | 12:50    |
| 247192001  | 1   | 12:52    |
| ZZZZZZ     | 1   | 12:54    |
| ZZZZZZ     | 1   | 12:56    |
| ZZZZZZ     | 1   | 12:58    |
| ZZZZZZ     | 1   | 13:00    |
| ZZZZZZ     | 1   | 13:02    |
| ZZZZZZ     | 1   | 13:04    |
| ZZZZZZ     | 1   | 13:06    |
| ZZZZZZ     | 1   | 13:08    |
| ZZZZZZ     | 1   | 13:10    |
| CCV06      | 1   | 13:12    |
| CCB06      | 1   | 13:14    |
| ZZZZZZ     | 1   | 13:16    |
| ZZZZZZ     | 1   | 13:18    |
| ZZZZZZ     | 1   | 13:20    |
| ZZZZZZ     | 1   | 13:22    |
| ZZZZZZ     | 1   | 13:24    |
| 1202052036 | 1   | 13:26    |
| 1202052037 | 1   | 13:28    |
| 1202052041 | 5   | 13:29    |
| ZZZZZZ     | 1   | 13:31    |

**Metals**  
**-14-**  
**Analysis Run Log**

| Samp No. | D/F | Run Time | Al | Sb | As | Ba | Be | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Hg | Ni | K | Se | Ag | Na | Tl | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|
| ZZZZZZ   | 1   | 13:33    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |   |    |
| CCV07    | 1   | 13:35    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |
| CCB07    | 1   | 13:37    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X  |    |   |    |    |    |    |   |    |

# Standards

**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1863-1

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

| ICP/MS | <u>Analyte</u> | <u>Wavelength</u><br><u>(nm)</u> | <u>MDL</u>  | <u>RDL</u>  |
|--------|----------------|----------------------------------|-------------|-------------|
|        |                |                                  | <u>ug/L</u> | <u>ug/L</u> |
| LIQUID | Aluminum       |                                  | 15.0        | 30          |
|        | Antimony       |                                  | 1.0         | 3           |
|        | Arsenic        |                                  | 1.6         | 5           |
|        | Barium         |                                  | 0.6         | 2           |
|        | Beryllium      |                                  | 0.1         | .5          |
|        | Cadmium        |                                  | 0.11        | 1           |
|        | Calcium        |                                  | 65.0        | 200         |
|        | Chromium       |                                  | 2.0         | 10          |
|        | Cobalt         |                                  | 0.1         | 1           |
|        | Copper         |                                  | 0.33        | 1           |
|        | Iron           |                                  | 33.0        | 100         |
|        | Lead           |                                  | 0.5         | 2           |
|        | Magnesium      |                                  | 5.2         | 15          |
|        | Manganese      |                                  | 1.0         | 5           |
|        | Nickel         |                                  | 0.5         | 2           |
|        | Potassium      |                                  | 80.0        | 300         |
|        | Selenium       |                                  | 1.0         | 5           |
|        | Silver         |                                  | 0.2         | 1           |
|        | Sodium         |                                  | 80.0        | 250         |
|        | Thallium       |                                  | 0.3         | 1           |
|        | Vanadium       |                                  | 3.0         | 10          |
|        | Zinc           |                                  | 3.0         | 10          |

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METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1863-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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|         |                | <u>Wavelength</u><br><u>(nm)</u> | <u>MDL</u><br><u>ug/L</u> | <u>RDL</u><br><u>ug/L</u> |
|---------|----------------|----------------------------------|---------------------------|---------------------------|
| MERCURY | <u>Analyte</u> |                                  |                           |                           |
| LIQUID  | Mercury        |                                  | 0.066                     | .2                        |

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**METALS**  
**-10-**  
**Instrument Detection Limits**

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SDG NO. 10-1863-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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| ICP    | <u>Analyte</u> | <u>Wavelength</u> | <u>MDL</u> | <u>RDL</u> |
|--------|----------------|-------------------|------------|------------|
|        |                | (nm)              | ug/L       | ug/L       |
| LIQUID | Aluminum       | 396.153           | 68.0       | 200        |
|        | Antimony       | 206.836           | 3.0        | 10         |
|        | Arsenic        | 188.979           | 5.0        | 30         |
|        | Barium         | 233.527           | 1.0        | 5          |
|        | Beryllium      | 313.107           | 1.0        | 5          |
|        | Cadmium        | 226.502           | 1.0        | 5          |
|        | Calcium        | 317.933           | 50.0       | 200        |
|        | Chromium       | 267.716           | 1.0        | 5          |
|        | Cobalt         | 228.616           | 1.0        | 5          |
|        | Copper         | 324.752           | 3.0        | 10         |
|        | Iron           | 238.204           | 30.0       | 100        |
|        | Lead           | 220.353           | 3.3        | 10         |
|        | Magnesium      | 279.077           | 85.0       | 300        |
|        | Manganese      | 257.61            | 2.0        | 10         |
|        | Nickel         | 231.604           | 1.5        | 5          |
|        | Potassium      | 766.49            | 50.0       | 150        |
|        | Selenium       | 196.026           | 5.0        | 30         |
|        | Silver         | 328.068           | 1.0        | 5          |
|        | Sodium         | 589.592           | 100        | 300        |
|        | Thallium       | 190.801           | 5.0        | 20         |
|        | Vanadium       | 292.402           | 1.0        | 5          |
|        | Zinc           | 213.857           | 3.3        | 10         |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Aluminum | Antimony | Arsenic | Barium   | Beryllium |
|-------------|------------|----------|----------|---------|----------|-----------|
| Aluminum    | 396.153    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Antimony    | 206.836    | 0.02697  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Arsenic     | 188.979    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Barium      | 233.527    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Beryllium   | 313.107    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Boron       | 249.677    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Cadmium     | 226.502    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Chromium    | 267.716    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Cobalt      | 228.616    | 0.00000  | 0.00000  | 0.00000 | -0.48147 | 0.00000   |
| Copper      | 324.752    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Iron        | 238.204    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Lead        | 220.353    | -0.21356 | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Magnesium   | 279.077    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Manganese   | 257.61     | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Molybdenum  | 202.031    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Nickel      | 231.604    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Phosphorous | 214.914    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Potassium   | 766.49     | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Selenium    | 196.026    | -0.05186 | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Silica      | 251.611    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Silicon     | 251.611    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Silver      | 328.068    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Strontium   | 421.552    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Sulfur      | 181.975    | 0.18741  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Thallium    | 190.801    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Tin         | 189.927    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Titanium    | 334.94     | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Uranium     | 409.014    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Vanadium    | 292.402    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |
| Zinc        | 213.857    | 0.00000  | 0.00000  | 0.00000 | 0.00000  | 0.00000   |



**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Boron   | Cadmium | Chromium | Cobalt   | Copper  |
|-------------|------------|---------|---------|----------|----------|---------|
| Aluminum    | 396.153    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Antimony    | 206.836    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Arsenic     | 188.979    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Barium      | 233.527    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Beryllium   | 313.107    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Boron       | 249.677    | 0.00000 | 0.00000 | 0.00000  | 2.85580  | 0.00000 |
| Cadmium     | 226.502    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Chromium    | 267.716    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Cobalt      | 228.616    | 0.00000 | 0.00000 | 0.44491  | 0.00000  | 0.00000 |
| Copper      | 324.752    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Iron        | 238.204    | 0.00000 | 0.00000 | 0.00000  | -29.9151 | 0.00000 |
| Lead        | 220.353    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.57616 |
| Magnesium   | 279.077    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Manganese   | 257.61     | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Molybdenum  | 202.031    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Nickel      | 231.604    | 0.00000 | 0.00000 | 0.00000  | 0.60374  | 0.00000 |
| Phosphorous | 214.914    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 198.62  |
| Potassium   | 766.49     | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Selenium    | 196.026    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Silica      | 251.611    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Silicon     | 251.611    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Silver      | 328.068    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Strontium   | 421.552    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Sulfur      | 181.975    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Thallium    | 190.801    | 0.00000 | 0.00000 | 0.00000  | 4.37985  | 0.00000 |
| Tin         | 189.927    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 0.00000 |
| Titanium    | 334.94     | 0.00000 | 0.00000 | 0.36147  | 0.00000  | 0.00000 |
| Uranium     | 409.014    | 0.00000 | 0.00000 | 2.23785  | 0.00000  | 0.00000 |
| Vanadium    | 292.402    | 0.00000 | 0.00000 | 0.36818  | 0.00000  | 0.00000 |
| Zinc        | 213.857    | 0.00000 | 0.00000 | 0.00000  | 0.00000  | 1.35273 |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Iron     | Lead    | Magnesium | Manganese | Molybdenum |
|-------------|------------|----------|---------|-----------|-----------|------------|
| Aluminum    | 396.153    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 48.4946    |
| Antimony    | 206.836    | -0.02515 | 0.00000 | 0.00000   | 0.00000   | -20.5057   |
| Arsenic     | 188.979    | -0.23424 | 0.00000 | 0.00000   | 0.00000   | 2.41902    |
| Barium      | 233.527    | -0.03042 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Beryllium   | 313.107    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Boron       | 249.677    | 0.16240  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Cadmium     | 226.502    | 0.10329  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Chromium    | 267.716    | -0.01944 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Cobalt      | 228.616    | 0.01444  | 0.00000 | 0.00000   | 0.00000   | -2.33100   |
| Copper      | 324.752    | -0.05293 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Iron        | 238.204    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Lead        | 220.353    | 0.09554  | 0.00000 | 0.00000   | 0.00000   | -2.48774   |
| Magnesium   | 279.077    | 1.04597  | 0.00000 | 0.00000   | 0.00000   | -10.4683   |
| Manganese   | 257.61     | -0.09877 | 0.00000 | 0.04089   | 0.00000   | 0.00000    |
| Molybdenum  | 202.031    | -0.07763 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Nickel      | 231.604    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Phosphorous | 214.914    | 0.80543  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Potassium   | 766.49     | 0.00000  | 0.00000 | 0.00000   | 0.39429   | 1.18725    |
| Selenium    | 196.026    | -3.27508 | 0.00000 | 0.00000   | 0.00000   | -3.07287   |
| Silica      | 251.611    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 27.2377    |
| Silicon     | 251.611    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 12.3082    |
| Silver      | 328.068    | -0.32385 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Strontium   | 421.552    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Sulfur      | 181.975    | 0.00000  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Thallium    | 190.801    | 0.00000  | 0.00000 | 0.00000   | -4.77918  | 0.00000    |
| Tin         | 189.927    | -0.01682 | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Titanium    | 334.94     | 0.00000  | 0.00000 | 0.08168   | 0.00000   | 0.00000    |
| Uranium     | 409.014    | 0.11400  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |
| Vanadium    | 292.402    | 0.14564  | 0.00000 | -0.01931  | 0.00000   | -14.1293   |
| Zinc        | 213.857    | 0.09701  | 0.00000 | 0.00000   | 0.00000   | 0.00000    |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1863-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Nickel   | Phosphorous | Potassium | Selenium | Silica  |
|-------------|------------|----------|-------------|-----------|----------|---------|
| Aluminum    | 396.153    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Antimony    | 206.836    | -0.84443 | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Arsenic     | 188.979    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Barium      | 233.527    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Beryllium   | 313.107    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Boron       | 249.677    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Cadmium     | 226.502    | -0.63547 | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Chromium    | 267.716    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Cobalt      | 228.616    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Copper      | 324.752    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Iron        | 238.204    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Lead        | 220.353    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Magnesium   | 279.077    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Manganese   | 257.61     | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Molybdenum  | 202.031    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Nickel      | 231.604    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Phosphorous | 214.914    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Potassium   | 766.49     | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Selenium    | 196.026    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Silica      | 251.611    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Silicon     | 251.611    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Silver      | 328.068    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Strontium   | 421.552    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Sulfur      | 181.975    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Thallium    | 190.801    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Tin         | 189.927    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Titanium    | 334.94     | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Uranium     | 409.014    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Vanadium    | 292.402    | 0.00000  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |
| Zinc        | 213.857    | 6.37026  | 0.00000     | 0.00000   | 0.00000  | 0.00000 |

**METALS**  
**-11-**  
**Interement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1863-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Silicon | Silver  | Strontium | Sulfur  | Thallium |
|-------------|------------|---------|---------|-----------|---------|----------|
| Aluminum    | 396.153    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Antimony    | 206.836    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Arsenic     | 188.979    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Barium      | 233.527    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Beryllium   | 313.107    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Boron       | 249.677    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Cadmium     | 226.502    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Chromium    | 267.716    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Cobalt      | 228.616    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Copper      | 324.752    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Iron        | 238.204    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Lead        | 220.353    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Magnesium   | 279.077    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Manganese   | 257.61     | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Molybdenum  | 202.031    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Nickel      | 231.604    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Phosphorous | 214.914    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Potassium   | 766.49     | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Selenium    | 196.026    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Silica      | 251.611    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Silicon     | 251.611    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Silver      | 328.068    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Strontium   | 421.552    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Sulfur      | 181.975    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Thallium    | 190.801    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Tin         | 189.927    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Titanium    | 334.94     | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Uranium     | 409.014    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Vanadium    | 292.402    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |
| Zinc        | 213.857    | 0.00000 | 0.00000 | 0.00000   | 0.00000 | 0.00000  |

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1863-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

| Parmname    | Wavelength | Tin      | Titanium | Uranium  | Vanadium | Zinc    |
|-------------|------------|----------|----------|----------|----------|---------|
| Aluminum    | 396.153    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Antimony    | 206.836    | -15.4932 | 3.30431  | 0.00000  | -2.81282 | 0.00000 |
| Arsenic     | 188.979    | 0.00000  | -8.66313 | 0.00000  | 0.00000  | 0.00000 |
| Barium      | 233.527    | 0.00000  | 0.00000  | 0.00000  | -2.20293 | 0.00000 |
| Beryllium   | 313.107    | 0.00000  | -2.27027 | 0.00000  | 0.00000  | 0.00000 |
| Boron       | 249.677    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Cadmium     | 226.502    | 0.00000  | 0.00000  | -0.19473 | 0.00000  | 0.00000 |
| Chromium    | 267.716    | 0.00000  | 0.00000  | 0.39645  | -1.41250 | 0.00000 |
| Cobalt      | 228.616    | 0.00000  | 2.09497  | 0.00000  | 0.00000  | 0.00000 |
| Copper      | 324.752    | 0.00000  | 0.00000  | 0.55360  | 0.00000  | 0.00000 |
| Iron        | 238.204    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Lead        | 220.353    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Magnesium   | 279.077    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Manganese   | 257.61     | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Molybdenum  | 202.031    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Nickel      | 231.604    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Phosphorous | 214.914    | -9.37529 | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Potassium   | 766.49     | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Selenium    | 196.026    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Silica      | 251.611    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Silicon     | 251.611    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Silver      | 328.068    | 0.00000  | 0.00000  | 0.81635  | -4.04400 | 0.00000 |
| Strontium   | 421.552    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Sulfur      | 181.975    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Thallium    | 190.801    | 0.00000  | -8.29801 | 0.00000  | 1.88584  | 0.00000 |
| Tin         | 189.927    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Titanium    | 334.94     | 0.00000  | 0.00000  | 0.43915  | 0.00000  | 0.00000 |
| Uranium     | 409.014    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |
| Vanadium    | 292.402    | 0.00000  | 1.05947  | -1.91382 | 0.00000  | 0.00000 |
| Zinc        | 213.857    | 0.00000  | 0.00000  | 0.00000  | 0.00000  | 0.00000 |

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1863-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

| <u>Analyte</u> | <u>Integration<br/>Time<br/>(msec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective<br/>Date</u> |
|----------------|--|------------|--------------|---------------------------|
| Aluminum       | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Antimony       | 1000                                   | 250        | ug/L         | 01-FEB-10                 |
| Arsenic        | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Barium         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Beryllium      | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Cadmium        | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Calcium        | 500                                    | 50000      | ug/L         | 01-FEB-10                 |
| Chromium       | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Cobalt         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Copper         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Iron           | 500                                    | 50000      | ug/L         | 01-FEB-10                 |
| Lead           | 1000                                   | 5000       | ug/L         | 01-FEB-10                 |
| Magnesium      | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Manganese      | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Nickel         | 1000                                   | 1000       | ug/L         | 01-FEB-10                 |
| Potassium      | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Selenium       | 1000                                   | 500        | ug/L         | 01-FEB-10                 |
| Silver         | 1000                                   | 250        | ug/L         | 01-FEB-10                 |
| Sodium         | 1                                      | 50000      | ug/L         | 01-FEB-10                 |
| Thallium       | 1000                                   | 500        | ug/L         | 01-FEB-10                 |
| Vanadium       | 1000                                   | 100        | ug/L         | 01-FEB-10                 |
| Zinc           | 1000                                   | 2500       | ug/L         | 01-FEB-10                 |

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1863-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

| <u>Analyte</u> | <u>Integration<br/>Time<br/>(sec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective<br/>Date</u> |
|----------------|---------------------------------------|------------|--------------|---------------------------|
| Lead           | 20                                    | 25000      | ug/L         | 01-FEB-10                 |
| Magnesium      | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Manganese      | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Nickel         | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Potassium      | 20                                    | 300000     | ug/L         | 01-FEB-10                 |
| Selenium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Silver         | 20                                    | 1000       | ug/L         | 01-FEB-10                 |
| Sodium         | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Thallium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Vanadium       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Zinc           | 20                                    | 15000      | ug/L         | 01-FEB-10                 |
| Iron           | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Aluminum       | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Antimony       | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Arsenic        | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Barium         | 20                                    | 15000      | ug/L         | 01-FEB-10                 |
| Beryllium      | 20                                    | 3000       | ug/L         | 01-FEB-10                 |
| Cadmium        | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Calcium        | 20                                    | 500000     | ug/L         | 01-FEB-10                 |
| Chromium       | 20                                    | 25000      | ug/L         | 01-FEB-10                 |
| Cobalt         | 20                                    | 10000      | ug/L         | 01-FEB-10                 |
| Copper         | 20                                    | 20000      | ug/L         | 01-FEB-10                 |

# Raw Data

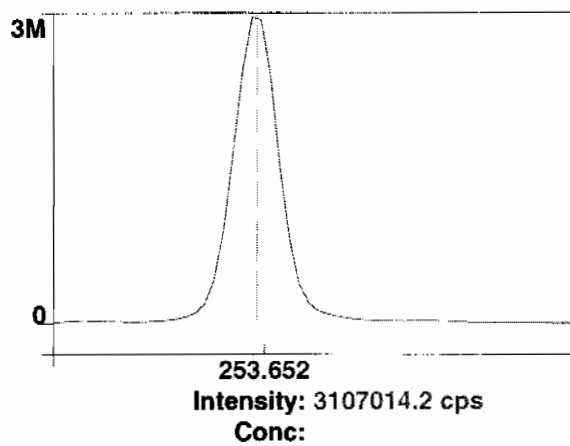


Method: Hg\_ReAlign  
Result: 031510

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

## =====

## Analysis Begun

Start Time: 3/10/2010 16:32:56

Plasma On Time: 3/8/2010 08:27:38

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif

Batch ID:

Results Data Set: 031010

Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/10/2010 16:32:57

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

## -----

## Replicate Data: S0

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3225.1           | 3225.1                 | 0.000 %               | 16:35:10         |
| 1     | Y RADIAL           | 2632.7           | 2632.7                 | 0.000 %               | 16:35:10         |
| 1     | Al 396.153Radial†  | -59.7            | -59.4                  | [0.00] ug/L           | 16:35:10         |
| 1     | Ca 317.933Radial†  | 11.9             | 11.8                   | [0.00] ug/L           | 16:35:10         |
| 1     | Fe 238.204 Radial† | 10.7             | 10.6                   | [0.00] ug/L           | 16:35:10         |
| 1     | K 766.490 Radial†  | 2010.0           | 1997.2                 | [0.00] ug/L           | 16:34:50         |
| 1     | Mg 279.077 IEC†    | 3.4              | 3.4                    | [0.00] ug/L           | 16:35:10         |
| 1     | Na 589.592 Radial† | -743.7           | -739.0                 | [0.00] ug/L           | 16:34:50         |
| 1     | Sr 421.552†        | 35.3             | 35.1                   | [0.00] ug/L           | 16:34:50         |
| 1     | Sc 361.383         | 788962.0         | 788962.0               | 0.0000 %              | 16:36:07         |
| 1     | Y 371.029          | 674779.7         | 674779.7               | 0.0000 %              | 16:36:07         |
| 1     | Ag 328.068†        | 76.4             | 76.7                   | [0.00] ug/L           | 16:36:07         |
| 1     | As 188.979†        | -18.2            | -18.2                  | [0.00] ug/L           | 16:36:27         |
| 1     | B 249.677†         | -349.7           | -351.0                 | [0.00] ug/L           | 16:36:27         |
| 1     | Ba 233.527†        | -4.3             | -4.4                   | [0.00] ug/L           | 16:36:27         |
| 1     | Be 313.107†        | -3523.2          | -3536.6                | [0.00] ug/L           | 16:36:07         |
| 1     | Cd 226.502†        | -151.2           | -151.7                 | [0.00] ug/L           | 16:36:27         |
| 1     | Co 228.616†        | -50.6            | -50.8                  | [0.00] ug/L           | 16:36:27         |
| 1     | Cr 267.716†        | 58.8             | 59.0                   | [0.00] ug/L           | 16:36:27         |
| 1     | Cu 324.752†        | 6175.6           | 6199.1                 | [0.00] ug/L           | 16:36:07         |
| 1     | Mn 257.610†        | 402.6            | 404.2                  | [0.00] ug/L           | 16:36:27         |
| 1     | Mo 202.031†        | 10.9             | 10.9                   | [0.00] ug/L           | 16:36:27         |
| 1     | Ni 231.604†        | 59.3             | 59.5                   | [0.00] ug/L           | 16:36:27         |
| 1     | P 214.914†         | 157.1            | 157.7                  | [0.00] ug/L           | 16:36:27         |
| 1     | Pb 220.353†        | -44.2            | -44.4                  | [0.00] ug/L           | 16:36:27         |
| 1     | S 181.975 Axial†   | 32.5             | 32.6                   | [0.00] ug/L           | 16:36:27         |
| 1     | Sb 206.836†        | 28.0             | 28.1                   | [0.00] ug/L           | 16:36:27         |
| 1     | Se 196.026†        | -21.8            | -21.9                  | [0.00] ug/L           | 16:36:27         |
| 1     | Si 251.611†        | 474.7            | 476.5                  | [0.00] ug/L           | 16:36:27         |
| 1     | Sn 189.927†        | 10.3             | 10.3                   | [0.00] ug/L           | 16:36:27         |
| 1     | Ti 334.940†        | -878.2           | -881.5                 | [0.00] ug/L           | 16:36:07         |
| 1     | Tl 190.801†        | -30.4            | -30.5                  | [0.00] ug/L           | 16:36:27         |
| 1     | U 409.014†         | -1952.1          | -1959.6                | [0.00] ug/L           | 16:36:07         |
| 1     | V 292.402†         | -1236.9          | -1241.6                | [0.00] ug/L           | 16:36:07         |
| 1     | Zn 213.857†        | 514.3            | 516.3                  | [0.00] ug/L           | 16:36:27         |
| 1     | SiO2†              | 463.4            | 465.1                  | [0.00] ug/L           | 16:37:38         |
| 2     | Sc Radial          | 3187.5           | 3187.5                 | 0.000 %               | 16:35:35         |
| 2     | Y RADIAL           | 2619.6           | 2619.6                 | 0.000 %               | 16:35:35         |
| 2     | Al 396.153Radial†  | -58.5            | -58.8                  | [0.00] ug/L           | 16:35:35         |
| 2     | Ca 317.933Radial†  | 12.4             | 12.5                   | [0.00] ug/L           | 16:35:35         |
| 2     | Fe 238.204 Radial† | 8.5              | 8.6                    | [0.00] ug/L           | 16:35:35         |
| 2     | K 766.490 Radial†  | 1956.1           | 1966.6                 | [0.00] ug/L           | 16:35:15         |
| 2     | Mg 279.077 IEC†    | -1.4             | -1.4                   | [0.00] ug/L           | 16:35:35         |
| 2     | Na 589.592 Radial† | -777.4           | -781.6                 | [0.00] ug/L           | 16:35:15         |
| 2     | Sr 421.552†        | 39.0             | 39.2                   | [0.00] ug/L           | 16:35:15         |
| 2     | Sc 361.383         | 793522.6         | 793522.6               | 0.0000 %              | 16:36:32         |
| 2     | Y 371.029          | 678954.5         | 678954.5               | 0.0000 %              | 16:36:32         |

|   |                    |          |          |             |          |
|---|--------------------|----------|----------|-------------|----------|
| 2 | Ag 328.068†        | 131.5    | 131.2    | [0.00] ug/L | 16:36:32 |
| 2 | As 188.979†        | -18.7    | -18.7    | [0.00] ug/L | 16:36:52 |
| 2 | B 249.677†         | -387.4   | -386.7   | [0.00] ug/L | 16:36:52 |
| 2 | Ba 233.527†        | -10.9    | -10.9    | [0.00] ug/L | 16:36:52 |
| 2 | Be 313.107†        | -3560.8  | -3553.8  | [0.00] ug/L | 16:36:32 |
| 2 | Cd 226.502†        | -158.1   | -157.8   | [0.00] ug/L | 16:36:52 |
| 2 | Co 228.616†        | -47.4    | -47.3    | [0.00] ug/L | 16:36:52 |
| 2 | Cr 267.716†        | 49.9     | 49.8     | [0.00] ug/L | 16:36:52 |
| 2 | Cu 324.752†        | 6248.8   | 6236.6   | [0.00] ug/L | 16:36:32 |
| 2 | Mn 257.610†        | 390.5    | 389.8    | [0.00] ug/L | 16:36:52 |
| 2 | Mo 202.031†        | 13.6     | 13.6     | [0.00] ug/L | 16:36:52 |
| 2 | Ni 231.604†        | 57.5     | 57.3     | [0.00] ug/L | 16:36:52 |
| 2 | P 214.914†         | 168.3    | 168.0    | [0.00] ug/L | 16:36:52 |
| 2 | Pb 220.353†        | -49.5    | -49.4    | [0.00] ug/L | 16:36:52 |
| 2 | S 181.975 Axial†   | 28.7     | 28.6     | [0.00] ug/L | 16:36:52 |
| 2 | Sb 206.836†        | 20.4     | 20.3     | [0.00] ug/L | 16:36:52 |
| 2 | Se 196.026†        | -21.0    | -20.9    | [0.00] ug/L | 16:36:52 |
| 2 | Si 251.611†        | 490.8    | 489.9    | [0.00] ug/L | 16:36:52 |
| 2 | Sn 189.927†        | 9.6      | 9.6      | [0.00] ug/L | 16:36:52 |
| 2 | Ti 334.940†        | -948.2   | -946.3   | [0.00] ug/L | 16:36:32 |
| 2 | Tl 190.801†        | -22.2    | -22.2    | [0.00] ug/L | 16:36:52 |
| 2 | U 409.014†         | -1949.5  | -1945.7  | [0.00] ug/L | 16:36:32 |
| 2 | V 292.402†         | -1151.1  | -1148.9  | [0.00] ug/L | 16:36:32 |
| 2 | Zn 213.857†        | 512.1    | 511.1    | [0.00] ug/L | 16:36:52 |
| 2 | SiO2†              | 471.3    | 470.3    | [0.00] ug/L | 16:37:58 |
| 3 | Sc Radial          | 3201.1   | 3201.1   | 0.000 %     | 16:36:00 |
| 3 | Y RADIAL           | 2630.1   | 2630.1   | 0.000 %     | 16:36:00 |
| 3 | Al 396.153Radial†  | -67.8    | -67.8    | [0.00] ug/L | 16:36:00 |
| 3 | Ca 317.933Radial†  | 13.1     | 13.1     | [0.00] ug/L | 16:36:00 |
| 3 | Fe 238.204 Radial† | 9.2      | 9.2      | [0.00] ug/L | 16:36:00 |
| 3 | K 766.490 Radial†  | 2113.9   | 2116.2   | [0.00] ug/L | 16:35:40 |
| 3 | Mg 279.077 IEC†    | 3.1      | 3.1      | [0.00] ug/L | 16:36:00 |
| 3 | Na 589.592 Radial† | -676.5   | -677.2   | [0.00] ug/L | 16:35:40 |
| 3 | Sr 421.552†        | 29.6     | 29.6     | [0.00] ug/L | 16:35:40 |
| 3 | Sc 361.383         | 793410.7 | 793410.7 | 0.0000 %    | 16:36:57 |
| 3 | Y 371.029          | 679187.8 | 679187.8 | 0.0000 %    | 16:36:57 |
| 3 | Ag 328.068†        | 186.4    | 186.1    | [0.00] ug/L | 16:36:57 |
| 3 | As 188.979†        | -19.6    | -19.6    | [0.00] ug/L | 16:37:17 |
| 3 | B 249.677†         | -394.8   | -394.1   | [0.00] ug/L | 16:37:17 |
| 3 | Ba 233.527†        | 14.4     | 14.3     | [0.00] ug/L | 16:37:17 |
| 3 | Be 313.107†        | -3541.8  | -3535.4  | [0.00] ug/L | 16:36:57 |
| 3 | Cd 226.502†        | -159.5   | -159.3   | [0.00] ug/L | 16:37:17 |
| 3 | Co 228.616†        | -39.7    | -39.6    | [0.00] ug/L | 16:37:17 |
| 3 | Cr 267.716†        | 49.7     | 49.7     | [0.00] ug/L | 16:37:17 |
| 3 | Cu 324.752†        | 6211.6   | 6200.3   | [0.00] ug/L | 16:36:57 |
| 3 | Mn 257.610†        | 403.4    | 402.6    | [0.00] ug/L | 16:37:17 |
| 3 | Mo 202.031†        | 14.6     | 14.6     | [0.00] ug/L | 16:37:17 |
| 3 | Ni 231.604†        | 65.1     | 65.0     | [0.00] ug/L | 16:37:17 |
| 3 | P 214.914†         | 167.6    | 167.3    | [0.00] ug/L | 16:37:17 |
| 3 | Pb 220.353†        | -37.3    | -37.3    | [0.00] ug/L | 16:37:17 |
| 3 | S 181.975 Axial†   | 31.2     | 31.2     | [0.00] ug/L | 16:37:17 |
| 3 | Sb 206.836†        | 19.7     | 19.7     | [0.00] ug/L | 16:37:17 |
| 3 | Se 196.026†        | -19.3    | -19.3    | [0.00] ug/L | 16:37:17 |
| 3 | Si 251.611†        | 462.8    | 461.9    | [0.00] ug/L | 16:37:17 |
| 3 | Sn 189.927†        | 3.5      | 3.5      | [0.00] ug/L | 16:37:17 |
| 3 | Ti 334.940†        | -959.2   | -957.4   | [0.00] ug/L | 16:36:57 |
| 3 | Tl 190.801†        | -25.2    | -25.2    | [0.00] ug/L | 16:37:17 |
| 3 | U 409.014†         | -2014.6  | -2010.9  | [0.00] ug/L | 16:36:57 |
| 3 | V 292.402†         | -1188.4  | -1186.3  | [0.00] ug/L | 16:36:57 |
| 3 | Zn 213.857†        | 507.7    | 506.8    | [0.00] ug/L | 16:37:17 |
| 3 | SiO2†              | 490.5    | 489.7    | [0.00] ug/L | 16:38:18 |

-----  
Mean Data: S0

| Analyte     | Mean Corrected<br>Intensity | Std.Dev. | RSD    | Calib<br>Conc. Units |
|-------------|-----------------------------|----------|--------|----------------------|
| Sc 361.383  | 791965.1                    | 2601.35  | 0.33%  | 0.0000 %             |
| Sc Radial   | 3204.6                      | 19.03    | 0.59%  | 0.000 %              |
| Y 371.029   | 677640.7                    | 2480.38  | 0.37%  | 0.0000 %             |
| Y RADIAL    | 2627.5                      | 6.91     | 0.26%  | 0.000 %              |
| Ag 328.068† | 131.3                       | 54.70    | 41.65% | [0.00] ug/L          |

|                    |         |       |         |        |      |
|--------------------|---------|-------|---------|--------|------|
| Al 396.153Radial†  | -62.0   | 5.05  | 8.14%   | [0.00] | ug/L |
| As 188.979†        | -18.8   | 0.70  | 3.72%   | [0.00] | ug/L |
| B 249.677†         | -377.3  | 23.01 | 6.10%   | [0.00] | ug/L |
| Ba 233.527†        | -0.3    | 13.08 | >999.9% | [0.00] | ug/L |
| Be 313.107†        | -3541.9 | 10.32 | 0.29%   | [0.00] | ug/L |
| Ca 317.933Radial†  | 12.5    | 0.67  | 5.35%   | [0.00] | ug/L |
| Cd 226.502†        | -156.3  | 3.98  | 2.54%   | [0.00] | ug/L |
| Co 228.616†        | -45.9   | 5.72  | 12.46%  | [0.00] | ug/L |
| Cr 267.716†        | 52.8    | 5.38  | 10.18%  | [0.00] | ug/L |
| Cu 324.752†        | 6212.0  | 21.28 | 0.34%   | [0.00] | ug/L |
| Fe 238.204 Radial† | 9.5     | 1.05  | 11.02%  | [0.00] | ug/L |
| K 766.490 Radial†  | 2026.7  | 79.04 | 3.90%   | [0.00] | ug/L |
| Mg 279.077 IEC†    | 1.7     | 2.67  | 156.13% | [0.00] | ug/L |
| Mn 257.610†        | 398.9   | 7.90  | 1.98%   | [0.00] | ug/L |
| Mo 202.031†        | 13.0    | 1.89  | 14.51%  | [0.00] | ug/L |
| Na 589.592 Radial† | -732.6  | 52.47 | 7.16%   | [0.00] | ug/L |
| Ni 231.604†        | 60.6    | 3.96  | 6.53%   | [0.00] | ug/L |
| P 214.914†         | 164.3   | 5.75  | 3.50%   | [0.00] | ug/L |
| Pb 220.353†        | -43.7   | 6.08  | 13.92%  | [0.00] | ug/L |
| S 181.975 Axial†   | 30.8    | 2.03  | 6.58%   | [0.00] | ug/L |
| Sb 206.836†        | 22.7    | 4.69  | 20.65%  | [0.00] | ug/L |
| Se 196.026†        | -20.7   | 1.33  | 6.42%   | [0.00] | ug/L |
| Si 251.611†        | 476.1   | 13.96 | 2.93%   | [0.00] | ug/L |
| Sn 189.927†        | 7.8     | 3.77  | 48.35%  | [0.00] | ug/L |
| Sr 421.552†        | 34.6    | 4.83  | 13.94%  | [0.00] | ug/L |
| Ti 334.940†        | -928.4  | 41.01 | 4.42%   | [0.00] | ug/L |
| Tl 190.801†        | -26.0   | 4.24  | 16.34%  | [0.00] | ug/L |
| U 409.014†         | -1972.1 | 34.35 | 1.74%   | [0.00] | ug/L |
| V 292.402†         | -1192.3 | 46.67 | 3.91%   | [0.00] | ug/L |
| Zn 213.857†        | 511.4   | 4.77  | 0.93%   | [0.00] | ug/L |
| SiO2†              | 475.0   | 12.93 | 2.72%   | [0.00] | ug/L |

Sequence No.: 2  
 Sample ID: S0.1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 3/10/2010 16:40:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

| Repl# | Analyte           | Net<br>Intensity | Corrected<br>Intensity | Conc. Units | Calib. | Analysis<br>Time |
|-------|-------------------|------------------|------------------------|-------------|--------|------------------|
| 1     | Sc Radial         | 3391.4           | 3391.4                 | 106         | %      | 16:42:42         |
| 1     | Y RADIAL          | 2782.4           | 2782.4                 | 105.9       | %      | 16:42:42         |
| 1     | K 766.490 Radial† | 4144.4           | 1889.4                 | [1000]      | ug/L   | 16:42:21         |
| 1     | Sr 421.552†       | 11257.0          | 10602.0                | [100]       | ug/L   | 16:42:42         |
| 1     | Sc 361.383        | 819759.9         | 819759.9               | 103.51      | %      | 16:43:38         |
| 1     | Y 371.029         | 700353.7         | 700353.7               | 103.35      | %      | 16:43:38         |
| 1     | Ag 328.068†       | 20390.8          | 19568.1                | [100]       | ug/L   | 16:43:38         |
| 1     | As 188.979†       | 160.2            | 173.6                  | [100]       | ug/L   | 16:43:59         |
| 1     | B 249.677†        | 3227.1           | 3494.9                 | [100]       | ug/L   | 16:43:38         |
| 1     | Ba 233.527†       | 10836.7          | 10469.6                | [100]       | ug/L   | 16:43:38         |
| 1     | Be 313.107†       | 232718.9         | 228370.2               | [100]       | ug/L   | 16:43:38         |
| 1     | Cd 226.502†       | 6798.9           | 6724.6                 | [100]       | ug/L   | 16:43:59         |
| 1     | Co 228.616†       | 3913.9           | 3827.1                 | [100]       | ug/L   | 16:43:59         |
| 1     | Cr 267.716†       | 7876.0           | 7556.1                 | [100]       | ug/L   | 16:43:38         |
| 1     | Cu 324.752†       | 37685.2          | 30195.5                | [100]       | ug/L   | 16:43:38         |
| 1     | Mn 257.610†       | 78646.5          | 75581.1                | [100]       | ug/L   | 16:43:38         |
| 1     | Mo 202.031†       | 1185.0           | 1131.8                 | [100]       | ug/L   | 16:43:59         |
| 1     | Ni 231.604†       | 3346.4           | 3172.3                 | [100]       | ug/L   | 16:43:59         |
| 1     | P 214.914†        | 841.8            | 649.0                  | [500]       | ug/L   | 16:43:59         |
| 1     | Pb 220.353†       | 621.3            | 643.9                  | [100]       | ug/L   | 16:43:59         |
| 1     | S 181.975 Axial†  | 136.7            | 101.2                  | [200]       | ug/L   | 16:43:59         |
| 1     | Sb 206.836†       | 273.5            | 241.5                  | [100]       | ug/L   | 16:43:59         |
| 1     | Se 196.026†       | 107.8            | 124.8                  | [100]       | ug/L   | 16:43:59         |
| 1     | Si 251.611†       | 14031.9          | 13080.1                | [500]       | ug/L   | 16:43:38         |
| 1     | Sn 189.927†       | 455.0            | 431.8                  | [100]       | ug/L   | 16:43:59         |
| 1     | Ti 334.940†       | 58272.8          | 57225.4                | [100]       | ug/L   | 16:43:38         |
| 1     | Tl 190.801†       | 241.0            | 258.8                  | [100]       | ug/L   | 16:43:59         |
| 1     | U 409.014†        | 1682.6           | 3597.6                 | [100]       | ug/L   | 16:43:38         |
| 1     | V 292.402†        | 11714.4          | 12509.5                | [100]       | ug/L   | 16:43:38         |
| 1     | Zn 213.857†       | 8940.3           | 8125.8                 | [100]       | ug/L   | 16:43:38         |
| 1     | SiO2†             | 13988.0          | 13038.7                | [1069.5]    | ug/L   | 16:44:55         |
| 2     | Sc Radial         | 3340.1           | 3340.1                 | 104         | %      | 16:43:07         |
| 2     | Y RADIAL          | 2749.9           | 2749.9                 | 104.7       | %      | 16:43:07         |
| 2     | K 766.490 Radial† | 4092.1           | 1899.4                 | [1000]      | ug/L   | 16:42:47         |
| 2     | Sr 421.552†       | 11075.9          | 10591.9                | [100]       | ug/L   | 16:43:07         |
| 2     | Sc 361.383        | 831257.4         | 831257.4               | 104.96      | %      | 16:44:04         |
| 2     | Y 371.029         | 710207.1         | 710207.1               | 104.81      | %      | 16:44:04         |
| 2     | Ag 328.068†       | 20713.8          | 19603.3                | [100]       | ug/L   | 16:44:04         |
| 2     | As 188.979†       | 160.4            | 171.6                  | [100]       | ug/L   | 16:44:24         |
| 2     | B 249.677†        | 3327.8           | 3547.8                 | [100]       | ug/L   | 16:44:04         |
| 2     | Ba 233.527†       | 11034.2          | 10512.9                | [100]       | ug/L   | 16:44:04         |
| 2     | Be 313.107†       | 236491.5         | 228854.8               | [100]       | ug/L   | 16:44:04         |
| 2     | Cd 226.502†       | 6793.4           | 6628.5                 | [100]       | ug/L   | 16:44:24         |
| 2     | Co 228.616†       | 3929.7           | 3789.8                 | [100]       | ug/L   | 16:44:24         |
| 2     | Cr 267.716†       | 8028.8           | 7596.4                 | [100]       | ug/L   | 16:44:04         |
| 2     | Cu 324.752†       | 38159.1          | 30143.4                | [100]       | ug/L   | 16:44:04         |
| 2     | Mn 257.610†       | 79821.2          | 75649.3                | [100]       | ug/L   | 16:44:04         |
| 2     | Mo 202.031†       | 1186.7           | 1117.6                 | [100]       | ug/L   | 16:44:24         |
| 2     | Ni 231.604†       | 3364.4           | 3144.7                 | [100]       | ug/L   | 16:44:24         |
| 2     | P 214.914†        | 838.3            | 634.3                  | [500]       | ug/L   | 16:44:24         |
| 2     | Pb 220.353†       | 635.4            | 649.0                  | [100]       | ug/L   | 16:44:24         |
| 2     | S 181.975 Axial†  | 132.9            | 95.8                   | [200]       | ug/L   | 16:44:24         |
| 2     | Sb 206.836†       | 273.5            | 237.8                  | [100]       | ug/L   | 16:44:24         |
| 2     | Se 196.026†       | 111.5            | 126.9                  | [100]       | ug/L   | 16:44:24         |
| 2     | Si 251.611†       | 14243.9          | 13094.5                | [500]       | ug/L   | 16:44:04         |
| 2     | Sn 189.927†       | 459.9            | 430.4                  | [100]       | ug/L   | 16:44:24         |
| 2     | Ti 334.940†       | 59325.5          | 57449.7                | [100]       | ug/L   | 16:44:04         |
| 2     | Tl 190.801†       | 250.5            | 264.6                  | [100]       | ug/L   | 16:44:24         |
| 2     | U 409.014†        | 1688.5           | 3580.8                 | [100]       | ug/L   | 16:44:04         |

|   |                   |          |          |               |          |
|---|-------------------|----------|----------|---------------|----------|
| 2 | V 292.402†        | 11930.9  | 12559.2  | [100] ug/L    | 16:44:04 |
| 2 | Zn 213.857†       | 9065.7   | 8125.8   | [100] ug/L    | 16:44:04 |
| 2 | SiO2†             | 13942.6  | 12808.5  | [1069.5] ug/L | 16:45:00 |
| 3 | Sc Radial         | 3368.1   | 3368.1   | 105 %         | 16:43:32 |
| 3 | Y RADIAL          | 2759.0   | 2759.0   | 105.0 %       | 16:43:32 |
| 3 | K 766.490 Radial† | 3984.8   | 1764.6   | [1000] ug/L   | 16:43:12 |
| 3 | Sr 421.552†       | 11114.2  | 10539.8  | [100] ug/L    | 16:43:32 |
| 3 | Sc 361.383        | 817163.3 | 817163.3 | 103.18 %      | 16:44:30 |
| 3 | Y 371.029         | 697945.3 | 697945.3 | 103.00 %      | 16:44:30 |
| 3 | Ag 328.068†       | 20389.9  | 19629.8  | [100] ug/L    | 16:44:30 |
| 3 | As 188.979†       | 157.5    | 171.5    | [100] ug/L    | 16:44:50 |
| 3 | B 249.677†        | 3232.5   | 3510.1   | [100] ug/L    | 16:44:30 |
| 3 | Ba 233.527†       | 10868.1  | 10533.3  | [100] ug/L    | 16:44:30 |
| 3 | Be 313.107†       | 232406.5 | 228781.9 | [100] ug/L    | 16:44:30 |
| 3 | Cd 226.502†       | 6777.9   | 6725.2   | [100] ug/L    | 16:44:50 |
| 3 | Co 228.616†       | 3898.5   | 3824.2   | [100] ug/L    | 16:44:50 |
| 3 | Cr 267.716†       | 7870.1   | 7574.6   | [100] ug/L    | 16:44:30 |
| 3 | Cu 324.752†       | 37732.8  | 30357.3  | [100] ug/L    | 16:44:30 |
| 3 | Mn 257.610†       | 78751.9  | 75924.6  | [100] ug/L    | 16:44:30 |
| 3 | Mo 202.031†       | 1189.4   | 1139.7   | [100] ug/L    | 16:44:50 |
| 3 | Ni 231.604†       | 3339.7   | 3176.1   | [100] ug/L    | 16:44:50 |
| 3 | P 214.914†        | 829.5    | 639.6    | [500] ug/L    | 16:44:50 |
| 3 | Pb 220.353†       | 603.3    | 628.4    | [100] ug/L    | 16:44:50 |
| 3 | S 181.975 Axial†  | 136.6    | 101.6    | [200] ug/L    | 16:44:50 |
| 3 | Sb 206.836†       | 265.9    | 234.9    | [100] ug/L    | 16:44:50 |
| 3 | Se 196.026†       | 102.9    | 120.4    | [100] ug/L    | 16:44:50 |
| 3 | Si 251.611†       | 14028.0  | 13119.4  | [500] ug/L    | 16:44:30 |
| 3 | Sn 189.927†       | 455.0    | 433.2    | [100] ug/L    | 16:44:50 |
| 3 | Ti 334.940†       | 58302.0  | 57432.6  | [100] ug/L    | 16:44:30 |
| 3 | Tl 190.801†       | 232.9    | 251.6    | [100] ug/L    | 16:44:50 |
| 3 | U 409.014†        | 1581.6   | 3504.9   | [100] ug/L    | 16:44:30 |
| 3 | V 292.402†        | 11687.3  | 12519.2  | [100] ug/L    | 16:44:30 |
| 3 | Zn 213.857†       | 8939.3   | 8152.2   | [100] ug/L    | 16:44:30 |
| 3 | SiO2†             | 13898.0  | 12994.4  | [1069.5] ug/L | 16:45:05 |

## Mean Data: S0.1

| Analyte           | Mean Corrected Intensity | Std.Dev. | RSD   | Conc. Units   | Calib |
|-------------------|--------------------------|----------|-------|---------------|-------|
| Sc 361.383        | 822726.9                 | 7500.91  | 0.91% | 103.88 %      |       |
| Sc Radial         | 3366.6                   | 25.71    | 0.76% | 105 %         |       |
| Y 371.029         | 702835.3                 | 6496.67  | 0.92% | 103.72 %      |       |
| Y RADIAL          | 2763.8                   | 16.77    | 0.61% | 105.2 %       |       |
| Ag 328.068†       | 19600.4                  | 30.98    | 0.16% | [100] ug/L    |       |
| As 188.979†       | 172.2                    | 1.20     | 0.70% | [100] ug/L    |       |
| B 249.677†        | 3517.6                   | 27.24    | 0.77% | [100] ug/L    |       |
| Ba 233.527†       | 10505.3                  | 32.53    | 0.31% | [100] ug/L    |       |
| Be 313.107†       | 228669.0                 | 261.29   | 0.11% | [100] ug/L    |       |
| Cd 226.502†       | 6692.8                   | 55.63    | 0.83% | [100] ug/L    |       |
| Co 228.616†       | 3813.7                   | 20.75    | 0.54% | [100] ug/L    |       |
| Cr 267.716†       | 7575.7                   | 20.16    | 0.27% | [100] ug/L    |       |
| Cu 324.752†       | 30232.0                  | 111.52   | 0.37% | [100] ug/L    |       |
| K 766.490 Radial† | 1851.2                   | 75.10    | 4.06% | [1000] ug/L   |       |
| Mn 257.610†       | 75718.3                  | 181.89   | 0.24% | [100] ug/L    |       |
| Mo 202.031†       | 1129.7                   | 11.23    | 0.99% | [100] ug/L    |       |
| Ni 231.604†       | 3164.4                   | 17.14    | 0.54% | [100] ug/L    |       |
| P 214.914†        | 641.0                    | 7.41     | 1.16% | [500] ug/L    |       |
| Pb 220.353†       | 640.4                    | 10.74    | 1.68% | [100] ug/L    |       |
| S 181.975 Axial†  | 99.5                     | 3.21     | 3.23% | [200] ug/L    |       |
| Sb 206.836†       | 238.1                    | 3.27     | 1.37% | [100] ug/L    |       |
| Se 196.026†       | 124.0                    | 3.32     | 2.68% | [100] ug/L    |       |
| Si 251.611†       | 13098.0                  | 19.88    | 0.15% | [500] ug/L    |       |
| Sn 189.927†       | 431.8                    | 1.41     | 0.33% | [100] ug/L    |       |
| Sr 421.552†       | 10577.9                  | 33.38    | 0.32% | [100] ug/L    |       |
| Ti 334.940†       | 57369.3                  | 124.83   | 0.22% | [100] ug/L    |       |
| Tl 190.801†       | 258.4                    | 6.51     | 2.52% | [100] ug/L    |       |
| U 409.014†        | 3561.1                   | 49.41    | 1.39% | [100] ug/L    |       |
| V 292.402†        | 12529.3                  | 26.36    | 0.21% | [100] ug/L    |       |
| Zn 213.857†       | 8134.6                   | 15.27    | 0.19% | [100] ug/L    |       |
| SiO2†             | 12947.2                  | 122.11   | 0.94% | [1069.5] ug/L |       |

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 3/10/2010 16:47:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

| Repl# | Analyte           | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib. | Analysis<br>Time |
|-------|-------------------|------------------|------------------------|----------------|--------|------------------|
| 1     | Sc Radial         | 3341.8           | 3341.8                 | 104 %          |        | 16:49:28         |
| 1     | Y RADIAL          | 2729.1           | 2729.1                 | 103.9 %        |        | 16:49:28         |
| 1     | Al 396.153Radial† | 2289.7           | 2257.7                 | [5000] ug/L    |        | 16:49:08         |
| 1     | Ca 317.933Radial† | 1311.1           | 1244.8                 | [5000] ug/L    |        | 16:49:28         |
| 1     | K 766.490 Radial† | 12877.3          | 10321.8                | [5000] ug/L    |        | 16:49:08         |
| 1     | Mg 279.077 IEC†   | 52.8             | 48.9                   | [5000] ug/L    |        | 16:49:28         |
| 1     | Sr 421.552†       | 52881.2          | 50674.9                | [500] ug/L     |        | 16:49:08         |
| 1     | Sc 361.383        | 838716.0         | 838716.0               | 105.90 %       |        | 16:50:26         |
| 1     | Y 371.029         | 709497.2         | 709497.2               | 104.70 %       |        | 16:50:26         |
| 1     | Ag 328.068†       | 101896.8         | 96085.6                | [500] ug/L     |        | 16:50:31         |
| 1     | As 188.979†       | 902.4            | 870.9                  | [500] ug/L     |        | 16:50:51         |
| 1     | B 249.677†        | 17924.0          | 17302.2                | [500] ug/L     |        | 16:50:31         |
| 1     | Ba 233.527†       | 54137.1          | 51119.7                | [500] ug/L     |        | 16:50:31         |
| 1     | Be 313.107†       | 1205583.6        | 1141925.1              | [500] ug/L     |        | 16:50:26         |
| 1     | Cd 226.502†       | 35140.7          | 33338.1                | [500] ug/L     |        | 16:50:31         |
| 1     | Co 228.616†       | 19811.5          | 18753.1                | [500] ug/L     |        | 16:50:31         |
| 1     | Cr 267.716†       | 39344.3          | 37098.4                | [500] ug/L     |        | 16:50:31         |
| 1     | Cu 324.752†       | 165256.1         | 149832.6               | [500] ug/L     |        | 16:50:31         |
| 1     | Mn 257.610†       | 393593.2         | 371255.0               | [500] ug/L     |        | 16:50:26         |
| 1     | Mo 202.031†       | 5949.7           | 5605.0                 | [500] ug/L     |        | 16:50:51         |
| 1     | Ni 231.604†       | 16523.9          | 15542.2                | [500] ug/L     |        | 16:50:31         |
| 1     | P 214.914†        | 3544.5           | 3182.6                 | [2500] ug/L    |        | 16:50:51         |
| 1     | Pb 220.353†       | 3248.4           | 3111.0                 | [500] ug/L     |        | 16:50:51         |
| 1     | S 181.975 Axial†  | 600.7            | 536.4                  | [1000] ug/L    |        | 16:50:51         |
| 1     | Sb 206.836†       | 1272.8           | 1179.1                 | [500] ug/L     |        | 16:50:51         |
| 1     | Se 196.026†       | 617.2            | 603.5                  | [500] ug/L     |        | 16:50:51         |
| 1     | Si 251.611†       | 68896.8          | 64580.3                | [2500] ug/L    |        | 16:50:31         |
| 1     | Sn 189.927†       | 2274.7           | 2140.1                 | [500] ug/L     |        | 16:50:51         |
| 1     | Ti 334.940†       | 293311.6         | 277890.6               | [500] ug/L     |        | 16:50:31         |
| 1     | Tl 190.801†       | 1291.2           | 1245.1                 | [500] ug/L     |        | 16:50:51         |
| 1     | U 409.014†        | 16131.1          | 17204.0                | [500] ug/L     |        | 16:50:31         |
| 1     | V 292.402†        | 64278.6          | 61887.9                | [500] ug/L     |        | 16:50:31         |
| 1     | Zn 213.857†       | 42782.1          | 39886.0                | [500] ug/L     |        | 16:50:31         |
| 1     | SiO2†             | 69484.8          | 65136.6                | [5347.5] ug/L  |        | 16:51:58         |
| 2     | Sc Radial         | 3356.3           | 3356.3                 | 105 %          |        | 16:49:54         |
| 2     | Y RADIAL          | 2715.4           | 2715.4                 | 103.3 %        |        | 16:49:54         |
| 2     | Al 396.153Radial† | 2290.2           | 2248.6                 | [5000] ug/L    |        | 16:49:33         |
| 2     | Ca 317.933Radial† | 1308.6           | 1237.0                 | [5000] ug/L    |        | 16:49:54         |
| 2     | K 766.490 Radial† | 12880.8          | 10271.7                | [5000] ug/L    |        | 16:49:33         |
| 2     | Mg 279.077 IEC†   | 53.4             | 49.3                   | [5000] ug/L    |        | 16:49:54         |
| 2     | Sr 421.552†       | 52649.8          | 50234.1                | [500] ug/L     |        | 16:49:33         |
| 2     | Sc 361.383        | 846396.6         | 846396.6               | 106.87 %       |        | 16:50:57         |
| 2     | Y 371.029         | 716229.1         | 716229.1               | 105.69 %       |        | 16:50:57         |
| 2     | Ag 328.068†       | 102043.3         | 95349.6                | [500] ug/L     |        | 16:51:02         |
| 2     | As 188.979†       | 904.2            | 864.9                  | [500] ug/L     |        | 16:51:22         |
| 2     | B 249.677†        | 18037.2          | 17254.4                | [500] ug/L     |        | 16:51:02         |
| 2     | Ba 233.527†       | 54310.0          | 50817.6                | [500] ug/L     |        | 16:51:02         |
| 2     | Be 313.107†       | 1192902.0        | 1119728.7              | [500] ug/L     |        | 16:50:57         |
| 2     | Cd 226.502†       | 35209.8          | 33101.8                | [500] ug/L     |        | 16:51:02         |
| 2     | Co 228.616†       | 19893.8          | 18660.3                | [500] ug/L     |        | 16:51:02         |
| 2     | Cr 267.716†       | 39317.6          | 36736.3                | [500] ug/L     |        | 16:51:02         |
| 2     | Cu 324.752†       | 165208.7         | 148372.1               | [500] ug/L     |        | 16:51:02         |
| 2     | Mn 257.610†       | 389278.1         | 363844.9               | [500] ug/L     |        | 16:50:57         |
| 2     | Mo 202.031†       | 5930.2           | 5535.8                 | [500] ug/L     |        | 16:51:22         |
| 2     | Ni 231.604†       | 16519.5          | 15396.5                | [500] ug/L     |        | 16:51:02         |
| 2     | P 214.914†        | 3537.2           | 3145.4                 | [2500] ug/L    |        | 16:51:22         |
| 2     | Pb 220.353†       | 3265.1           | 3098.8                 | [500] ug/L     |        | 16:51:22         |
| 2     | S 181.975 Axial†  | 599.8            | 530.5                  | [1000] ug/L    |        | 16:51:22         |
| 2     | Sb 206.836†       | 1273.3           | 1168.6                 | [500] ug/L     |        | 16:51:22         |

|   |                   |           |           |          |      |          |
|---|-------------------|-----------|-----------|----------|------|----------|
| 2 | Se 196.026†       | 613.8     | 595.0     | [500]    | ug/L | 16:51:22 |
| 2 | Si 251.611†       | 68967.6   | 64056.2   | [2500]   | ug/L | 16:51:02 |
| 2 | Sn 189.927†       | 2282.1    | 2127.6    | [500]    | ug/L | 16:51:22 |
| 2 | Ti 334.940†       | 293660.7  | 275703.9  | [500]    | ug/L | 16:51:02 |
| 2 | Tl 190.801†       | 1283.5    | 1226.9    | [500]    | ug/L | 16:51:22 |
| 2 | U 409.014†        | 16033.3   | 16974.3   | [500]    | ug/L | 16:51:02 |
| 2 | V 292.402†        | 64411.3   | 61461.3   | [500]    | ug/L | 16:51:02 |
| 2 | Zn 213.857†       | 42767.4   | 39505.7   | [500]    | ug/L | 16:51:02 |
| 2 | SiO2†             | 68759.1   | 63862.2   | [5347.5] | ug/L | 16:52:03 |
| 3 | Sc Radial         | 2957.7    | 2957.7    | 92.3     | %    | 16:50:19 |
| 3 | Y RADIAL          | 2406.1    | 2406.1    | 91.57    | %    | 16:50:19 |
| 3 | Al 396.153Radial† | 2274.2    | 2526.1    | [5000]   | ug/L | 16:49:59 |
| 3 | Ca 317.933Radial† | 1321.9    | 1419.7    | [5000]   | ug/L | 16:50:19 |
| 3 | K 766.490 Radial† | 12790.3   | 11831.3   | [5000]   | ug/L | 16:49:59 |
| 3 | Mg 279.077 IEC†   | 56.7      | 59.8      | [5000]   | ug/L | 16:50:19 |
| 3 | Sr 421.552†       | 52258.8   | 56586.6   | [500]    | ug/L | 16:49:59 |
| 3 | Sc 361.383        | 854125.8  | 854125.8  | 107.85   | %    | 16:51:28 |
| 3 | Y 371.029         | 722123.4  | 722123.4  | 106.56   | %    | 16:51:28 |
| 3 | Ag 328.068†       | 102130.0  | 94566.0   | [500]    | ug/L | 16:51:33 |
| 3 | As 188.979†       | 892.0     | 845.9     | [500]    | ug/L | 16:51:53 |
| 3 | B 249.677†        | 17974.1   | 17043.2   | [500]    | ug/L | 16:51:33 |
| 3 | Ba 233.527†       | 54633.2   | 50657.4   | [500]    | ug/L | 16:51:33 |
| 3 | Be 313.107†       | 1204455.8 | 1120341.1 | [500]    | ug/L | 16:51:28 |
| 3 | Cd 226.502†       | 35550.5   | 33119.5   | [500]    | ug/L | 16:51:33 |
| 3 | Co 228.616†       | 20054.4   | 18640.8   | [500]    | ug/L | 16:51:33 |
| 3 | Cr 267.716†       | 39490.6   | 36563.7   | [500]    | ug/L | 16:51:33 |
| 3 | Cu 324.752†       | 165304.4  | 147062.1  | [500]    | ug/L | 16:51:33 |
| 3 | Mn 257.610†       | 394313.7  | 365217.9  | [500]    | ug/L | 16:51:28 |
| 3 | Mo 202.031†       | 5898.1    | 5455.8    | [500]    | ug/L | 16:51:53 |
| 3 | Ni 231.604†       | 16674.6   | 15400.5   | [500]    | ug/L | 16:51:33 |
| 3 | P 214.914†        | 3533.3    | 3111.8    | [2500]   | ug/L | 16:51:53 |
| 3 | Pb 220.353†       | 3241.8    | 3049.5    | [500]    | ug/L | 16:51:53 |
| 3 | S 181.975 Axial†  | 590.7     | 516.9     | [1000]   | ug/L | 16:51:53 |
| 3 | Sb 206.836†       | 1268.3    | 1153.3    | [500]    | ug/L | 16:51:53 |
| 3 | Se 196.026†       | 610.7     | 586.9     | [500]    | ug/L | 16:51:53 |
| 3 | Si 251.611†       | 69188.4   | 63677.0   | [2500]   | ug/L | 16:51:33 |
| 3 | Sn 189.927†       | 2259.6    | 2087.3    | [500]    | ug/L | 16:51:53 |
| 3 | Ti 334.940†       | 294352.3  | 273858.7  | [500]    | ug/L | 16:51:33 |
| 3 | Tl 190.801†       | 1286.5    | 1218.8    | [500]    | ug/L | 16:51:53 |
| 3 | U 409.014†        | 15967.2   | 16777.3   | [500]    | ug/L | 16:51:33 |
| 3 | V 292.402†        | 64516.9   | 61013.9   | [500]    | ug/L | 16:51:33 |
| 3 | Zn 213.857†       | 42999.7   | 39358.9   | [500]    | ug/L | 16:51:33 |
| 3 | SiO2†             | 68280.7   | 62836.4   | [5347.5] | ug/L | 16:52:09 |

-----  
Mean Data: S0.5

| Analyte           | Mean Corrected<br>Intensity | Std.Dev. | RSD    | Calib<br>Conc. Units |
|-------------------|-----------------------------|----------|--------|----------------------|
| Sc 361.383        | 846412.8                    | 7704.92  | 0.91%  | 106.88 %             |
| Sc Radial         | 3218.6                      | 226.10   | 7.02%  | 100 %                |
| Y 371.029         | 715949.9                    | 6317.71  | 0.88%  | 105.65 %             |
| Y RADIAL          | 2616.8                      | 182.66   | 6.98%  | 99.60 %              |
| Ag 328.068†       | 95333.8                     | 759.95   | 0.80%  | [500] ug/L           |
| Al 396.153Radial† | 2344.1                      | 157.64   | 6.72%  | [5000] ug/L          |
| As 188.979†       | 860.6                       | 13.08    | 1.52%  | [500] ug/L           |
| B 249.677†        | 17199.9                     | 137.80   | 0.80%  | [500] ug/L           |
| Ba 233.527†       | 50864.9                     | 234.74   | 0.46%  | [500] ug/L           |
| Be 313.107†       | 1127331.6                   | 12642.01 | 1.12%  | [500] ug/L           |
| Ca 317.933Radial† | 1300.5                      | 103.32   | 7.94%  | [5000] ug/L          |
| Cd 226.502†       | 33186.5                     | 131.65   | 0.40%  | [500] ug/L           |
| Co 228.616†       | 18684.7                     | 59.99    | 0.32%  | [500] ug/L           |
| Cr 267.716†       | 36799.5                     | 272.87   | 0.74%  | [500] ug/L           |
| Cu 324.752†       | 148422.3                    | 1385.95  | 0.93%  | [500] ug/L           |
| K 766.490 Radial† | 10808.3                     | 886.35   | 8.20%  | [5000] ug/L          |
| Mg 279.077 IEC†   | 52.7                        | 6.15     | 11.68% | [5000] ug/L          |
| Mn 257.610†       | 366772.6                    | 3942.15  | 1.07%  | [500] ug/L           |
| Mo 202.031†       | 5532.2                      | 74.69    | 1.35%  | [500] ug/L           |
| Ni 231.604†       | 15446.4                     | 82.99    | 0.54%  | [500] ug/L           |
| P 214.914†        | 3146.6                      | 35.43    | 1.13%  | [2500] ug/L          |
| Pb 220.353†       | 3086.4                      | 32.54    | 1.05%  | [500] ug/L           |
| S 181.975 Axial†  | 527.9                       | 9.99     | 1.89%  | [1000] ug/L          |



|             |          |         |       |               |
|-------------|----------|---------|-------|---------------|
| Sb 206.836† | 1167.0   | 13.00   | 1.11% | [500] ug/L    |
| Se 196.026† | 595.1    | 8.26    | 1.39% | [500] ug/L    |
| Si 251.611† | 64104.5  | 453.61  | 0.71% | [2500] ug/L   |
| Sn 189.927† | 2118.3   | 27.57   | 1.30% | [500] ug/L    |
| Sr 421.552† | 52498.5  | 3547.25 | 6.76% | [500] ug/L    |
| Ti 334.940† | 275817.7 | 2018.35 | 0.73% | [500] ug/L    |
| Tl 190.801† | 1230.3   | 13.50   | 1.10% | [500] ug/L    |
| U 409.014†  | 16985.2  | 213.59  | 1.26% | [500] ug/L    |
| V 292.402†  | 61454.4  | 437.08  | 0.71% | [500] ug/L    |
| Zn 213.857† | 39583.5  | 272.04  | 0.69% | [500] ug/L    |
| SiO2†       | 63945.1  | 1152.34 | 1.80% | [5347.5] ug/L |

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/10/2010 16:54:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc.<br>Units | Calib.<br>Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|----------------|-----------------|------------------|
| 1     | Sc Radial          | 3359.9           | 3359.9                 | 105            | %               | 16:56:32         |
| 1     | Y RADIAL           | 2751.6           | 2751.6                 | 104.7          | %               | 16:56:32         |
| 1     | Al 396.153Radial†  | 4639.9           | 4487.5                 | [10000]        | ug/L            | 16:56:12         |
| 1     | Ca 317.933Radial†  | 2550.9           | 2420.5                 | [10000]        | ug/L            | 16:56:32         |
| 1     | Fe 238.204 Radial† | 380.4            | 353.3                  | [10000]        | ug/L            | 16:56:32         |
| 1     | K 766.490 Radial†  | 23104.7          | 20010.2                | [10000]        | ug/L            | 16:56:12         |
| 1     | Mg 279.077 IEC†    | 106.0            | 99.4                   | [10000]        | ug/L            | 16:56:32         |
| 1     | Na 589.592 Radial† | 31241.2          | 30529.8                | [10000]        | ug/L            | 16:56:12         |
| 1     | Sr 421.552†        | 107711.7         | 102698.5               | [1000]         | ug/L            | 16:56:12         |
| 1     | Sc 361.383         | 847989.8         | 847989.8               | 107.07         | %               | 16:57:31         |
| 1     | Y 371.029          | 716432.2         | 716432.2               | 105.72         | %               | 16:57:31         |
| 1     | Ag 328.068†        | 201482.4         | 188039.6               | [1000]         | ug/L            | 16:57:31         |
| 1     | As 188.979†        | 1801.1           | 1701.0                 | [1000]         | ug/L            | 16:57:51         |
| 1     | B 249.677†         | 36367.1          | 34341.6                | [1000]         | ug/L            | 16:57:31         |
| 1     | Ba 233.527†        | 107906.7         | 100777.9               | [1000]         | ug/L            | 16:57:31         |
| 1     | Be 313.107†        | 2354801.0        | 2202766.7              | [1000]         | ug/L            | 16:57:31         |
| 1     | Cd 226.502†        | 69836.8          | 65379.1                | [1000]         | ug/L            | 16:57:31         |
| 1     | Co 228.616†        | 38328.8          | 35842.4                | [1000]         | ug/L            | 16:57:51         |
| 1     | Cr 267.716†        | 77885.6          | 72687.1                | [1000]         | ug/L            | 16:57:31         |
| 1     | Cu 324.752†        | 323410.2         | 295831.3               | [1000]         | ug/L            | 16:57:31         |
| 1     | Mn 257.610†        | 771116.8         | 719772.1               | [1000]         | ug/L            | 16:57:31         |
| 1     | Mo 202.031†        | 11687.3          | 10902.1                | [1000]         | ug/L            | 16:57:51         |
| 1     | Ni 231.604†        | 31766.7          | 29607.4                | [1000]         | ug/L            | 16:57:51         |
| 1     | P 214.914†         | 6792.6           | 6179.5                 | [5000]         | ug/L            | 16:57:51         |
| 1     | Pb 220.353†        | 6440.5           | 6058.7                 | [1000]         | ug/L            | 16:57:51         |
| 1     | S 181.975 Axial†   | 1149.7           | 1042.9                 | [2000]         | ug/L            | 16:57:51         |
| 1     | Sb 206.836†        | 2506.4           | 2318.1                 | [1000]         | ug/L            | 16:57:51         |
| 1     | Se 196.026†        | 1224.3           | 1164.1                 | [1000]         | ug/L            | 16:57:51         |
| 1     | Si 251.611†        | 137337.3         | 127787.6               | [5000]         | ug/L            | 16:57:31         |
| 1     | Sn 189.927†        | 4478.6           | 4175.0                 | [1000]         | ug/L            | 16:57:51         |
| 1     | Ti 334.940†        | 596985.4         | 558472.4               | [1000]         | ug/L            | 16:57:31         |
| 1     | Tl 190.801†        | 2561.7           | 2418.4                 | [1000]         | ug/L            | 16:57:51         |
| 1     | U 409.014†         | 32860.4          | 32661.4                | [1000]         | ug/L            | 16:57:31         |
| 1     | V 292.402†         | 129215.9         | 121871.2               | [1000]         | ug/L            | 16:57:31         |
| 1     | Zn 213.857†        | 83942.0          | 77884.8                | [1000]         | ug/L            | 16:57:31         |
| 1     | SiO2†              | 136834.9         | 127319.5               | [10695]        | ug/L            | 16:58:52         |
| 2     | Sc Radial          | 3348.7           | 3348.7                 | 104            | %               | 16:56:57         |
| 2     | Y RADIAL           | 2743.8           | 2743.8                 | 104.4          | %               | 16:56:57         |
| 2     | Al 396.153Radial†  | 4707.9           | 4567.3                 | [10000]        | ug/L            | 16:56:37         |
| 2     | Ca 317.933Radial†  | 2551.4           | 2429.1                 | [10000]        | ug/L            | 16:56:57         |
| 2     | Fe 238.204 Radial† | 378.7            | 352.9                  | [10000]        | ug/L            | 16:56:57         |
| 2     | K 766.490 Radial†  | 23314.1          | 20284.1                | [10000]        | ug/L            | 16:56:37         |
| 2     | Mg 279.077 IEC†    | 106.0            | 99.7                   | [10000]        | ug/L            | 16:56:57         |
| 2     | Na 589.592 Radial† | 31689.5          | 31058.4                | [10000]        | ug/L            | 16:56:37         |
| 2     | Sr 421.552†        | 108730.6         | 104016.8               | [1000]         | ug/L            | 16:56:37         |
| 2     | Sc 361.383         | 849747.5         | 849747.5               | 107.30         | %               | 16:57:59         |
| 2     | Y 371.029          | 717436.8         | 717436.8               | 105.87         | %               | 16:57:59         |
| 2     | Ag 328.068†        | 201654.2         | 187810.5               | [1000]         | ug/L            | 16:57:59         |
| 2     | As 188.979†        | 1815.0           | 1710.4                 | [1000]         | ug/L            | 16:58:19         |
| 2     | B 249.677†         | 36421.6          | 34322.2                | [1000]         | ug/L            | 16:57:59         |
| 2     | Ba 233.527†        | 107902.0         | 100565.0               | [1000]         | ug/L            | 16:57:59         |
| 2     | Be 313.107†        | 2354174.0        | 2197633.3              | [1000]         | ug/L            | 16:57:59         |
| 2     | Cd 226.502†        | 69806.2          | 65215.7                | [1000]         | ug/L            | 16:57:59         |
| 2     | Co 228.616†        | 38454.6          | 35885.6                | [1000]         | ug/L            | 16:58:19         |
| 2     | Cr 267.716†        | 77831.7          | 72486.3                | [1000]         | ug/L            | 16:57:59         |
| 2     | Cu 324.752†        | 324187.2         | 295930.7               | [1000]         | ug/L            | 16:57:59         |
| 2     | Mn 257.610†        | 771858.7         | 718973.8               | [1000]         | ug/L            | 16:57:59         |
| 2     | Mo 202.031†        | 11688.0          | 10880.2                | [1000]         | ug/L            | 16:58:19         |
| 2     | Ni 231.604†        | 31772.8          | 29551.6                | [1000]         | ug/L            | 16:58:19         |

|   |                    |           |           |         |      |          |
|---|--------------------|-----------|-----------|---------|------|----------|
| 2 | P 214.914†         | 6835.9    | 6206.7    | [5000]  | ug/L | 16:58:19 |
| 2 | Pb 220.353†        | 6471.8    | 6075.4    | [1000]  | ug/L | 16:58:19 |
| 2 | S 181.975 Axial†   | 1156.8    | 1047.4    | [2000]  | ug/L | 16:58:19 |
| 2 | Sb 206.836†        | 2512.8    | 2319.2    | [1000]  | ug/L | 16:58:19 |
| 2 | Se 196.026†        | 1225.1    | 1162.5    | [1000]  | ug/L | 16:58:19 |
| 2 | Si 251.611†        | 137414.4  | 127594.2  | [5000]  | ug/L | 16:57:59 |
| 2 | Sn 189.927†        | 4502.0    | 4188.1    | [1000]  | ug/L | 16:58:19 |
| 2 | Ti 334.940†        | 598149.5  | 558404.0  | [1000]  | ug/L | 16:57:59 |
| 2 | Tl 190.801†        | 2568.6    | 2419.9    | [1000]  | ug/L | 16:58:19 |
| 2 | U 409.014†         | 32817.8   | 32558.2   | [1000]  | ug/L | 16:57:59 |
| 2 | V 292.402†         | 129255.2  | 121658.2  | [1000]  | ug/L | 16:57:59 |
| 2 | Zn 213.857†        | 84003.6   | 77780.0   | [1000]  | ug/L | 16:57:59 |
| 2 | SiO2†              | 137104.4  | 127306.3  | [10695] | ug/L | 16:58:57 |
| 3 | Sc Radial          | 3368.7    | 3368.7    | 105     | %    | 16:57:22 |
| 3 | Y RADIAL           | 2748.5    | 2748.5    | 104.6   | %    | 16:57:22 |
| 3 | Al 396.153Radial†  | 4728.8    | 4560.4    | [10000] | ug/L | 16:57:02 |
| 3 | Ca 317.933Radial†  | 2560.2    | 2423.0    | [10000] | ug/L | 16:57:22 |
| 3 | Fe 238.204 Radial† | 383.1     | 355.0     | [10000] | ug/L | 16:57:22 |
| 3 | K 766.490 Radial†  | 23480.0   | 20309.6   | [10000] | ug/L | 16:57:02 |
| 3 | Mg 279.077 IEC†    | 106.2     | 99.3      | [10000] | ug/L | 16:57:22 |
| 3 | Na 589.592 Radial† | 31746.6   | 30932.7   | [10000] | ug/L | 16:57:02 |
| 3 | Sr 421.552†        | 109237.7  | 103881.7  | [1000]  | ug/L | 16:57:02 |
| 3 | Sc 361.383         | 845362.0  | 845362.0  | 106.74  | %    | 16:58:26 |
| 3 | Y 371.029          | 713238.7  | 713238.7  | 105.25  | %    | 16:58:26 |
| 3 | Ag 328.068†        | 201005.5  | 188177.8  | [1000]  | ug/L | 16:58:26 |
| 3 | As 188.979†        | 1793.7    | 1699.3    | [1000]  | ug/L | 16:58:46 |
| 3 | B 249.677†         | 36287.8   | 34372.9   | [1000]  | ug/L | 16:58:26 |
| 3 | Ba 233.527†        | 107796.4  | 100987.8  | [1000]  | ug/L | 16:58:26 |
| 3 | Be 313.107†        | 2342063.8 | 2197670.5 | [1000]  | ug/L | 16:58:26 |
| 3 | Cd 226.502†        | 69660.9   | 65417.1   | [1000]  | ug/L | 16:58:26 |
| 3 | Co 228.616†        | 38491.4   | 36106.0   | [1000]  | ug/L | 16:58:46 |
| 3 | Cr 267.716†        | 77661.6   | 72703.3   | [1000]  | ug/L | 16:58:26 |
| 3 | Cu 324.752†        | 322314.7  | 295743.8  | [1000]  | ug/L | 16:58:26 |
| 3 | Mn 257.610†        | 770494.2  | 721427.5  | [1000]  | ug/L | 16:58:26 |
| 3 | Mo 202.031†        | 11723.7   | 10970.2   | [1000]  | ug/L | 16:58:46 |
| 3 | Ni 231.604†        | 31876.7   | 29802.6   | [1000]  | ug/L | 16:58:46 |
| 3 | P 214.914†         | 6842.6    | 6246.1    | [5000]  | ug/L | 16:58:46 |
| 3 | Pb 220.353†        | 6452.1    | 6088.2    | [1000]  | ug/L | 16:58:46 |
| 3 | S 181.975 Axial†   | 1149.3    | 1045.9    | [2000]  | ug/L | 16:58:46 |
| 3 | Sb 206.836†        | 2524.1    | 2342.0    | [1000]  | ug/L | 16:58:46 |
| 3 | Se 196.026†        | 1222.6    | 1166.1    | [1000]  | ug/L | 16:58:46 |
| 3 | Si 251.611†        | 137081.9  | 127947.1  | [5000]  | ug/L | 16:58:26 |
| 3 | Sn 189.927†        | 4494.2    | 4202.6    | [1000]  | ug/L | 16:58:46 |
| 3 | Ti 334.940†        | 596288.5  | 559552.7  | [1000]  | ug/L | 16:58:26 |
| 3 | Tl 190.801†        | 2563.8    | 2427.8    | [1000]  | ug/L | 16:58:46 |
| 3 | U 409.014†         | 32779.5   | 32681.0   | [1000]  | ug/L | 16:58:26 |
| 3 | V 292.402†         | 128848.4  | 121902.1  | [1000]  | ug/L | 16:58:26 |
| 3 | Zn 213.857†        | 83830.8   | 78024.2   | [1000]  | ug/L | 16:58:26 |
| 3 | SiO2†              | 135822.5  | 126768.3  | [10695] | ug/L | 16:59:02 |

## Mean Data: SCAL

| Analyte            | Mean Corrected Intensity | Std.Dev. | RSD   | Conc.   | Calib Units |
|--------------------|--------------------------|----------|-------|---------|-------------|
| Sc 361.383         | 847699.8                 | 2207.10  | 0.26% | 107.04  | %           |
| Sc Radial          | 3359.1                   | 10.02    | 0.30% | 105     | %           |
| Y 371.029          | 715702.6                 | 2192.08  | 0.31% | 105.62  | %           |
| Y RADIAL           | 2748.0                   | 3.95     | 0.14% | 104.6   | %           |
| Ag 328.068†        | 188009.3                 | 185.49   | 0.10% | [1000]  | ug/L        |
| Al 396.153Radial†  | 4538.4                   | 44.24    | 0.97% | [10000] | ug/L        |
| As 188.979†        | 1703.5                   | 6.01     | 0.35% | [1000]  | ug/L        |
| B 249.677†         | 34345.6                  | 25.60    | 0.07% | [1000]  | ug/L        |
| Ba 233.527†        | 100776.9                 | 211.37   | 0.21% | [1000]  | ug/L        |
| Be 313.107†        | 2199356.8                | 2953.08  | 0.13% | [1000]  | ug/L        |
| Ca 317.933Radial†  | 2424.2                   | 4.44     | 0.18% | [10000] | ug/L        |
| Cd 226.502†        | 65337.3                  | 107.01   | 0.16% | [1000]  | ug/L        |
| Co 228.616†        | 35944.6                  | 141.39   | 0.39% | [1000]  | ug/L        |
| Cr 267.716†        | 72625.6                  | 120.86   | 0.17% | [1000]  | ug/L        |
| Cu 324.752†        | 295835.3                 | 93.49    | 0.03% | [1000]  | ug/L        |
| Fe 238.204 Radial† | 353.7                    | 1.08     | 0.31% | [10000] | ug/L        |
| K 766.490 Radial†  | 20201.3                  | 166.00   | 0.82% | [10000] | ug/L        |

|                    |          |         |       |         |      |
|--------------------|----------|---------|-------|---------|------|
| Mg 279.077 IEC†    | 99.5     | 0.23    | 0.23% | [10000] | ug/L |
| Mn 257.610†        | 720057.8 | 1251.53 | 0.17% | [1000]  | ug/L |
| Mo 202.031†        | 10917.5  | 46.92   | 0.43% | [1000]  | ug/L |
| Na 589.592 Radial† | 30840.3  | 276.13  | 0.90% | [10000] | ug/L |
| Ni 231.604†        | 29653.9  | 131.80  | 0.44% | [1000]  | ug/L |
| P 214.914†         | 6210.7   | 33.48   | 0.54% | [5000]  | ug/L |
| Pb 220.353†        | 6074.1   | 14.79   | 0.24% | [1000]  | ug/L |
| S 181.975 Axial†   | 1045.4   | 2.25    | 0.22% | [2000]  | ug/L |
| Sb 206.836†        | 2326.4   | 13.50   | 0.58% | [1000]  | ug/L |
| Se 196.026†        | 1164.2   | 1.78    | 0.15% | [1000]  | ug/L |
| Si 251.611†        | 127776.3 | 176.70  | 0.14% | [5000]  | ug/L |
| Sn 189.927†        | 4188.5   | 13.82   | 0.33% | [1000]  | ug/L |
| Sr 421.552†        | 103532.4 | 725.25  | 0.70% | [1000]  | ug/L |
| Ti 334.940†        | 558809.7 | 644.35  | 0.12% | [1000]  | ug/L |
| Tl 190.801†        | 2422.0   | 5.07    | 0.21% | [1000]  | ug/L |
| U 409.014†         | 32633.6  | 65.96   | 0.20% | [1000]  | ug/L |
| V 292.402†         | 121810.5 | 132.79  | 0.11% | [1000]  | ug/L |
| Zn 213.857†        | 77896.3  | 122.53  | 0.16% | [1000]  | ug/L |
| SiO2†              | 127131.4 | 314.48  | 0.25% | [10695] | ug/L |

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/10/2010 17:01:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|---------------|
| 1     | Sc Radial          | 3310.8        | 3310.8              | 103 %        |              | 17:03:26      |
| 1     | Y RADIAL           | 2712.0        | 2712.0              | 103.2 %      |              | 17:03:26      |
| 1     | Al 396.153Radial†  | 23785.4       | 23083.9             | [50000] ug/L |              | 17:03:06      |
| 1     | Ca 317.933Radial†  | 12355.9       | 11946.8             | [50000] ug/L |              | 17:03:06      |
| 1     | Fe 238.204 Radial† | 725.2         | 692.4               | [20000] ug/L |              | 17:03:26      |
| 1     | Mg 279.077 IEC†    | 500.9         | 483.2               | [50000] ug/L |              | 17:03:26      |
| 1     | Na 589.592 Radial† | 64579.1       | 63238.9             | [20000] ug/L |              | 17:03:06      |
| 1     | Sc 361.383         | 819482.9      | 819482.9            | 103.47 %     |              | 17:04:23      |
| 1     | Y 371.029          | 689581.6      | 689581.6            | 101.76 %     |              | 17:04:23      |
| 2     | Sc Radial          | 3301.0        | 3301.0              | 103 %        |              | 17:03:51      |
| 2     | Y RADIAL           | 2689.2        | 2689.2              | 102.3 %      |              | 17:03:51      |
| 2     | Al 396.153Radial†  | 23944.8       | 23307.6             | [50000] ug/L |              | 17:03:31      |
| 2     | Ca 317.933Radial†  | 12427.7       | 12052.3             | [50000] ug/L |              | 17:03:31      |
| 2     | Fe 238.204 Radial† | 725.7         | 695.0               | [20000] ug/L |              | 17:03:51      |
| 2     | Mg 279.077 IEC†    | 496.3         | 480.1               | [50000] ug/L |              | 17:03:51      |
| 2     | Na 589.592 Radial† | 65353.0       | 64177.2             | [20000] ug/L |              | 17:03:31      |
| 2     | Sc 361.383         | 825396.3      | 825396.3            | 104.22 %     |              | 17:04:29      |
| 2     | Y 371.029          | 694166.5      | 694166.5            | 102.44 %     |              | 17:04:29      |
| 3     | Sc Radial          | 3369.6        | 3369.6              | 105 %        |              | 17:04:16      |
| 3     | Y RADIAL           | 2747.7        | 2747.7              | 104.6 %      |              | 17:04:16      |
| 3     | Al 396.153Radial†  | 24090.1       | 22972.2             | [50000] ug/L |              | 17:03:56      |
| 3     | Ca 317.933Radial†  | 12475.6       | 11852.1             | [50000] ug/L |              | 17:03:56      |
| 3     | Fe 238.204 Radial† | 733.1         | 687.8               | [20000] ug/L |              | 17:04:16      |
| 3     | Mg 279.077 IEC†    | 509.9         | 483.2               | [50000] ug/L |              | 17:04:16      |
| 3     | Na 589.592 Radial† | 65900.2       | 63405.1             | [20000] ug/L |              | 17:03:56      |
| 3     | Sc 361.383         | 820149.1      | 820149.1            | 103.56 %     |              | 17:04:34      |
| 3     | Y 371.029          | 690175.9      | 690175.9            | 101.85 %     |              | 17:04:34      |

## Mean Data: S10

| Analyte            | Mean Corrected Intensity | Std.Dev. | RSD   | Conc. Units  | Calib |
|--------------------|--------------------------|----------|-------|--------------|-------|
| Sc 361.383         | 821676.1                 | 3238.92  | 0.39% | 103.75 %     |       |
| Sc Radial          | 3327.1                   | 37.11    | 1.12% | 104 %        |       |
| Y 371.029          | 691308.0                 | 2493.33  | 0.36% | 102.02 %     |       |
| Y RADIAL           | 2716.3                   | 29.52    | 1.09% | 103.4 %      |       |
| Al 396.153Radial†  | 23121.2                  | 170.79   | 0.74% | [50000] ug/L |       |
| Ca 317.933Radial†  | 11950.4                  | 100.18   | 0.84% | [50000] ug/L |       |
| Fe 238.204 Radial† | 691.7                    | 3.68     | 0.53% | [20000] ug/L |       |
| Mg 279.077 IEC†    | 482.2                    | 1.76     | 0.37% | [50000] ug/L |       |
| Na 589.592 Radial† | 63607.1                  | 500.73   | 0.79% | [20000] ug/L |       |

## Calibration Summary

| Analyte          | Stds. | Equation   | Intercept | Slope  | Curvature | Corr. Coef. | Reslope |
|------------------|-------|------------|-----------|--------|-----------|-------------|---------|
| Ag 328.068       | 3     | Lin Thru 0 | 0.0       | 188.6  | 0.00000   | 0.999978    |         |
| Al 396.153Radial | 3     | Lin Thru 0 | 0.0       | 0.4622 | 0.00000   | 0.999993    |         |
| As 188.979       | 3     | Lin Thru 0 | 0.0       | 1.707  | 0.00000   | 0.999991    |         |
| B 249.677        | 3     | Lin Thru 0 | 0.0       | 34.36  | 0.00000   | 0.999998    |         |
| Ba 233.527       | 3     | Lin Thru 0 | 0.0       | 101.0  | 0.00000   | 0.999986    |         |
| Be 313.107       | 3     | Lin Thru 0 | 0.0       | 2211   | 0.00000   | 0.999946    |         |
| Ca 317.933Radial | 3     | Lin Thru 0 | 0.0       | 0.2393 | 0.00000   | 0.999960    |         |
| Cd 226.502       | 3     | Lin Thru 0 | 0.0       | 65.56  | 0.00000   | 0.999978    |         |
| Co 228.616       | 3     | Lin Thru 0 | 0.0       | 36.24  | 0.00000   | 0.999866    |         |
| Cr 267.716       | 3     | Lin Thru 0 | 0.0       | 72.84  | 0.00000   | 0.999979    |         |
| Cu 324.752       | 3     | Lin Thru 0 | 0.0       | 296.1  | 0.00000   | 0.999997    |         |
| Fe 238.204 Radia | 2     | Lin Thru 0 | 0.0       | 0.0347 | 0.00000   | 0.999959    |         |
| K 766.490 Radial | 3     | Lin Thru 0 | 0.0       | 2.047  | 0.00000   | 0.999584    |         |

|                  |   |            |     |        |         |          |
|------------------|---|------------|-----|--------|---------|----------|
| Mg 279.077 IEC   | 3 | Lin Thru 0 | 0.0 | 0.0097 | 0.00000 | 0.999943 |
| Mn 257.610       | 3 | Lin Thru 0 | 0.0 | 723.0  | 0.00000 | 0.999963 |
| Mo 202.031       | 3 | Lin Thru 0 | 0.0 | 10.95  | 0.00000 | 0.999982 |
| Na 589.592 Radia | 2 | Lin Thru 0 | 0.0 | 3.161  | 0.00000 | 0.999926 |
| Ni 231.604       | 3 | Lin Thru 0 | 0.0 | 29.92  | 0.00000 | 0.999851 |
| P 214.914        | 3 | Lin Thru 0 | 0.0 | 1.246  | 0.00000 | 0.999983 |
| Pb 220.353       | 3 | Lin Thru 0 | 0.0 | 6.096  | 0.00000 | 0.999969 |
| S 181.975 Axial  | 3 | Lin Thru 0 | 0.0 | 0.5235 | 0.00000 | 0.999982 |
| Sb 206.836       | 3 | Lin Thru 0 | 0.0 | 2.328  | 0.00000 | 0.999997 |
| Se 196.026       | 3 | Lin Thru 0 | 0.0 | 1.170  | 0.00000 | 0.999946 |
| Si 251.611       | 3 | Lin Thru 0 | 0.0 | 25.58  | 0.00000 | 0.999997 |
| Sn 189.927       | 3 | Lin Thru 0 | 0.0 | 4.199  | 0.00000 | 0.999986 |
| Sr 421.552       | 3 | Lin Thru 0 | 0.0 | 103.8  | 0.00000 | 0.999983 |
| Ti 334.940       | 3 | Lin Thru 0 | 0.0 | 557.5  | 0.00000 | 0.999983 |
| Tl 190.801       | 3 | Lin Thru 0 | 0.0 | 2.431  | 0.00000 | 0.999964 |
| U 409.014        | 3 | Lin Thru 0 | 0.0 | 32.92  | 0.00000 | 0.999843 |
| V 292.402        | 3 | Lin Thru 0 | 0.0 | 122.1  | 0.00000 | 0.999991 |
| Zn 213.857       | 3 | Lin Thru 0 | 0.0 | 78.18  | 0.00000 | 0.999972 |
| SiO2             | 3 | Lin Thru 0 | 0.0 | 11.90  | 0.00000 | 0.999996 |

Sequence No.: 6  
 Sample ID: ICV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 9  
 Date Collected: 3/10/2010 17:06:46  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3325.8        | 3325.8              | 104 %              |                    | 17:08:59      |
| 1     | Y RADIAL           | 2701.2        | 2701.2              | 102.8 %            |                    | 17:08:59      |
| 1     | Al 396.153Radial†  | 2328.7        | 2305.8              | 4963.4 ug/L        | 4963.4 ppb         | 17:08:39      |
| 1     | Ca 317.933Radial†  | 1264.8        | 1206.2              | 5039.8 ug/L        | 5039.8 ppb         | 17:08:59      |
| 1     | Fe 238.204 Radial† | 191.9         | 175.4               | 5063.7 ug/L        | 5063.7 ppb         | 17:08:59      |
| 1     | K 766.490 Radial†  | 7346.1        | 5051.7              | 2464.6 ug/L        | 2464.6 ppb         | 17:08:39      |
| 1     | Mg 279.077 IEC†    | 55.8          | 52.1                | 5386.7 ug/L        | 5386.7 ppb         | 17:08:59      |
| 1     | Na 589.592 Radial† | 7032.3        | 7508.5              | 2375.3 ug/L        | 2375.3 ppb         | 17:08:39      |
| 1     | Sr 421.552†        | 55793.2       | 53724.9             | 517.34 ug/L        | 517.34 ppb         | 17:08:39      |
| 1     | Sc 361.383         | 834717.9      | 834717.9            | 105.40 %           |                    | 17:09:56      |
| 1     | Y 371.029          | 709677.8      | 709677.8            | 104.73 %           |                    | 17:09:56      |
| 1     | Ag 328.068†        | 50954.8       | 48213.6             | 258.78 ug/L        | 258.78 ppb         | 17:09:56      |
| 1     | As 188.979†        | 837.7         | 813.7               | 480.77 ug/L        | 480.77 ppb         | 17:10:16      |
| 1     | B 249.677†         | 18334.6       | 17772.8             | 514.91 ug/L        | 514.91 ppb         | 17:09:56      |
| 1     | Ba 233.527†        | 54038.2       | 51270.8             | 508.90 ug/L        | 508.90 ppb         | 17:09:56      |
| 1     | Be 313.107†        | 600496.9      | 573282.4            | 260.40 ug/L        | 260.40 ppb         | 17:09:56      |
| 1     | Cd 226.502†        | 34270.0       | 32671.0             | 498.27 ug/L        | 498.27 ppb         | 17:09:56      |
| 1     | Co 228.616†        | 19662.4       | 18701.2             | 516.14 ug/L        | 516.14 ppb         | 17:09:56      |
| 1     | Cr 267.716†        | 37520.4       | 35545.9             | 488.70 ug/L        | 488.70 ppb         | 17:09:56      |
| 1     | Cu 324.752†        | 163950.7      | 149341.5            | 504.38 ug/L        | 504.38 ppb         | 17:09:56      |
| 1     | Mn 257.610†        | 388452.2      | 368157.5            | 509.47 ug/L        | 509.47 ppb         | 17:09:56      |
| 1     | Mo 202.031†        | 6160.0        | 5831.4              | 533.02 ug/L        | 533.02 ppb         | 17:10:16      |
| 1     | Ni 231.604†        | 16184.2       | 15294.7             | 510.95 ug/L        | 510.95 ppb         | 17:09:56      |
| 1     | P 214.914†         | 3464.1        | 3122.3              | 2408.4 ug/L        | 2408.4 ppb         | 17:10:16      |
| 1     | Pb 220.353†        | 3169.4        | 3050.7              | 501.91 ug/L        | 501.91 ppb         | 17:10:16      |
| 1     | S 181.975 Axial†   | 1398.6        | 1296.2              | 2474.9 ug/L        | 2474.9 ppb         | 17:10:16      |
| 1     | Sb 206.836†        | 1249.5        | 1162.7              | 518.60 ug/L        | 518.60 ppb         | 17:10:16      |
| 1     | Se 196.026†        | 3132.2        | 2992.4              | 2574.6 ug/L        | 2574.6 ppb         | 17:10:16      |
| 1     | Si 251.611†        | 132757.0      | 125481.3            | 4899.4 ug/L        | 4899.4 ppb         | 17:09:56      |
| 1     | Sn 189.927†        | 2366.3        | 2237.3              | 533.41 ug/L        | 533.41 ppb         | 17:10:16      |
| 1     | Ti 334.940†        | 287857.1      | 274042.0            | 491.40 ug/L        | 491.40 ppb         | 17:09:56      |
| 1     | Tl 190.801†        | 1330.9        | 1288.7              | 533.44 ug/L        | 533.44 ppb         | 17:10:16      |
| 1     | U 409.014†         | 14771.1       | 15986.6             | 483.92 ug/L        | 483.92 ppb         | 17:09:56      |
| 1     | V 292.402†         | 63702.8       | 61632.3             | 512.07 ug/L        | 512.07 ppb         | 17:09:56      |
| 1     | Zn 213.857†        | 42332.0       | 39652.4             | 502.53 ug/L        | 502.53 ppb         | 17:09:56      |
| 1     | SiO2†              | 133481.0      | 126169.3            | 10585 ug/L         | 10585 ppb          | 17:11:14      |
| 2     | Sc Radial          | 3347.1        | 3347.1              | 104 %              |                    | 17:09:24      |
| 2     | Y RADIAL           | 2730.8        | 2730.8              | 103.9 %            |                    | 17:09:24      |
| 2     | Al 396.153Radial†  | 2279.9        | 2244.9              | 4831.6 ug/L        | 4831.6 ppb         | 17:09:04      |
| 2     | Ca 317.933Radial†  | 1272.2        | 1205.6              | 5037.1 ug/L        | 5037.1 ppb         | 17:09:24      |
| 2     | Fe 238.204 Radial† | 192.4         | 174.8               | 5045.5 ug/L        | 5045.5 ppb         | 17:09:24      |
| 2     | K 766.490 Radial†  | 7375.3        | 5034.7              | 2456.3 ug/L        | 2456.3 ppb         | 17:09:04      |
| 2     | Mg 279.077 IEC†    | 53.3          | 49.3                | 5105.1 ug/L        | 5105.1 ppb         | 17:09:24      |
| 2     | Na 589.592 Radial† | 6990.4        | 7425.4              | 2349.0 ug/L        | 2349.0 ppb         | 17:09:04      |
| 2     | Sr 421.552†        | 55417.3       | 53023.3             | 510.58 ug/L        | 510.58 ppb         | 17:09:04      |
| 2     | Sc 361.383         | 837512.3      | 837512.3            | 105.75 %           |                    | 17:10:22      |
| 2     | Y 371.029          | 711184.4      | 711184.4            | 104.95 %           |                    | 17:10:22      |
| 2     | Ag 328.068†        | 50903.0       | 48003.4             | 257.65 ug/L        | 257.65 ppb         | 17:10:22      |
| 2     | As 188.979†        | 836.0         | 809.3               | 478.24 ug/L        | 478.24 ppb         | 17:10:42      |
| 2     | B 249.677†         | 18362.4       | 17741.0             | 513.99 ug/L        | 513.99 ppb         | 17:10:22      |
| 2     | Ba 233.527†        | 54348.1       | 51392.7             | 510.10 ug/L        | 510.10 ppb         | 17:10:22      |
| 2     | Be 313.107†        | 602536.7      | 573310.3            | 260.41 ug/L        | 260.41 ppb         | 17:10:22      |
| 2     | Cd 226.502†        | 34428.8       | 32712.7             | 498.91 ug/L        | 498.91 ppb         | 17:10:22      |
| 2     | Co 228.616†        | 19824.2       | 18792.0             | 518.63 ug/L        | 518.63 ppb         | 17:10:22      |
| 2     | Cr 267.716†        | 37663.3       | 35562.2             | 488.92 ug/L        | 488.92 ppb         | 17:10:22      |
| 2     | Cu 324.752†        | 164513.9      | 149355.0            | 504.42 ug/L        | 504.42 ppb         | 17:10:22      |
| 2     | Mn 257.610†        | 390507.7      | 368871.5            | 510.46 ug/L        | 510.46 ppb         | 17:10:22      |
| 2     | Mo 202.031†        | 6160.2        | 5812.2              | 531.26 ug/L        | 531.26 ppb         | 17:10:42      |
| 2     | Ni 231.604†        | 16228.4       | 15285.2             | 510.63 ug/L        | 510.63 ppb         | 17:10:22      |

|   |                    |          |          |             |            |          |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914†         | 3478.4   | 3124.9   | 2410.4 ug/L | 2410.4 ppb | 17:10:42 |
| 2 | Pb 220.353†        | 3178.2   | 3049.1   | 501.61 ug/L | 501.61 ppb | 17:10:42 |
| 2 | S 181.975 Axial†   | 1400.1   | 1293.2   | 2469.2 ug/L | 2469.2 ppb | 17:10:42 |
| 2 | Sb 206.836†        | 1268.3   | 1176.6   | 524.52 ug/L | 524.52 ppb | 17:10:42 |
| 2 | Se 196.026†        | 3150.4   | 2999.8   | 2580.8 ug/L | 2580.8 ppb | 17:10:42 |
| 2 | Si 251.611†        | 133292.2 | 125567.1 | 4902.7 ug/L | 4902.7 ppb | 17:10:22 |
| 2 | Sn 189.927†        | 2376.4   | 2239.4   | 533.90 ug/L | 533.90 ppb | 17:10:42 |
| 2 | Ti 334.940†        | 289394.9 | 274584.9 | 492.39 ug/L | 492.39 ppb | 17:10:22 |
| 2 | Tl 190.801†        | 1341.2   | 1294.2   | 535.70 ug/L | 535.70 ppb | 17:10:42 |
| 2 | U 409.014†         | 14988.0  | 16145.0  | 488.73 ug/L | 488.73 ppb | 17:10:22 |
| 2 | V 292.402†         | 63918.0  | 61634.2  | 512.07 ug/L | 512.07 ppb | 17:10:22 |
| 2 | Zn 213.857†        | 42649.5  | 39818.7  | 504.66 ug/L | 504.66 ppb | 17:10:22 |
| 2 | SiO2†              | 135760.2 | 127902.0 | 10731 ug/L  | 10731 ppb  | 17:11:19 |
| 3 | Sc Radial          | 3350.9   | 3350.9   | 105 %       |            | 17:09:49 |
| 3 | Y RADIAL           | 2742.2   | 2742.2   | 104.4 %     |            | 17:09:49 |
| 3 | Al 396.153Radial†  | 2346.9   | 2306.4   | 4964.6 ug/L | 4964.6 ppb | 17:09:29 |
| 3 | Ca 317.933Radial†  | 1278.0   | 1209.7   | 5054.3 ug/L | 5054.3 ppb | 17:09:49 |
| 3 | Fe 238.204 Radial† | 193.3    | 175.4    | 5063.2 ug/L | 5063.2 ppb | 17:09:49 |
| 3 | K 766.490 Radial†  | 7303.7   | 4958.1   | 2418.8 ug/L | 2418.8 ppb | 17:09:29 |
| 3 | Mg 279.077 IEC†    | 55.4     | 51.3     | 5310.6 ug/L | 5310.6 ppb | 17:09:49 |
| 3 | Na 589.592 Radial† | 7101.6   | 7524.1   | 2380.2 ug/L | 2380.2 ppb | 17:09:29 |
| 3 | Sr 421.552†        | 56696.6  | 54186.0  | 521.78 ug/L | 521.78 ppb | 17:09:29 |
| 3 | Sc 361.383         | 834025.5 | 834025.5 | 105.31 %    |            | 17:10:48 |
| 3 | Y 371.029          | 707977.5 | 707977.5 | 104.48 %    |            | 17:10:48 |
| 3 | Ag 328.068†        | 50758.9  | 48067.8  | 258.00 ug/L | 258.00 ppb | 17:10:48 |
| 3 | As 188.979†        | 839.8    | 816.3    | 482.30 ug/L | 482.30 ppb | 17:11:08 |
| 3 | B 249.677†         | 18317.3  | 17770.8  | 514.85 ug/L | 514.85 ppb | 17:10:48 |
| 3 | Ba 233.527†        | 54116.6  | 51387.7  | 510.06 ug/L | 510.06 ppb | 17:10:48 |
| 3 | Be 313.107†        | 599983.7 | 573268.1 | 260.39 ug/L | 260.39 ppb | 17:10:48 |
| 3 | Cd 226.502†        | 34313.8  | 32739.6  | 499.32 ug/L | 499.32 ppb | 17:10:48 |
| 3 | Co 228.616†        | 19741.0  | 18791.3  | 518.63 ug/L | 518.63 ppb | 17:10:48 |
| 3 | Cr 267.716†        | 37486.9  | 35543.6  | 488.67 ug/L | 488.67 ppb | 17:10:48 |
| 3 | Cu 324.752†        | 163538.2 | 149078.9 | 503.49 ug/L | 503.49 ppb | 17:10:48 |
| 3 | Mn 257.610†        | 389357.8 | 369323.4 | 511.08 ug/L | 511.08 ppb | 17:10:48 |
| 3 | Mo 202.031†        | 6177.1   | 5852.6   | 534.95 ug/L | 534.95 ppb | 17:11:08 |
| 3 | Ni 231.604†        | 16191.7  | 15314.5  | 511.61 ug/L | 511.61 ppb | 17:10:48 |
| 3 | P 214.914†         | 3464.8   | 3125.7   | 2411.3 ug/L | 2411.3 ppb | 17:11:08 |
| 3 | Pb 220.353†        | 3176.3   | 3059.8   | 503.40 ug/L | 503.40 ppb | 17:11:08 |
| 3 | S 181.975 Axial†   | 1409.4   | 1307.5   | 2496.6 ug/L | 2496.6 ppb | 17:11:08 |
| 3 | Sb 206.836†        | 1258.1   | 1171.9   | 522.63 ug/L | 522.63 ppb | 17:11:08 |
| 3 | Se 196.026†        | 3129.1   | 2992.0   | 2574.2 ug/L | 2574.2 ppb | 17:11:08 |
| 3 | Si 251.611†        | 132833.3 | 125658.4 | 4906.3 ug/L | 4906.3 ppb | 17:10:48 |
| 3 | Sn 189.927†        | 2375.4   | 2247.8   | 535.91 ug/L | 535.91 ppb | 17:11:08 |
| 3 | Ti 334.940†        | 287884.9 | 274295.1 | 491.86 ug/L | 491.86 ppb | 17:10:48 |
| 3 | Tl 190.801†        | 1327.2   | 1286.2   | 532.39 ug/L | 532.39 ppb | 17:11:08 |
| 3 | U 409.014†         | 14919.9  | 16139.6  | 488.56 ug/L | 488.56 ppb | 17:10:48 |
| 3 | V 292.402†         | 63650.8  | 61633.1  | 512.11 ug/L | 512.11 ppb | 17:10:48 |
| 3 | Zn 213.857†        | 42455.5  | 39803.1  | 504.45 ug/L | 504.45 ppb | 17:10:48 |
| 3 | SiO2†              | 133630.9 | 126416.8 | 10606 ug/L  | 10606 ppb  | 17:11:24 |

## Mean Data: ICV

| Analyte   | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383  | 835418.6                 | 105.49 %    |        | 0.233    |                    |          | 0.22% |
| Sc Radial   | 3341.2                   | 104 %       |        | 0.4      |                    |          | 0.40% |
| Y 371.029   | 709613.2                 | 104.72 %    |        | 0.237    |                    |          | 0.23% |
| Y RADIAL  | 2724.7                   | 103.7 %     |        | 0.81     |                    |          | 0.78% |
| Ag 328.068†   | 48094.9                  | 258.14 ug/L |        | 0.576    | 258.14 ppb         | 0.576    | 0.22% |
| QC value within limits for Ag 328.068 Recovery = 103.26%      |                          |             |        |          |                    |          |       |
| Al 396.153Radial†   | 2285.7                   | 4919.9 ug/L |        | 76.43    | 4919.9 ppb         | 76.43    | 1.55% |
| QC value within limits for Al 396.153Radial Recovery = 98.40% |                          |             |        |          |                    |          |       |
| As 188.979†   | 813.1                    | 480.44 ug/L |        | 2.052    | 480.44 ppb         | 2.052    | 0.43% |
| QC value within limits for As 188.979 Recovery = 96.09%       |                          |             |        |          |                    |          |       |
| B 249.677†  | 17761.5                  | 514.58 ug/L |        | 0.517    | 514.58 ppb         | 0.517    | 0.10% |
| QC value within limits for B 249.677 Recovery = 102.92%       |                          |             |        |          |                    |          |       |
| Ba 233.527†   | 51350.4                  | 509.69 ug/L |        | 0.683    | 509.69 ppb         | 0.683    | 0.13% |
| QC value within limits for Ba 233.527 Recovery = 101.94%      |                          |             |        |          |                    |          |       |
| Be 313.107†   | 573286.9                 | 260.40 ug/L |        | 0.010    | 260.40 ppb         | 0.010    | 0.00% |
| QC value within limits for Be 313.107 Recovery = 104.16%      |                          |             |        |          |                    |          |       |
| Ca 317.933Radial†   | 1207.2                   | 5043.8 ug/L |        | 9.25     | 5043.8 ppb         | 9.25     | 0.18% |



QC value within limits for Ca 317.933 Radial Recovery = 100.88%

|   |          |             |        |            |        |       |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502†   | 32707.8  | 498.83 ug/L | 0.528  | 498.83 ppb | 0.528  | 0.11% |
| QC value within limits for Cd 226.502 Recovery = 99.77%         |          |             |        |            |        |       |
| Co 228.616†   | 18761.5  | 517.80 ug/L | 1.441  | 517.80 ppb | 1.441  | 0.28% |
| QC value within limits for Co 228.616 Recovery = 103.56%        |          |             |        |            |        |       |
| Cr 267.716†   | 35550.6  | 488.77 ug/L | 0.138  | 488.77 ppb | 0.138  | 0.03% |
| QC value within limits for Cr 267.716 Recovery = 97.75%         |          |             |        |            |        |       |
| Cu 324.752†   | 149258.5 | 504.10 ug/L | 0.526  | 504.10 ppb | 0.526  | 0.10% |
| QC value within limits for Cu 324.752 Recovery = 100.82%        |          |             |        |            |        |       |
| Fe 238.204 Radial†  | 175.2    | 5057.4 ug/L | 10.38  | 5057.4 ppb | 10.38  | 0.21% |
| QC value within limits for Fe 238.204 Radial Recovery = 101.15% |          |             |        |            |        |       |
| K 766.490 Radial†   | 5014.8   | 2446.6 ug/L | 24.37  | 2446.6 ppb | 24.37  | 1.00% |
| QC value within limits for K 766.490 Radial Recovery = 97.86%   |          |             |        |            |        |       |
| Mg 279.077 IEC†   | 50.9     | 5267.5 ug/L | 145.66 | 5267.5 ppb | 145.66 | 2.77% |
| QC value within limits for Mg 279.077 IEC Recovery = 105.35%    |          |             |        |            |        |       |
| Mn 257.610†   | 368784.1 | 510.34 ug/L | 0.815  | 510.34 ppb | 0.815  | 0.16% |
| QC value within limits for Mn 257.610 Recovery = 102.07%        |          |             |        |            |        |       |
| Mo 202.031†   | 5832.1   | 533.08 ug/L | 1.845  | 533.08 ppb | 1.845  | 0.35% |
| QC value within limits for Mo 202.031 Recovery = 106.62%        |          |             |        |            |        |       |
| Na 589.592 Radial†  | 7486.0   | 2368.2 ug/L | 16.78  | 2368.2 ppb | 16.78  | 0.71% |
| QC value within limits for Na 589.592 Radial Recovery = 94.73%  |          |             |        |            |        |       |
| Ni 231.604†   | 15298.1  | 511.07 ug/L | 0.500  | 511.07 ppb | 0.500  | 0.10% |
| QC value within limits for Ni 231.604 Recovery = 102.21%        |          |             |        |            |        |       |
| P 214.914†  | 3124.3   | 2410.0 ug/L | 1.51   | 2410.0 ppb | 1.51   | 0.06% |
| QC value within limits for P 214.914 Recovery = 96.40%          |          |             |        |            |        |       |
| Pb 220.353†   | 3053.2   | 502.31 ug/L | 0.961  | 502.31 ppb | 0.961  | 0.19% |
| QC value within limits for Pb 220.353 Recovery = 100.46%        |          |             |        |            |        |       |
| S 181.975 Axial†  | 1299.0   | 2480.3 ug/L | 14.46  | 2480.3 ppb | 14.46  | 0.58% |
| QC value within limits for S 181.975 Axial Recovery = 99.21%    |          |             |        |            |        |       |
| Sb 206.836†   | 1170.4   | 521.91 ug/L | 3.023  | 521.91 ppb | 3.023  | 0.58% |
| QC value within limits for Sb 206.836 Recovery = 104.38%        |          |             |        |            |        |       |
| Se 196.026†   | 2994.7   | 2576.5 ug/L | 3.68   | 2576.5 ppb | 3.68   | 0.14% |
| QC value within limits for Se 196.026 Recovery = 103.06%        |          |             |        |            |        |       |
| Si 251.611†   | 125568.9 | 4902.8 ug/L | 3.45   | 4902.8 ppb | 3.45   | 0.07% |
| QC value within limits for Si 251.611 Recovery = 98.06%         |          |             |        |            |        |       |
| Sn 189.927†   | 2241.5   | 534.41 ug/L | 1.324  | 534.41 ppb | 1.324  | 0.25% |
| QC value within limits for Sn 189.927 Recovery = 106.88%        |          |             |        |            |        |       |
| Sr 421.552†   | 53644.7  | 516.57 ug/L | 5.638  | 516.57 ppb | 5.638  | 1.09% |
| QC value within limits for Sr 421.552 Recovery = 103.31%        |          |             |        |            |        |       |
| Ti 334.940†   | 274307.3 | 491.88 ug/L | 0.498  | 491.88 ppb | 0.498  | 0.10% |
| QC value within limits for Ti 334.940 Recovery = 98.38%         |          |             |        |            |        |       |
| Tl 190.801†   | 1289.7   | 533.84 ug/L | 1.691  | 533.84 ppb | 1.691  | 0.32% |
| QC value within limits for Tl 190.801 Recovery = 106.77%        |          |             |        |            |        |       |
| U 409.014†  | 16090.4  | 487.07 ug/L | 2.731  | 487.07 ppb | 2.731  | 0.56% |
| QC value within limits for U 409.014 Recovery = 97.41%          |          |             |        |            |        |       |
| V 292.402†  | 61633.2  | 512.09 ug/L | 0.025  | 512.09 ppb | 0.025  | 0.00% |
| QC value within limits for V 292.402 Recovery = 102.42%         |          |             |        |            |        |       |
| Zn 213.857†   | 39758.1  | 503.88 ug/L | 1.175  | 503.88 ppb | 1.175  | 0.23% |
| QC value within limits for Zn 213.857 Recovery = 100.78%        |          |             |        |            |        |       |
| SiO2†   | 126829.3 | 10641 ug/L  | 78.8   | 10641 ppb  | 78.8   | 0.74% |
| QC value within limits for SiO2 Recovery = 99.49%               |          |             |        |            |        |       |

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/10/2010 17:13:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3233.0           | 3233.0                 | 101 %                 |                       | 17:15:48         |
| 1     | Y RADIAL           | 2653.1           | 2653.1                 | 101.0 %               |                       | 17:15:48         |
| 1     | Al 396.153Radial†  | -61.4            | 1.1                    | 2.4288 ug/L           | 2.4288 ppb            | 17:15:48         |
| 1     | Ca 317.933Radial†  | 9.5              | -3.1                   | -12.892 ug/L          | -12.892 ppb           | 17:15:48         |
| 1     | Fe 238.204 Radial† | 6.8              | -2.7                   | -77.655 ug/L          | -77.655 ppb           | 17:15:48         |
| 1     | K 766.490 Radial†  | 1974.8           | -69.2                  | -33.813 ug/L          | -33.813 ppb           | 17:15:28         |
| 1     | Mg 279.077 IEC†    | 1.2              | -0.5                   | -54.844 ug/L          | -54.844 ppb           | 17:15:48         |
| 1     | Na 589.592 Radial† | -693.3           | 45.4                   | 14.358 ug/L           | 14.358 ppb            | 17:15:28         |
| 1     | Sr 421.552†        | 46.1             | 11.0                   | 0.1063 ug/L           | 0.1063 ppb            | 17:15:28         |
| 1     | Sc 361.383         | 794657.3         | 794657.3               | 100.34 %              |                       | 17:16:45         |
| 1     | Y 371.029          | 680293.5         | 680293.5               | 100.39 %              |                       | 17:16:45         |
| 1     | Ag 328.068†        | 222.3            | 90.2                   | 0.4543 ug/L           | 0.4543 ppb            | 17:16:45         |
| 1     | As 188.979†        | -16.5            | 2.4                    | 1.3585 ug/L           | 1.3585 ppb            | 17:17:05         |
| 1     | B 249.677†         | -41.2            | 336.2                  | 9.7982 ug/L           | 9.7982 ppb            | 17:17:05         |
| 1     | Ba 233.527†        | 22.8             | 23.0                   | 0.2252 ug/L           | 0.2252 ppb            | 17:17:05         |
| 1     | Be 313.107†        | -3451.1          | 102.5                  | 0.0462 ug/L           | 0.0462 ppb            | 17:16:45         |
| 1     | Cd 226.502†        | -151.5           | 5.2                    | 0.0879 ug/L           | 0.0879 ppb            | 17:17:05         |
| 1     | Co 228.616†        | -54.6            | -8.6                   | -0.2351 ug/L          | -0.2351 ppb           | 17:17:05         |
| 1     | Cr 267.716†        | 68.2             | 15.1                   | 0.2046 ug/L           | 0.2046 ppb            | 17:17:05         |
| 1     | Cu 324.752†        | 6139.7           | -93.1                  | -0.3181 ug/L          | -0.3181 ppb           | 17:16:45         |
| 1     | Mn 257.610†        | 426.3            | 26.0                   | 0.0305 ug/L           | 0.0305 ppb            | 17:17:05         |
| 1     | Mo 202.031†        | 12.8             | -0.3                   | -0.0334 ug/L          | -0.0334 ppb           | 17:17:05         |
| 1     | Ni 231.604†        | 67.2             | 6.4                    | 0.2133 ug/L           | 0.2133 ppb            | 17:17:05         |
| 1     | P 214.914†         | 166.6            | 1.7                    | 1.5076 ug/L           | 1.5076 ppb            | 17:17:05         |
| 1     | Pb 220.353†        | -66.6            | -22.7                  | -3.7159 ug/L          | -3.7159 ppb           | 17:17:05         |
| 1     | S 181.975 Axial†   | 28.2             | -2.7                   | -5.1138 ug/L          | -5.1138 ppb           | 17:17:05         |
| 1     | Sb 206.836†        | 30.3             | 7.5                    | 3.2150 ug/L           | 3.2150 ppb            | 17:17:05         |
| 1     | Se 196.026†        | -24.9            | -4.2                   | -3.7677 ug/L          | -3.7677 ppb           | 17:17:05         |
| 1     | Si 251.611†        | 495.5            | 17.7                   | 0.6926 ug/L           | 0.6926 ppb            | 17:17:05         |
| 1     | Sn 189.927†        | 11.2             | 3.4                    | 0.8126 ug/L           | 0.8126 ppb            | 17:17:05         |
| 1     | Ti 334.940†        | -969.0           | -37.3                  | -0.0639 ug/L          | -0.0639 ppb           | 17:16:45         |
| 1     | Tl 190.801†        | -21.9            | 4.1                    | 1.6990 ug/L           | 1.6990 ppb            | 17:17:05         |
| 1     | U 409.014†         | -2003.9          | -25.0                  | -0.7520 ug/L          | -0.7520 ppb           | 17:16:45         |
| 1     | V 292.402†         | -1225.6          | -29.2                  | -0.2307 ug/L          | -0.2307 ppb           | 17:16:45         |
| 1     | Zn 213.857†        | 517.5            | 4.3                    | 0.0658 ug/L           | 0.0658 ppb            | 17:17:05         |
| 1     | SiO2†              | 491.8            | 15.1                   | 1.2658 ug/L           | 1.2658 ppb            | 17:18:16         |
| 2     | Sc Radial          | 3175.6           | 3175.6                 | 99.1 %                |                       | 17:16:13         |
| 2     | Y RADIAL           | 2610.4           | 2610.4                 | 99.35 %               |                       | 17:16:13         |
| 2     | Al 396.153Radial†  | -51.4            | 10.2                   | 21.970 ug/L           | 21.970 ppb            | 17:16:13         |
| 2     | Ca 317.933Radial†  | 9.7              | -2.7                   | -11.448 ug/L          | -11.448 ppb           | 17:16:13         |
| 2     | Fe 238.204 Radial† | 7.7              | -1.7                   | -49.950 ug/L          | -49.950 ppb           | 17:16:13         |
| 2     | K 766.490 Radial†  | 2032.9           | 24.8                   | 12.131 ug/L           | 12.131 ppb            | 17:15:53         |
| 2     | Mg 279.077 IEC†    | -1.0             | -2.7                   | -277.06 ug/L          | -277.06 ppb           | 17:16:13         |
| 2     | Na 589.592 Radial† | -755.2           | -29.4                  | -9.3145 ug/L          | -9.3145 ppb           | 17:15:53         |
| 2     | Sr 421.552†        | 12.3             | -22.3                  | -0.2144 ug/L          | -0.2144 ppb           | 17:15:53         |
| 2     | Sc 361.383         | 792924.8         | 792924.8               | 100.12 %              |                       | 17:17:10         |
| 2     | Y 371.029          | 677870.8         | 677870.8               | 100.03 %              |                       | 17:17:10         |
| 2     | Ag 328.068†        | 144.0            | 12.5                   | 0.0482 ug/L           | 0.0482 ppb            | 17:17:10         |
| 2     | As 188.979†        | -15.6            | 3.2                    | 1.8678 ug/L           | 1.8678 ppb            | 17:17:30         |
| 2     | B 249.677†         | -53.3            | 324.0                  | 9.4358 ug/L           | 9.4358 ppb            | 17:17:30         |
| 2     | Ba 233.527†        | 6.2              | 6.5                    | 0.0623 ug/L           | 0.0623 ppb            | 17:17:30         |
| 2     | Be 313.107†        | -3488.7          | 57.4                   | 0.0262 ug/L           | 0.0262 ppb            | 17:17:10         |
| 2     | Cd 226.502†        | -131.5           | 24.9                   | 0.3859 ug/L           | 0.3859 ppb            | 17:17:30         |
| 2     | Co 228.616†        | -40.4            | 5.6                    | 0.1548 ug/L           | 0.1548 ppb            | 17:17:30         |
| 2     | Cr 267.716†        | 56.3             | 3.4                    | 0.0429 ug/L           | 0.0429 ppb            | 17:17:30         |
| 2     | Cu 324.752†        | 6169.7           | -49.8                  | -0.1725 ug/L          | -0.1725 ppb           | 17:17:10         |
| 2     | Mn 257.610†        | 431.0            | 31.6                   | 0.0502 ug/L           | 0.0502 ppb            | 17:17:30         |
| 2     | Mo 202.031†        | 15.5             | 2.5                    | 0.2202 ug/L           | 0.2202 ppb            | 17:17:30         |
| 2     | Ni 231.604†        | 64.7             | 4.0                    | 0.1329 ug/L           | 0.1329 ppb            | 17:17:30         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 166.4    | 1.9      | 1.5761 ug/L  | 1.5761 ppb  | 17:17:30 |
| 2 | Pb 220.353†        | -38.6    | 5.1      | 0.8445 ug/L  | 0.8445 ppb  | 17:17:30 |
| 2 | S 181.975 Axial†   | 24.9     | -5.9     | -11.293 ug/L | -11.293 ppb | 17:17:30 |
| 2 | Sb 206.836†        | 22.6     | -0.2     | -0.0479 ug/L | -0.0479 ppb | 17:17:30 |
| 2 | Se 196.026†        | -22.0    | -1.3     | -1.2344 ug/L | -1.2344 ppb | 17:17:30 |
| 2 | Si 251.611†        | 484.7    | 8.0      | 0.3085 ug/L  | 0.3085 ppb  | 17:17:30 |
| 2 | Sn 189.927†        | 12.1     | 4.3      | 1.0173 ug/L  | 1.0173 ppb  | 17:17:30 |
| 2 | Ti 334.940†        | -875.3   | 54.1     | 0.1168 ug/L  | 0.1168 ppb  | 17:17:10 |
| 2 | Tl 190.801†        | -22.5    | 3.5      | 1.4275 ug/L  | 1.4275 ppb  | 17:17:30 |
| 2 | U 409.014†         | -1871.2  | 103.2    | 3.1388 ug/L  | 3.1388 ppb  | 17:17:10 |
| 2 | V 292.402†         | -1201.9  | -8.2     | -0.0559 ug/L | -0.0559 ppb | 17:17:10 |
| 2 | Zn 213.857†        | 503.1    | -8.9     | -0.1074 ug/L | -0.1074 ppb | 17:17:30 |
| 2 | SiO2†              | 492.2    | 16.6     | 1.3890 ug/L  | 1.3890 ppb  | 17:18:36 |
| 3 | Sc Radial          | 3178.4   | 3178.4   | 99.2 %       |             | 17:16:38 |
| 3 | Y RADIAL           | 2619.6   | 2619.6   | 99.70 %      |             | 17:16:38 |
| 3 | Al 396.153Radial†  | -67.3    | -5.8     | -12.556 ug/L | -12.556 ppb | 17:16:38 |
| 3 | Ca 317.933Radial†  | 7.5      | -4.9     | -20.366 ug/L | -20.366 ppb | 17:16:38 |
| 3 | Fe 238.204 Radial† | 9.2      | -0.2     | -4.6521 ug/L | -4.6521 ppb | 17:16:38 |
| 3 | K 766.490 Radial†  | 2140.4   | 131.4    | 64.199 ug/L  | 64.199 ppb  | 17:16:18 |
| 3 | Mg 279.077 IEC†    | 0.3      | -1.4     | -144.49 ug/L | -144.49 ppb | 17:16:38 |
| 3 | Na 589.592 Radial† | -772.3   | -46.0    | -14.557 ug/L | -14.557 ppb | 17:16:18 |
| 3 | Sr 421.552†        | 17.5     | -17.0    | -0.1635 ug/L | -0.1635 ppb | 17:16:18 |
| 3 | Sc 361.383         | 782197.8 | 782197.8 | 98.767 %     |             | 17:17:36 |
| 3 | Y 371.029          | 668759.1 | 668759.1 | 98.689 %     |             | 17:17:36 |
| 3 | Ag 328.068†        | 156.4    | 27.0     | 0.1403 ug/L  | 0.1403 ppb  | 17:17:36 |
| 3 | As 188.979†        | -25.1    | -6.6     | -3.8440 ug/L | -3.8440 ppb | 17:17:56 |
| 3 | B 249.677†         | -81.3    | 295.0    | 8.5837 ug/L  | 8.5837 ppb  | 17:17:56 |
| 3 | Ba 233.527†        | 6.7      | 7.1      | 0.0697 ug/L  | 0.0697 ppb  | 17:17:56 |
| 3 | Be 313.107†        | -3458.6  | 40.2     | 0.0179 ug/L  | 0.0179 ppb  | 17:17:36 |
| 3 | Cd 226.502†        | -144.3   | 10.1     | 0.1552 ug/L  | 0.1552 ppb  | 17:17:56 |
| 3 | Co 228.616†        | -32.9    | 12.5     | 0.3467 ug/L  | 0.3467 ppb  | 17:17:56 |
| 3 | Cr 267.716†        | 72.4     | 20.5     | 0.2798 ug/L  | 0.2798 ppb  | 17:17:56 |
| 3 | Cu 324.752†        | 6094.3   | -41.6    | -0.1414 ug/L | -0.1414 ppb | 17:17:36 |
| 3 | Mn 257.610†        | 399.6    | 5.7      | 0.0134 ug/L  | 0.0134 ppb  | 17:17:56 |
| 3 | Mo 202.031†        | 15.7     | 2.9      | 0.2622 ug/L  | 0.2622 ppb  | 17:17:56 |
| 3 | Ni 231.604†        | 55.7     | -4.3     | -0.1425 ug/L | -0.1425 ppb | 17:17:56 |
| 3 | P 214.914†         | 173.1    | 11.0     | 8.8460 ug/L  | 8.8460 ppb  | 17:17:56 |
| 3 | Pb 220.353†        | -29.2    | 14.1     | 2.3110 ug/L  | 2.3110 ppb  | 17:17:56 |
| 3 | S 181.975 Axial†   | 24.9     | -5.6     | -10.599 ug/L | -10.599 ppb | 17:17:56 |
| 3 | Sb 206.836†        | 25.0     | 2.6      | 1.1413 ug/L  | 1.1413 ppb  | 17:17:56 |
| 3 | Se 196.026†        | -19.7    | 0.8      | 0.6446 ug/L  | 0.6446 ppb  | 17:17:56 |
| 3 | Si 251.611†        | 489.6    | 19.6     | 0.7647 ug/L  | 0.7647 ppb  | 17:17:56 |
| 3 | Sn 189.927†        | 12.1     | 4.5      | 1.0669 ug/L  | 1.0669 ppb  | 17:17:56 |
| 3 | Ti 334.940†        | -972.3   | -56.1    | -0.0922 ug/L | -0.0922 ppb | 17:17:36 |
| 3 | Tl 190.801†        | -25.1    | 0.6      | 0.2437 ug/L  | 0.2437 ppb  | 17:17:56 |
| 3 | U 409.014†         | -1902.2  | 46.2     | 1.4018 ug/L  | 1.4018 ppb  | 17:17:36 |
| 3 | V 292.402†         | -1202.0  | -24.7    | -0.1980 ug/L | -0.1980 ppb | 17:17:36 |
| 3 | Zn 213.857†        | 509.6    | 4.6      | 0.0607 ug/L  | 0.0607 ppb  | 17:17:56 |
| 3 | SiO2†              | 494.0    | 25.1     | 2.1037 ug/L  | 2.1037 ppb  | 17:18:56 |

## Mean Data: ICB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 789926.6                 | 99.743 %           | 0.8522   |                    |          | 0.85%   |
| Sc Radial   | 3195.7                   | 99.7 %             | 1.01     |                    |          | 1.01%   |
| Y 371.029   | 675641.1                 | 99.705 %           | 0.8975   |                    |          | 0.90%   |
| Y RADIAL  | 2627.7                   | 100.0 %            | 0.85     |                    |          | 0.85%   |
| Ag 328.068†   | 43.3                     | 0.2142 ug/L        | 0.21292  | 0.2142 ppb         | 0.21292  | 99.38%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 1.8                      | 3.9475 ug/L        | 17.31264 | 3.9475 ppb         | 17.31264 | 438.57% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | -0.3                     | -0.2059 ug/L       | 3.16099  | -0.2059 ppb        | 3.16099  | >999.9% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 318.4                    | 9.2726 ug/L        | 0.62351  | 9.2726 ppb         | 0.62351  | 6.72%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 12.2                     | 0.1190 ug/L        | 0.09199  | 0.1190 ppb         | 0.09199  | 77.28%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 66.7                     | 0.0301 ug/L        | 0.01454  | 0.0301 ppb         | 0.01454  | 48.29%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | -3.6                     | -14.902 ug/L       | 4.7867   | -14.902 ppb        | 4.7867   | 32.12%  |

|  |       |              |          |             |          |         |  |
|--|-------|--------------|----------|-------------|----------|---------|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |       |              |          |             |          |         |  |
| Cd 226.502†  | 13.4  | 0.2097 ug/L  | 0.15626  | 0.2097 ppb  | 0.15626  | 74.53%  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Co 228.616†  | 3.2   | 0.0888 ug/L  | 0.29646  | 0.0888 ppb  | 0.29646  | 333.92% |  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Cr 267.716†  | 13.0  | 0.1758 ug/L  | 0.12106  | 0.1758 ppb  | 0.12106  | 68.87%  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Cu 324.752†  | -61.5 | -0.2107 ug/L | 0.09434  | -0.2107 ppb | 0.09434  | 44.78%  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Fe 238.204 Radial†   | -1.5  | -44.086 ug/L | 36.8532  | -44.086 ppb | 36.8532  | 83.59%  |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |       |              |          |             |          |         |  |
| K 766.490 Radial†  | 29.0  | 14.172 ug/L  | 49.0380  | 14.172 ppb  | 49.0380  | 346.02% |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |       |              |          |             |          |         |  |
| Mg 279.077 IEC†  | -1.5  | -158.80 ug/L | 111.795  | -158.80 ppb | 111.795  | 70.40%  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |       |              |          |             |          |         |  |
| Mn 257.610†  | 21.1  | 0.0313 ug/L  | 0.01842  | 0.0313 ppb  | 0.01842  | 58.79%  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Mo 202.031†  | 1.7   | 0.1497 ug/L  | 0.15995  | 0.1497 ppb  | 0.15995  | 106.88% |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Na 589.592 Radial†   | -10.0 | -3.1714 ug/L | 15.40529 | -3.1714 ppb | 15.40529 | 485.76% |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |       |              |          |             |          |         |  |
| Ni 231.604†  | 2.0   | 0.0679 ug/L  | 0.18663  | 0.0679 ppb  | 0.18663  | 274.85% |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |       |              |          |             |          |         |  |
| P 214.914†   | 4.8   | 3.9766 ug/L  | 4.21721  | 3.9766 ppb  | 4.21721  | 106.05% |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |       |              |          |             |          |         |  |
| Pb 220.353†  | -1.2  | -0.1868 ug/L | 3.14302  | -0.1868 ppb | 3.14302  | >999.9% |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |       |              |          |             |          |         |  |
| S 181.975 Axial†   | -4.7  | -9.0021 ug/L | 3.38520  | -9.0021 ppb | 3.38520  | 37.60%  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |       |              |          |             |          |         |  |
| Sb 206.836†  | 3.3   | 1.4361 ug/L  | 1.65132  | 1.4361 ppb  | 1.65132  | 114.98% |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Se 196.026†  | -1.6  | -1.4525 ug/L | 2.21424  | -1.4525 ppb | 2.21424  | 152.44% |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Si 251.611†  | 15.1  | 0.5886 ug/L  | 0.24522  | 0.5886 ppb  | 0.24522  | 41.66%  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Sn 189.927†  | 4.1   | 0.9656 ug/L  | 0.13483  | 0.9656 ppb  | 0.13483  | 13.96%  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Sr 421.552†  | -9.4  | -0.0905 ug/L | 0.17235  | -0.0905 ppb | 0.17235  | 190.40% |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Ti 334.940†  | -13.1 | -0.0131 ug/L | 0.11340  | -0.0131 ppb | 0.11340  | 865.88% |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |       |              |          |             |          |         |  |
| Tl 190.801†  | 2.7   | 1.1234 ug/L  | 0.77386  | 1.1234 ppb  | 0.77386  | 68.89%  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |       |              |          |             |          |         |  |
| U 409.014†   | 41.4  | 1.2628 ug/L  | 1.94910  | 1.2628 ppb  | 1.94910  | 154.34% |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |       |              |          |             |          |         |  |
| V 292.402†   | -20.7 | -0.1616 ug/L | 0.09291  | -0.1616 ppb | 0.09291  | 57.51%  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |       |              |          |             |          |         |  |
| Zn 213.857†  | -0.0  | 0.0064 ug/L  | 0.09854  | 0.0064 ppb  | 0.09854  | >999.9% |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |       |              |          |             |          |         |  |
| SiO2†  | 18.9  | 1.5862 ug/L  | 0.45242  | 1.5862 ppb  | 0.45242  | 28.52%  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |       |              |          |             |          |         |  |

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/10/2010 17:21:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3212.8        | 3212.8              | 100 %              |                    | 17:23:22      |
| 1     | Y RADIAL           | 2638.2        | 2638.2              | 100.4 %            |                    | 17:23:22      |
| 1     | Al 396.153Radial†  | 37.9          | 99.8                | 215.42 ug/L        | 215.42 ppb         | 17:23:22      |
| 1     | Ca 317.933Radial†  | 62.8          | 50.2                | 209.69 ug/L        | 209.69 ppb         | 17:23:22      |
| 1     | Fe 238.204 Radial† | 12.3          | 2.8                 | 79.924 ug/L        | 79.924 ppb         | 17:23:22      |
| 1     | K 766.490 Radial†  | 2360.9        | 328.3               | 160.16 ug/L        | 160.16 ppb         | 17:23:02      |
| 1     | Mg 279.077 IEC†    | 3.5           | 1.8                 | 187.46 ug/L        | 187.46 ppb         | 17:23:22      |
| 1     | Na 589.592 Radial† | 241.0         | 973.0               | 307.81 ug/L        | 307.81 ppb         | 17:23:02      |
| 1     | Sr 421.552†        | 539.7         | 503.7               | 4.8488 ug/L        | 4.8488 ppb         | 17:23:02      |
| 1     | Sc 361.383         | 806124.5      | 806124.5            | 101.79 %           |                    | 17:24:19      |
| 1     | Y 371.029          | 689288.3      | 689288.3            | 101.72 %           |                    | 17:24:19      |
| 1     | Ag 328.068†        | 1129.7        | 978.5               | 5.1853 ug/L        | 5.1853 ppb         | 17:24:19      |
| 1     | As 188.979†        | 33.6          | 51.9                | 30.433 ug/L        | 30.433 ppb         | 17:24:39      |
| 1     | B 249.677†         | 1480.5        | 1831.7              | 53.276 ug/L        | 53.276 ppb         | 17:24:19      |
| 1     | Ba 233.527†        | 514.1         | 505.3               | 5.0156 ug/L        | 5.0156 ppb         | 17:24:39      |
| 1     | Be 313.107†        | 7619.9        | 11028.0             | 4.9990 ug/L        | 4.9990 ppb         | 17:24:19      |
| 1     | Cd 226.502†        | 184.4         | 337.4               | 5.1522 ug/L        | 5.1522 ppb         | 17:24:39      |
| 1     | Co 228.616†        | 151.1         | 194.3               | 5.3726 ug/L        | 5.3726 ppb         | 17:24:39      |
| 1     | Cr 267.716†        | 437.1         | 376.6               | 5.1591 ug/L        | 5.1591 ppb         | 17:24:39      |
| 1     | Cu 324.752†        | 9295.6        | 2920.3              | 9.8384 ug/L        | 9.8384 ppb         | 17:24:19      |
| 1     | Mn 257.610†        | 8079.5        | 7538.7              | 10.427 ug/L        | 10.427 ppb         | 17:24:19      |
| 1     | Mo 202.031†        | 121.1         | 105.9               | 9.6803 ug/L        | 9.6803 ppb         | 17:24:39      |
| 1     | Ni 231.604†        | 232.6         | 167.9               | 5.6100 ug/L        | 5.6100 ppb         | 17:24:39      |
| 1     | P 214.914†         | 361.7         | 191.0               | 151.46 ug/L        | 151.46 ppb         | 17:24:39      |
| 1     | Pb 220.353†        | 16.0          | 59.3                | 9.7911 ug/L        | 9.7911 ppb         | 17:24:39      |
| 1     | S 181.975 Axial†   | 78.1          | 46.0                | 87.745 ug/L        | 87.745 ppb         | 17:24:39      |
| 1     | Sb 206.836†        | 53.7          | 30.1                | 13.248 ug/L        | 13.248 ppb         | 17:24:39      |
| 1     | Se 196.026†        | 24.4          | 44.6                | 38.445 ug/L        | 38.445 ppb         | 17:24:39      |
| 1     | Si 251.611†        | 3008.4        | 2479.5              | 96.820 ug/L        | 96.820 ppb         | 17:24:39      |
| 1     | Sn 189.927†        | 48.2          | 39.5                | 9.4472 ug/L        | 9.4472 ppb         | 17:24:39      |
| 1     | Ti 334.940†        | 1884.1        | 2779.5              | 4.9736 ug/L        | 4.9736 ppb         | 17:24:19      |
| 1     | Tl 190.801†        | 18.4          | 44.0                | 18.164 ug/L        | 18.164 ppb         | 17:24:39      |
| 1     | U 409.014†         | -259.0        | 1717.7              | 52.152 ug/L        | 52.152 ppb         | 17:24:19      |
| 1     | V 292.402†         | -665.7        | 538.2               | 4.6311 ug/L        | 4.6311 ppb         | 17:24:19      |
| 1     | Zn 213.857†        | 1485.2        | 947.7               | 12.062 ug/L        | 12.062 ppb         | 17:24:39      |
| 1     | SiO2†              | 3087.0        | 2557.7              | 214.62 ug/L        | 214.62 ppb         | 17:25:35      |
| 2     | Sc Radial          | 3267.2        | 3267.2              | 102 %              |                    | 17:23:47      |
| 2     | Y RADIAL           | 2683.3        | 2683.3              | 102.1 %            |                    | 17:23:47      |
| 2     | Al 396.153Radial†  | 37.2          | 98.5                | 212.73 ug/L        | 212.73 ppb         | 17:23:47      |
| 2     | Ca 317.933Radial†  | 60.4          | 46.8                | 195.48 ug/L        | 195.48 ppb         | 17:23:47      |
| 2     | Fe 238.204 Radial† | 11.3          | 1.6                 | 45.429 ug/L        | 45.429 ppb         | 17:23:47      |
| 2     | K 766.490 Radial†  | 2336.4        | 264.9               | 129.24 ug/L        | 129.24 ppb         | 17:23:27      |
| 2     | Mg 279.077 IEC†    | 7.3           | 5.5                 | 564.22 ug/L        | 564.22 ppb         | 17:23:47      |
| 2     | Na 589.592 Radial† | 149.2         | 879.0               | 278.07 ug/L        | 278.07 ppb         | 17:23:27      |
| 2     | Sr 421.552†        | 532.3         | 487.4               | 4.6926 ug/L        | 4.6926 ppb         | 17:23:27      |
| 2     | Sc 361.383         | 801531.1      | 801531.1            | 101.21 %           |                    | 17:24:44      |
| 2     | Y 371.029          | 685747.5      | 685747.5            | 101.20 %           |                    | 17:24:44      |
| 2     | Ag 328.068†        | 1128.2        | 983.5               | 5.1989 ug/L        | 5.1989 ppb         | 17:24:44      |
| 2     | As 188.979†        | 28.8          | 47.3                | 27.756 ug/L        | 27.756 ppb         | 17:25:04      |
| 2     | B 249.677†         | 1472.8        | 1832.5              | 53.306 ug/L        | 53.306 ppb         | 17:24:44      |
| 2     | Ba 233.527†        | 523.7         | 517.7               | 5.1367 ug/L        | 5.1367 ppb         | 17:25:04      |
| 2     | Be 313.107†        | 7641.9        | 11092.6             | 5.0283 ug/L        | 5.0283 ppb         | 17:24:44      |
| 2     | Cd 226.502†        | 189.7         | 343.7               | 5.2527 ug/L        | 5.2527 ppb         | 17:25:04      |
| 2     | Co 228.616†        | 137.7         | 182.0               | 5.0319 ug/L        | 5.0319 ppb         | 17:25:04      |
| 2     | Cr 267.716†        | 431.5         | 373.5               | 5.1137 ug/L        | 5.1137 ppb         | 17:25:04      |
| 2     | Cu 324.752†        | 9292.4        | 2969.6              | 10.002 ug/L        | 10.002 ppb         | 17:24:44      |
| 2     | Mn 257.610†        | 8024.0        | 7529.4              | 10.395 ug/L        | 10.395 ppb         | 17:24:44      |
| 2     | Mo 202.031†        | 119.2         | 104.7               | 9.5675 ug/L        | 9.5675 ppb         | 17:25:04      |
| 2     | Ni 231.604†        | 241.6         | 178.1               | 5.9515 ug/L        | 5.9515 ppb         | 17:25:04      |

|   |                    |          |          |             |            |          |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914†         | 357.0    | 188.4    | 149.36 ug/L | 149.36 ppb | 17:25:04 |
| 2 | Pb 220.353†        | 28.2     | 71.5     | 11.791 ug/L | 11.791 ppb | 17:25:04 |
| 2 | S 181.975 Axial†   | 84.3     | 52.5     | 100.30 ug/L | 100.30 ppb | 17:25:04 |
| 2 | Sb 206.836†        | 40.4     | 17.2     | 7.7434 ug/L | 7.7434 ppb | 17:25:04 |
| 2 | Se 196.026†        | 19.1     | 39.5     | 34.009 ug/L | 34.009 ppb | 17:25:04 |
| 2 | Si 251.611†        | 2997.5   | 2485.6   | 97.062 ug/L | 97.062 ppb | 17:25:04 |
| 2 | Sn 189.927†        | 50.7     | 42.3     | 10.095 ug/L | 10.095 ppb | 17:25:04 |
| 2 | Ti 334.940†        | 1891.8   | 2797.7   | 4.9726 ug/L | 4.9726 ppb | 17:24:44 |
| 2 | Tl 190.801†        | 29.4     | 55.0     | 22.683 ug/L | 22.683 ppb | 17:25:04 |
| 2 | U 409.014†         | -181.4   | 1792.9   | 54.440 ug/L | 54.440 ppb | 17:24:44 |
| 2 | V 292.402†         | -671.3   | 528.9    | 4.5700 ug/L | 4.5700 ppb | 17:24:44 |
| 2 | Zn 213.857†        | 1467.9   | 939.0    | 11.953 ug/L | 11.953 ppb | 17:25:04 |
| 2 | SiO2†              | 3035.0   | 2523.7   | 211.77 ug/L | 211.77 ppb | 17:25:40 |
| 3 | Sc Radial          | 3246.9   | 3246.9   | 101 %       |            | 17:24:12 |
| 3 | Y RADIAL           | 2662.3   | 2662.3   | 101.3 %     |            | 17:24:12 |
| 3 | Al 396.153Radial†  | 42.2     | 103.7    | 223.90 ug/L | 223.90 ppb | 17:24:12 |
| 3 | Ca 317.933Radial†  | 63.0     | 49.7     | 207.49 ug/L | 207.49 ppb | 17:24:12 |
| 3 | Fe 238.204 Radial† | 11.1     | 1.4      | 41.691 ug/L | 41.691 ppb | 17:24:12 |
| 3 | K 766.490 Radial†  | 2407.7   | 349.6    | 170.62 ug/L | 170.62 ppb | 17:23:52 |
| 3 | Mg 279.077 IEC†    | 5.6      | 3.8      | 390.62 ug/L | 390.62 ppb | 17:24:12 |
| 3 | Na 589.592 Radial† | 102.0    | 833.3    | 263.60 ug/L | 263.60 ppb | 17:23:52 |
| 3 | Sr 421.552†        | 527.6    | 486.0    | 4.6790 ug/L | 4.6790 ppb | 17:23:52 |
| 3 | Sc 361.383         | 790532.8 | 790532.8 | 99.819 %    |            | 17:25:09 |
| 3 | Y 371.029          | 677458.5 | 677458.5 | 99.973 %    |            | 17:25:09 |
| 3 | Ag 328.068†        | 1034.1   | 904.6    | 4.7769 ug/L | 4.7769 ppb | 17:25:09 |
| 3 | As 188.979†        | 30.0     | 48.9     | 28.660 ug/L | 28.660 ppb | 17:25:29 |
| 3 | B 249.677†         | 1514.5   | 1894.5   | 55.112 ug/L | 55.112 ppb | 17:25:09 |
| 3 | Ba 233.527†        | 526.4    | 527.7    | 5.2349 ug/L | 5.2349 ppb | 17:25:29 |
| 3 | Be 313.107†        | 7522.7   | 11078.3  | 5.0213 ug/L | 5.0213 ppb | 17:25:09 |
| 3 | Cd 226.502†        | 194.9    | 351.5    | 5.3727 ug/L | 5.3727 ppb | 17:25:29 |
| 3 | Co 228.616†        | 145.5    | 191.7    | 5.2988 ug/L | 5.2988 ppb | 17:25:29 |
| 3 | Cr 267.716†        | 428.3    | 376.3    | 5.1504 ug/L | 5.1504 ppb | 17:25:29 |
| 3 | Cu 324.752†        | 9165.6   | 2970.2   | 10.002 ug/L | 10.002 ppb | 17:25:09 |
| 3 | Mn 257.610†        | 7853.3   | 7468.6   | 10.318 ug/L | 10.318 ppb | 17:25:09 |
| 3 | Mo 202.031†        | 112.6    | 99.7     | 9.1139 ug/L | 9.1139 ppb | 17:25:29 |
| 3 | Ni 231.604†        | 222.2    | 162.0    | 5.4111 ug/L | 5.4111 ppb | 17:25:29 |
| 3 | P 214.914†         | 356.5    | 192.8    | 152.91 ug/L | 152.91 ppb | 17:25:29 |
| 3 | Pb 220.353†        | 11.4     | 55.1     | 9.0943 ug/L | 9.0943 ppb | 17:25:29 |
| 3 | S 181.975 Axial†   | 81.4     | 50.8     | 96.919 ug/L | 96.919 ppb | 17:25:29 |
| 3 | Sb 206.836†        | 49.5     | 26.8     | 11.870 ug/L | 11.870 ppb | 17:25:29 |
| 3 | Se 196.026†        | 18.2     | 39.0     | 33.516 ug/L | 33.516 ppb | 17:25:29 |
| 3 | Si 251.611†        | 2973.2   | 2502.5   | 97.729 ug/L | 97.729 ppb | 17:25:29 |
| 3 | Sn 189.927†        | 50.7     | 43.0     | 10.284 ug/L | 10.284 ppb | 17:25:29 |
| 3 | Ti 334.940†        | 1733.4   | 2664.9   | 4.7491 ug/L | 4.7491 ppb | 17:25:09 |
| 3 | Tl 190.801†        | 15.7     | 41.6     | 17.189 ug/L | 17.189 ppb | 17:25:29 |
| 3 | U 409.014†         | -92.9    | 1879.0   | 57.057 ug/L | 57.057 ppb | 17:25:09 |
| 3 | V 292.402†         | -679.1   | 512.0    | 4.4271 ug/L | 4.4271 ppb | 17:25:09 |
| 3 | Zn 213.857†        | 1453.8   | 945.1    | 12.035 ug/L | 12.035 ppb | 17:25:29 |
| 3 | SiO2†              | 3098.5   | 2629.0   | 220.63 ug/L | 220.63 ppb | 17:25:45 |

## Mean Data: PQL

| Analyte  | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383   | 799396.1                 | 100.94 %           | 1.012    |                    |          | 1.00% |
| Sc Radial  | 3242.3                   | 101 %              | 0.9      |                    |          | 0.85% |
| Y 371.029  | 684164.7                 | 100.96 %           | 0.896    |                    |          | 0.89% |
| Y RADIAL   | 2661.3                   | 101.3 %            | 0.86     |                    |          | 0.85% |
| Ag 328.068†  | 955.5                    | 5.0537 ug/L        | 0.23985  | 5.0537 ppb         | 0.23985  | 4.75% |
| QC value within limits for Ag 328.068 Recovery = 101.07%       |                          |                    |          |                    |          |       |
| Al 396.153Radial†  | 100.7                    | 217.35 ug/L        | 5.831    | 217.35 ppb         | 5.831    | 2.68% |
| QC value within limits for Al 396.153Radial Recovery = 108.67% |                          |                    |          |                    |          |       |
| As 188.979†  | 49.4                     | 28.950 ug/L        | 1.3619   | 28.950 ppb         | 1.3619   | 4.70% |
| QC value within limits for As 188.979 Recovery = 96.50%        |                          |                    |          |                    |          |       |
| B 249.677†   | 1852.9                   | 53.898 ug/L        | 1.0511   | 53.898 ppb         | 1.0511   | 1.95% |
| QC value within limits for B 249.677 Recovery = 107.80%        |                          |                    |          |                    |          |       |
| Ba 233.527†  | 516.9                    | 5.1291 ug/L        | 0.10983  | 5.1291 ppb         | 0.10983  | 2.14% |
| QC value within limits for Ba 233.527 Recovery = 102.58%       |                          |                    |          |                    |          |       |
| Be 313.107†  | 11066.3                  | 5.0162 ug/L        | 0.01530  | 5.0162 ppb         | 0.01530  | 0.31% |
| QC value within limits for Be 313.107 Recovery = 100.32%       |                          |                    |          |                    |          |       |
| Ca 317.933Radial†  | 48.9                     | 204.22 ug/L        | 7.652    | 204.22 ppb         | 7.652    | 3.75% |

QC value within limits for Ca 317.933 Radial Recovery = 102.11%

Cd 226.502† 344.2 5.2592 ug/L 0.11038 5.2592 ppb 0.11038 2.10%

QC value within limits for Cd 226.502 Recovery = 105.18%

Co 228.616† 189.3 5.2344 ug/L 0.17924 5.2344 ppb 0.17924 3.42%

QC value within limits for Co 228.616 Recovery = 104.69%

Cr 267.716† 375.5 5.1411 ug/L 0.02406 5.1411 ppb 0.02406 0.47%

QC value within limits for Cr 267.716 Recovery = 102.82%

Cu 324.752† 2953.4 9.9474 ug/L 0.09442 9.9474 ppb 0.09442 0.95%

QC value within limits for Cu 324.752 Recovery = 99.47%

Fe 238.204 Radial† 1.9 55.681 ug/L 21.0779 55.681 ppb 21.0779 37.85%

QC value less than the lower limit for Fe 238.204 Radial Recovery = 55.68%

K 766.490 Radial† 314.3 153.34 ug/L 21.518 153.34 ppb 21.518 14.03%

QC value within limits for K 766.490 Radial Recovery = 102.23%

Mg 279.077 IEC† 3.7 380.77 ug/L 188.574 380.77 ppb 188.574 49.52%

QC value within limits for Mg 279.077 IEC Recovery = 126.92%

Mn 257.610† 7512.2 10.380 ug/L 0.0561 10.380 ppb 0.0561 0.54%

QC value within limits for Mn 257.610 Recovery = 103.80%

Mo 202.031† 103.4 9.4539 ug/L 0.29981 9.4539 ppb 0.29981 3.17%

QC value within limits for Mo 202.031 Recovery = 94.54%

Na 589.592 Radial† 895.1 283.16 ug/L 22.542 283.16 ppb 22.542 7.96%

QC value within limits for Na 589.592 Radial Recovery = 94.39%

Ni 231.604† 169.3 5.6575 ug/L 0.27333 5.6575 ppb 0.27333 4.83%

QC value within limits for Ni 231.604 Recovery = 113.15%

P 214.914† 190.8 151.24 ug/L 1.785 151.24 ppb 1.785 1.18%

QC value within limits for P 214.914 Recovery = 100.83%

Pb 220.353† 62.0 10.225 ug/L 1.3998 10.225 ppb 1.3998 13.69%

QC value within limits for Pb 220.353 Recovery = 102.25%

S 181.975 Axial† 49.8 94.987 ug/L 6.4960 94.987 ppb 6.4960 6.84%

QC value within limits for S 181.975 Axial Recovery = 94.99%

Sb 206.836† 24.7 10.954 ug/L 2.8646 10.954 ppb 2.8646 26.15%

QC value within limits for Sb 206.836 Recovery = 109.54%

Se 196.026† 41.0 35.323 ug/L 2.7145 35.323 ppb 2.7145 7.68%

QC value within limits for Se 196.026 Recovery = 117.74%

Si 251.611† 2489.2 97.203 ug/L 0.4706 97.203 ppb 0.4706 0.48%

QC value within limits for Si 251.611 Recovery = 97.20%

Sn 189.927† 41.6 9.9419 ug/L 0.43866 9.9419 ppb 0.43866 4.41%

QC value within limits for Sn 189.927 Recovery = 99.42%

Sr 421.552† 492.4 4.7401 ug/L 0.09432 4.7401 ppb 0.09432 1.99%

QC value within limits for Sr 421.552 Recovery = 94.80%

Ti 334.940† 2747.3 4.8984 ug/L 0.12932 4.8984 ppb 0.12932 2.64%

QC value within limits for Ti 334.940 Recovery = 97.97%

Tl 190.801† 46.9 19.345 ug/L 2.9315 19.345 ppb 2.9315 15.15%

QC value within limits for Tl 190.801 Recovery = 96.73%

U 409.014† 1796.5 54.550 ug/L 2.4542 54.550 ppb 2.4542 4.50%

QC value within limits for U 409.014 Recovery = 109.10%

V 292.402† 526.4 4.5427 ug/L 0.10472 4.5427 ppb 0.10472 2.31%

QC value within limits for V 292.402 Recovery = 90.85%

Zn 213.857† 943.9 12.017 ug/L 0.0568 12.017 ppb 0.0568 0.47%

QC value within limits for Zn 213.857 Recovery = 120.17%

SiO2† 2570.2 215.67 ug/L 4.522 215.67 ppb 4.522 2.10%

QC value within limits for SiO2 Recovery = 101.25%

QC Failed. Continue with analysis.

Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 13  
 Date Collected: 3/10/2010 17:27:57  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSA

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3111.8           | 3111.8                 | 97.1 %                |                       | 17:30:11         |
| 1     | Y RADIAL           | 2539.8           | 2539.8                 | 96.66 %               |                       | 17:30:11         |
| 1     | Al 396.153Radial†  | 226812.0         | 233637.4               | 505540 ug/L           | 505540 ppb            | 17:29:51         |
| 1     | Ca 317.933Radial†  | 109445.2         | 112696.2               | 470870 ug/L           | 470870 ppb            | 17:29:51         |
| 1     | Fe 238.204 Radial† | 6144.4           | 6318.2                 | 181850 ug/L           | 181850 ppb            | 17:30:11         |
| 1     | K 766.490 Radial†  | 1924.4           | -44.8                  | -179.42 ug/L          | -179.42 ppb           | 17:29:51         |
| 1     | Mg 279.077 IEC†    | 4577.0           | 4711.8                 | 487400 ug/L           | 487400 ppb            | 17:30:11         |
| 1     | Na 589.592 Radial† | -523.0           | 194.0                  | 61.380 ug/L           | 61.380 ppb            | 17:30:11         |
| 1     | Sr 421.552†        | 384.7            | 361.6                  | -0.0341 ug/L          | -0.0341 ppb           | 17:30:11         |
| 1     | Sc 361.383         | 729561.3         | 729561.3               | 92.120 %              |                       | 17:31:08         |
| 1     | Y 371.029          | 611690.9         | 611690.9               | 90.268 %              |                       | 17:31:08         |
| 1     | Ag 328.068†        | -8653.7          | -9525.3                | -0.6430 ug/L          | -0.6430 ppb           | 17:31:08         |
| 1     | As 188.979†        | -88.2            | -76.9                  | -2.6441 ug/L          | -2.6441 ppb           | 17:31:28         |
| 1     | B 249.677†         | 569.3            | 995.2                  | -0.5738 ug/L          | -0.5738 ppb           | 17:31:08         |
| 1     | Ba 233.527†        | -460.1           | -499.2                 | 0.6282 ug/L           | 0.6282 ppb            | 17:31:28         |
| 1     | Be 313.107†        | -3788.7          | -570.9                 | -0.3169 ug/L          | -0.3169 ppb           | 17:31:08         |
| 1     | Cd 226.502†        | 1114.7           | 1366.3                 | 2.0696 ug/L           | 2.0696 ppb            | 17:31:28         |
| 1     | Co 228.616†        | 6.1              | 52.5                   | -1.1733 ug/L          | -1.1733 ppb           | 17:31:28         |
| 1     | Cr 267.716†        | -523.5           | -621.1                 | -1.0617 ug/L          | -1.0617 ppb           | 17:31:28         |
| 1     | Cu 324.752†        | 3837.7           | -2046.0                | 2.6860 ug/L           | 2.6860 ppb            | 17:31:28         |
| 1     | Mn 257.610†        | 298.3            | -75.0                  | -2.0793 ug/L          | -2.0793 ppb           | 17:31:08         |
| 1     | Mo 202.031†        | -208.5           | -239.3                 | -2.1381 ug/L          | -2.1381 ppb           | 17:31:28         |
| 1     | Ni 231.604†        | 132.8            | 83.5                   | 2.7918 ug/L           | 2.7918 ppb            | 17:31:28         |
| 1     | P 214.914†         | 123.9            | -29.9                  | -43.795 ug/L          | -43.795 ppb           | 17:31:28         |
| 1     | Pb 220.353†        | -563.7           | -568.2                 | -0.6877 ug/L          | -0.6877 ppb           | 17:31:28         |
| 1     | S 181.975 Axial†   | 43.6             | 16.5                   | -63.245 ug/L          | -63.245 ppb           | 17:31:28         |
| 1     | Sb 206.836†        | 50.6             | 32.1                   | -3.4424 ug/L          | -3.4424 ppb           | 17:31:28         |
| 1     | Se 196.026†        | -716.4           | -757.0                 | -3.1077 ug/L          | -3.1077 ppb           | 17:31:28         |
| 1     | Si 251.611†        | 348.0            | -98.3                  | -3.5750 ug/L          | -3.5750 ppb           | 17:31:28         |
| 1     | Sn 189.927†        | -311.2           | -345.7                 | -9.1032 ug/L          | -9.1032 ppb           | 17:31:28         |
| 1     | Ti 334.940†        | -14126.6         | -14406.5               | -2.5311 ug/L          | -2.5311 ppb           | 17:31:08         |
| 1     | Tl 190.801†        | -73.9            | -54.3                  | -22.581 ug/L          | -22.581 ppb           | 17:31:28         |
| 1     | U 409.014†         | -226.0           | 1726.8                 | 31.738 ug/L           | 31.738 ppb            | 17:31:08         |
| 1     | V 292.402†         | 850.9            | 2116.0                 | 0.0902 ug/L           | 0.0902 ppb            | 17:31:28         |
| 1     | Zn 213.857†        | 2451.1           | 2149.3                 | 0.2711 ug/L           | 0.2711 ppb            | 17:31:28         |
| 1     | SiO2†              | 357.7            | -86.7                  | -6.6884 ug/L          | -6.6884 ppb           | 17:32:24         |
| 2     | Sc Radial          | 3125.3           | 3125.3                 | 97.5 %                |                       | 17:30:36         |
| 2     | Y RADIAL           | 2558.7           | 2558.7                 | 97.38 %               |                       | 17:30:36         |
| 2     | Al 396.153Radial†  | 224247.5         | 229995.2               | 497660 ug/L           | 497660 ppb            | 17:30:16         |
| 2     | Ca 317.933Radial†  | 108373.3         | 111108.6               | 464230 ug/L           | 464230 ppb            | 17:30:16         |
| 2     | Fe 238.204 Radial† | 6150.0           | 6296.4                 | 181220 ug/L           | 181220 ppb            | 17:30:36         |
| 2     | K 766.490 Radial†  | 1935.6           | -42.0                  | -175.80 ug/L          | -175.80 ppb           | 17:30:16         |
| 2     | Mg 279.077 IEC†    | 4609.3           | 4724.4                 | 488710 ug/L           | 488710 ppb            | 17:30:36         |
| 2     | Na 589.592 Radial† | -595.2           | 122.3                  | 38.690 ug/L           | 38.690 ppb            | 17:30:36         |
| 2     | Sr 421.552†        | 399.4            | 374.9                  | 0.1435 ug/L           | 0.1435 ppb            | 17:30:36         |
| 2     | Sc 361.383         | 726310.0         | 726310.0               | 91.710 %              |                       | 17:31:33         |
| 2     | Y 371.029          | 608445.8         | 608445.8               | 89.789 %              |                       | 17:31:33         |
| 2     | Ag 328.068†        | -8729.4          | -9649.8                | -1.4031 ug/L          | -1.4031 ppb           | 17:31:33         |
| 2     | As 188.979†        | -61.3            | -48.0                  | 14.176 ug/L           | 14.176 ppb            | 17:31:53         |
| 2     | B 249.677†         | 518.2            | 942.3                  | -2.0110 ug/L          | -2.0110 ppb           | 17:31:33         |
| 2     | Ba 233.527†        | -462.4           | -503.9                 | 0.5622 ug/L           | 0.5622 ppb            | 17:31:53         |
| 2     | Be 313.107†        | -3731.7          | -527.1                 | -0.2973 ug/L          | -0.2973 ppb           | 17:31:33         |
| 2     | Cd 226.502†        | 1113.2           | 1370.1                 | 2.1918 ug/L           | 2.1918 ppb            | 17:31:53         |
| 2     | Co 228.616†        | 11.4             | 58.3                   | -1.0010 ug/L          | -1.0010 ppb           | 17:31:53         |
| 2     | Cr 267.716†        | -549.8           | -652.4                 | -1.5148 ug/L          | -1.5148 ppb           | 17:31:53         |
| 2     | Cu 324.752†        | 3756.5           | -2115.9                | 2.4194 ug/L           | 2.4194 ppb            | 17:31:53         |
| 2     | Mn 257.610†        | 237.0            | -140.5                 | -2.2850 ug/L          | -2.2850 ppb           | 17:31:33         |
| 2     | Mo 202.031†        | -195.6           | -226.3                 | -1.0746 ug/L          | -1.0746 ppb           | 17:31:53         |
| 2     | Ni 231.604†        | 124.2            | 74.8                   | 2.4997 ug/L           | 2.4997 ppb            | 17:31:53         |



|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 134.5    | -17.7    | -35.430 ug/L | -35.430 ppb | 17:31:53 |
| 2 | Pb 220.353†        | -558.2   | -565.0   | -1.9047 ug/L | -1.9047 ppb | 17:31:53 |
| 2 | S 181.975 Axial†   | 38.5     | 11.2     | -71.854 ug/L | -71.854 ppb | 17:31:53 |
| 2 | Sb 206.836†        | 53.4     | 35.5     | -1.7430 ug/L | -1.7430 ppb | 17:31:53 |
| 2 | Se 196.026†        | -744.2   | -790.8   | -35.962 ug/L | -35.962 ppb | 17:31:53 |
| 2 | Si 251.611†        | 405.6    | -33.8    | -1.0675 ug/L | -1.0675 ppb | 17:31:53 |
| 2 | Sn 189.927†        | -309.4   | -345.2   | -10.131 ug/L | -10.131 ppb | 17:31:53 |
| 2 | Ti 334.940†        | -14101.2 | -14447.5 | -3.5987 ug/L | -3.5987 ppb | 17:31:33 |
| 2 | Tl 190.801†        | -56.6    | -35.7    | -14.944 ug/L | -14.944 ppb | 17:31:53 |
| 2 | U 409.014†         | -367.8   | 1571.0   | 27.079 ug/L  | 27.079 ppb  | 17:31:33 |
| 2 | V 292.402†         | 839.4    | 2107.5   | 0.1449 ug/L  | 0.1449 ppb  | 17:31:53 |
| 2 | Zn 213.857†        | 2457.6   | 2168.4   | 0.6106 ug/L  | 0.6106 ppb  | 17:31:53 |
| 2 | SiO2†              | 340.7    | -103.5   | -8.1333 ug/L | -8.1333 ppb | 17:32:29 |
| 3 | Sc Radial          | 3125.6   | 3125.6   | 97.5 %       |             | 17:31:01 |
| 3 | Y RADIAL           | 2549.0   | 2549.0   | 97.01 %      |             | 17:31:01 |
| 3 | Al 396.153Radial†  | 227846.1 | 233666.6 | 505600 ug/L  | 505600 ppb  | 17:30:41 |
| 3 | Ca 317.933Radial†  | 109957.5 | 112724.0 | 470980 ug/L  | 470980 ppb  | 17:30:41 |
| 3 | Fe 238.204 Radial† | 6145.0   | 6290.8   | 181060 ug/L  | 181060 ppb  | 17:31:01 |
| 3 | K 766.490 Radial†  | 1937.3   | -40.3    | -177.25 ug/L | -177.25 ppb | 17:30:41 |
| 3 | Mg 279.077 IEC†    | 4601.5   | 4716.1   | 487840 ug/L  | 487840 ppb  | 17:31:01 |
| 3 | Na 589.592 Radial† | -562.8   | 155.6    | 49.217 ug/L  | 49.217 ppb  | 17:31:01 |
| 3 | Sr 421.552†        | 390.6    | 365.8    | 0.0062 ug/L  | 0.0062 ppb  | 17:31:01 |
| 3 | Sc 361.383         | 719376.9 | 719376.9 | 90.834 %     |             | 17:31:59 |
| 3 | Y 371.029          | 603067.5 | 603067.5 | 88.995 %     |             | 17:31:59 |
| 3 | Ag 328.068†        | -8573.3  | -9569.7  | -1.1178 ug/L | -1.1178 ppb | 17:31:59 |
| 3 | As 188.979†        | -77.3    | -66.3    | 3.4296 ug/L  | 3.4296 ppb  | 17:32:19 |
| 3 | B 249.677†         | 465.8    | 890.1    | -3.5044 ug/L | -3.5044 ppb | 17:31:59 |
| 3 | Ba 233.527†        | -483.6   | -532.1   | 0.2788 ug/L  | 0.2788 ppb  | 17:32:19 |
| 3 | Be 313.107†        | -3761.4  | -599.0   | -0.3302 ug/L | -0.3302 ppb | 17:31:59 |
| 3 | Cd 226.502†        | 1108.3   | 1376.4   | 2.3036 ug/L  | 2.3036 ppb  | 17:32:19 |
| 3 | Co 228.616†        | -5.9     | 39.4     | -1.5227 ug/L | -1.5227 ppb | 17:32:19 |
| 3 | Cr 267.716†        | -512.1   | -616.6   | -1.0293 ug/L | -1.0293 ppb | 17:32:19 |
| 3 | Cu 324.752†        | 3719.0   | -2117.7  | 2.4064 ug/L  | 2.4064 ppb  | 17:32:19 |
| 3 | Mn 257.610†        | 268.8    | -102.9   | -2.2138 ug/L | -2.2138 ppb | 17:31:59 |
| 3 | Mo 202.031†        | -203.7   | -237.3   | -2.0155 ug/L | -2.0155 ppb | 17:32:19 |
| 3 | Ni 231.604†        | 132.2    | 85.0     | 2.8393 ug/L  | 2.8393 ppb  | 17:32:19 |
| 3 | P 214.914†         | 128.6    | -22.8    | -37.452 ug/L | -37.452 ppb | 17:32:19 |
| 3 | Pb 220.353†        | -565.0   | -578.3   | -2.2222 ug/L | -2.2222 ppb | 17:32:19 |
| 3 | S 181.975 Axial†   | 34.8     | 7.5      | -80.450 ug/L | -80.450 ppb | 17:32:19 |
| 3 | Sb 206.836†        | 67.8     | 51.9     | 5.0213 ug/L  | 5.0213 ppb  | 17:32:19 |
| 3 | Se 196.026†        | -726.5   | -779.1   | -24.164 ug/L | -24.164 ppb | 17:32:19 |
| 3 | Si 251.611†        | 366.4    | -72.8    | -2.5777 ug/L | -2.5777 ppb | 17:32:19 |
| 3 | Sn 189.927†        | -318.9   | -358.9   | -12.190 ug/L | -12.190 ppb | 17:32:19 |
| 3 | Ti 334.940†        | -14064.0 | -14554.7 | -2.8145 ug/L | -2.8145 ppb | 17:31:59 |
| 3 | Tl 190.801†        | -73.1    | -54.5    | -22.681 ug/L | -22.681 ppb | 17:32:19 |
| 3 | U 409.014†         | -439.1   | 1488.7   | 24.595 ug/L  | 24.595 ppb  | 17:31:59 |
| 3 | V 292.402†         | 843.1    | 2120.4   | 0.2385 ug/L  | 0.2385 ppb  | 17:32:19 |
| 3 | Zn 213.857†        | 2451.0   | 2186.9   | 0.8694 ug/L  | 0.8694 ppb  | 17:32:19 |
| 3 | SiO2†              | 350.2    | -89.5    | -6.9314 ug/L | -6.9314 ppb | 17:32:34 |

## Mean Data: ICSA

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383  | 725082.7                 | 91.555 %     |        | 0.6568   |                    |          | 0.72%   |
| Sc Radial   | 3120.9                   | 97.4 %       |        | 0.25     |                    |          | 0.25%   |
| Y 371.029   | 607734.7                 | 89.684 %     |        | 0.6427   |                    |          | 0.72%   |
| Y RADIAL  | 2549.2                   | 97.02 %      |        | 0.361    |                    |          | 0.37%   |
| Ag 328.068†   | -9581.6                  | -1.0546 ug/L |        | 0.38395  | -1.0546 ppb        | 0.38395  | 36.41%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated |                          |              |        |          |                    |          |         |
| Al 396.153Radial†   | 232433.0                 | 502930 ug/L  |        | 4568.4   | 502930 ppb         | 4568.4   | 0.91%   |
| QC value within limits for Al 396.153Radial Recovery = 100.59%  |                          |              |        |          |                    |          |         |
| As 188.979†   | -63.7                    | 4.9873 ug/L  |        | 8.51772  | 4.9873 ppb         | 8.51772  | 170.79% |
| QC value within limits for As 188.979 Recovery = Not calculated |                          |              |        |          |                    |          |         |
| B 249.677†  | 942.5                    | -2.0297 ug/L |        | 1.46536  | -2.0297 ppb        | 1.46536  | 72.19%  |
| QC value within limits for B 249.677 Recovery = Not calculated  |                          |              |        |          |                    |          |         |
| Ba 233.527†   | -511.7                   | 0.4898 ug/L  |        | 0.18562  | 0.4898 ppb         | 0.18562  | 37.90%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated |                          |              |        |          |                    |          |         |
| Be 313.107†   | -565.7                   | -0.3148 ug/L |        | 0.01657  | -0.3148 ppb        | 0.01657  | 5.27%   |
| QC value within limits for Be 313.107 Recovery = Not calculated |                          |              |        |          |                    |          |         |
| Ca 317.933Radial†   | 112176.3                 | 468690 ug/L  |        | 3863.7   | 468690 ppb         | 3863.7   | 0.82%   |

QC value within limits for Ca 317.933 Radial Recovery = 93.74%

|  |          |              |         |             |         |         |
|--|----------|--------------|---------|-------------|---------|---------|
| Cd 226.502†  | 1370.9   | 2.1883 ug/L  | 0.11704 | 2.1883 ppb  | 0.11704 | 5.35%   |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |          |              |         |             |         |         |
| Co 228.616†  | 50.1     | -1.2323 ug/L | 0.26578 | -1.2323 ppb | 0.26578 | 21.57%  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |          |              |         |             |         |         |
| Cr 267.716†  | -630.0   | -1.2019 ug/L | 0.27143 | -1.2019 ppb | 0.27143 | 22.58%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |          |              |         |             |         |         |
| Cu 324.752†  | -2093.2  | 2.5039 ug/L  | 0.15785 | 2.5039 ppb  | 0.15785 | 6.30%   |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |          |              |         |             |         |         |
| Fe 238.204 Radial†   | 6301.8   | 181380 ug/L  | 416.0   | 181380 ppb  | 416.0   | 0.23%   |
| QC value within limits for Fe 238.204 Radial Recovery = 90.69%         |          |              |         |             |         |         |
| K 766.490 Radial†  | -42.4    | -177.49 ug/L | 1.820   | -177.49 ppb | 1.820   | 1.03%   |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |          |              |         |             |         |         |
| Mg 279.077 IEC†  | 4717.4   | 487980 ug/L  | 664.2   | 487980 ppb  | 664.2   | 0.14%   |
| QC value within limits for Mg 279.077 IEC Recovery = 97.60%            |          |              |         |             |         |         |
| Mn 257.610†  | -106.1   | -2.1927 ug/L | 0.10447 | -2.1927 ppb | 0.10447 | 4.76%   |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |          |              |         |             |         |         |
| Mo 202.031†  | -234.3   | -1.7428 ug/L | 0.58185 | -1.7428 ppb | 0.58185 | 33.39%  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |          |              |         |             |         |         |
| Na 589.592 Radial†   | 157.3    | 49.762 ug/L  | 11.3547 | 49.762 ppb  | 11.3547 | 22.82%  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |          |              |         |             |         |         |
| Ni 231.604†  | 81.1     | 2.7103 ug/L  | 0.18389 | 2.7103 ppb  | 0.18389 | 6.78%   |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |          |              |         |             |         |         |
| P 214.914†   | -23.4    | -38.892 ug/L | 4.3643  | -38.892 ppb | 4.3643  | 11.22%  |
| QC value within limits for P 214.914 Recovery = Not calculated         |          |              |         |             |         |         |
| Pb 220.353†  | -570.5   | -1.6048 ug/L | 0.81001 | -1.6048 ppb | 0.81001 | 50.47%  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |          |              |         |             |         |         |
| S 181.975 Axial†   | 11.7     | -71.850 ug/L | 8.6027  | -71.850 ppb | 8.6027  | 11.97%  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |          |              |         |             |         |         |
| Sb 206.836†  | 39.9     | -0.0547 ug/L | 4.47729 | -0.0547 ppb | 4.47729 | >999.9% |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |          |              |         |             |         |         |
| Se 196.026†  | -775.6   | -21.078 ug/L | 16.6432 | -21.078 ppb | 16.6432 | 78.96%  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |          |              |         |             |         |         |
| Si 251.611†  | -68.3    | -2.4067 ug/L | 1.26246 | -2.4067 ppb | 1.26246 | 52.46%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |          |              |         |             |         |         |
| Sn 189.927†  | -349.9   | -10.475 ug/L | 1.5720  | -10.475 ppb | 1.5720  | 15.01%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |          |              |         |             |         |         |
| Sr 421.552†  | 367.4    | 0.0385 ug/L  | 0.09312 | 0.0385 ppb  | 0.09312 | 241.85% |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |          |              |         |             |         |         |
| Ti 334.940†  | -14469.6 | -2.9814 ug/L | 0.55308 | -2.9814 ppb | 0.55308 | 18.55%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |          |              |         |             |         |         |
| Tl 190.801†  | -48.2    | -20.068 ug/L | 4.4385  | -20.068 ppb | 4.4385  | 22.12%  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |          |              |         |             |         |         |
| U 409.014†   | 1595.5   | 27.804 ug/L  | 3.6259  | 27.804 ppb  | 3.6259  | 13.04%  |
| QC value within limits for U 409.014 Recovery = Not calculated         |          |              |         |             |         |         |
| V 292.402†   | 2114.6   | 0.1578 ug/L  | 0.07502 | 0.1578 ppb  | 0.07502 | 47.52%  |
| QC value within limits for V 292.402 Recovery = Not calculated         |          |              |         |             |         |         |
| Zn 213.857†  | 2168.2   | 0.5837 ug/L  | 0.30008 | 0.5837 ppb  | 0.30008 | 51.41%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |          |              |         |             |         |         |
| SiO2†  | -93.2    | -7.2511 ug/L | 0.77369 | -7.2511 ppb | 0.77369 | 10.67%  |
| QC value within limits for SiO2 Recovery = Not calculated              |          |              |         |             |         |         |

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: ICSAB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 14  
 Date Collected: 3/10/2010 17:34:46  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: ICSAB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Conc. Units | Calib.<br>Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-------------|-----------------|-----------------------|------------------|
| 1     | Sc Radial          | 3096.4           | 3096.4                 | 96.6        | %               |                       | 17:36:58         |
| 1     | Y RADIAL           | 2547.9           | 2547.9                 | 96.97       | %               |                       | 17:36:58         |
| 1     | Al 396.153Radial†  | 232858.7         | 241052.1               | 521560      | ug/L            | 521560 ppb            | 17:36:38         |
| 1     | Ca 317.933Radial†  | 111212.6         | 115083.7               | 480840      | ug/L            | 480840 ppb            | 17:36:38         |
| 1     | Fe 238.204 Radial† | 6240.3           | 6448.7                 | 185620      | ug/L            | 185620 ppb            | 17:36:58         |
| 1     | K 766.490 Radial†  | 13507.0          | 11952.0                | 5675.5      | ug/L            | 5675.5 ppb            | 17:36:38         |
| 1     | Mg 279.077 IEC†    | 4636.1           | 4796.3                 | 496140      | ug/L            | 496140 ppb            | 17:36:58         |
| 1     | Na 589.592 Radial† | 15925.3          | 17214.0                | 5445.6      | ug/L            | 5445.6 ppb            | 17:36:38         |
| 1     | Sr 421.552†        | 51806.9          | 53581.3                | 512.40      | ug/L            | 512.40 ppb            | 17:36:38         |
| 1     | Sc 361.383         | 732866.6         | 732866.6               | 92.538      | %               |                       | 17:37:56         |
| 1     | Y 371.029          | 615168.1         | 615168.1               | 90.781      | %               |                       | 17:37:56         |
| 1     | Ag 328.068†        | 39199.0          | 42228.7                | 276.45      | ug/L            | 276.45 ppb            | 17:37:56         |
| 1     | As 188.979†        | 736.6            | 814.8                  | 523.82      | ug/L            | 523.82 ppb            | 17:38:16         |
| 1     | B 249.677†         | 17157.1          | 18917.9                | 519.10      | ug/L            | 519.10 ppb            | 17:37:56         |
| 1     | Ba 233.527†        | 46182.0          | 49906.4                | 500.93      | ug/L            | 500.93 ppb            | 17:37:56         |
| 1     | Be 313.107†        | 499478.2         | 543298.1               | 246.82      | ug/L            | 246.82 ppb            | 17:37:56         |
| 1     | Cd 226.502†        | 28959.1          | 31450.7                | 460.98      | ug/L            | 460.98 ppb            | 17:38:16         |
| 1     | Co 228.616†        | 15125.5          | 16391.1                | 449.66      | ug/L            | 449.66 ppb            | 17:38:16         |
| 1     | Cr 267.716†        | 32264.7          | 34813.7                | 486.07      | ug/L            | 486.07 ppb            | 17:37:56         |
| 1     | Cu 324.752†        | 156972.3         | 163418.6               | 561.45      | ug/L            | 561.45 ppb            | 17:37:56         |
| 1     | Mn 257.610†        | 322560.4         | 348172.8               | 479.59      | ug/L            | 479.59 ppb            | 17:37:56         |
| 1     | Mo 202.031†        | 4771.2           | 5143.0                 | 489.82      | ug/L            | 489.82 ppb            | 17:38:16         |
| 1     | Ni 231.604†        | 12560.7          | 13513.0                | 451.43      | ug/L            | 451.43 ppb            | 17:38:16         |
| 1     | P 214.914†         | 3090.8           | 3175.7                 | 2424.0      | ug/L            | 2424.0 ppb            | 17:38:16         |
| 1     | Pb 220.353†        | 1997.4           | 2202.1                 | 457.79      | ug/L            | 457.79 ppb            | 17:38:16         |
| 1     | S 181.975 Axial†   | 1339.2           | 1416.4                 | 2607.7      | ug/L            | 2607.7 ppb            | 17:38:16         |
| 1     | Sb 206.836†        | 1198.1           | 1272.0                 | 546.32      | ug/L            | 546.32 ppb            | 17:38:16         |
| 1     | Se 196.026†        | 2020.3           | 2203.9                 | 2544.0      | ug/L            | 2544.0 ppb            | 17:38:16         |
| 1     | Si 251.611†        | 126343.9         | 136056.2               | 5313.6      | ug/L            | 5313.6 ppb            | 17:37:56         |
| 1     | Sn 189.927†        | 1571.0           | 1689.9                 | 477.21      | ug/L            | 477.21 ppb            | 17:38:16         |
| 1     | Ti 334.940†        | 248557.0         | 269529.1               | 507.00      | ug/L            | 507.00 ppb            | 17:37:56         |
| 1     | Tl 190.801†        | 967.5            | 1071.5                 | 444.10      | ug/L            | 444.10 ppb            | 17:38:16         |
| 1     | U 409.014†         | 14762.1          | 17924.6                | 522.22      | ug/L            | 522.22 ppb            | 17:37:56         |
| 1     | V 292.402†         | 58440.2          | 64345.1                | 516.72      | ug/L            | 516.72 ppb            | 17:37:56         |
| 1     | Zn 213.857†        | 38863.3          | 41485.8                | 499.27      | ug/L            | 499.27 ppb            | 17:37:56         |
| 1     | SiO2†              | 123363.6         | 132836.7               | 11147       | ug/L            | 11147 ppb             | 17:39:12         |
| 2     | Sc Radial          | 3139.2           | 3139.2                 | 98.0        | %               |                       | 17:37:24         |
| 2     | Y RADIAL           | 2576.3           | 2576.3                 | 98.05       | %               |                       | 17:37:24         |
| 2     | Al 396.153Radial†  | 231641.3         | 236528.1               | 511770      | ug/L            | 511770 ppb            | 17:37:04         |
| 2     | Ca 317.933Radial†  | 110696.8         | 112990.0               | 472090      | ug/L            | 472090 ppb            | 17:37:04         |
| 2     | Fe 238.204 Radial† | 6311.9           | 6433.9                 | 185190      | ug/L            | 185190 ppb            | 17:37:24         |
| 2     | K 766.490 Radial†  | 13388.8          | 11641.0                | 5526.5      | ug/L            | 5526.5 ppb            | 17:37:04         |
| 2     | Mg 279.077 IEC†    | 4698.1           | 4794.3                 | 495930      | ug/L            | 495930 ppb            | 17:37:24         |
| 2     | Na 589.592 Radial† | 15806.5          | 16868.3                | 5336.2      | ug/L            | 5336.2 ppb            | 17:37:04         |
| 2     | Sr 421.552†        | 51283.0          | 52316.6                | 500.29      | ug/L            | 500.29 ppb            | 17:37:04         |
| 2     | Sc 361.383         | 725944.0         | 725944.0               | 91.664      | %               |                       | 17:38:21         |
| 2     | Y 371.029          | 608293.9         | 608293.9               | 89.766      | %               |                       | 17:38:21         |
| 2     | Ag 328.068†        | 38730.2          | 42121.2                | 275.87      | ug/L            | 275.87 ppb            | 17:38:21         |
| 2     | As 188.979†        | 743.9            | 830.4                  | 532.85      | ug/L            | 532.85 ppb            | 17:38:41         |
| 2     | B 249.677†         | 17014.7          | 18939.4                | 519.80      | ug/L            | 519.80 ppb            | 17:38:21         |
| 2     | Ba 233.527†        | 45711.2          | 49868.7                | 500.55      | ug/L            | 500.55 ppb            | 17:38:21         |
| 2     | Be 313.107†        | 494065.5         | 542540.3               | 246.48      | ug/L            | 246.48 ppb            | 17:38:21         |
| 2     | Cd 226.502†        | 28660.7          | 31423.6                | 460.61      | ug/L            | 460.61 ppb            | 17:38:41         |
| 2     | Co 228.616†        | 14927.3          | 16330.7                | 448.00      | ug/L            | 448.00 ppb            | 17:38:41         |
| 2     | Cr 267.716†        | 31984.9          | 34840.9                | 486.42      | ug/L            | 486.42 ppb            | 17:38:21         |
| 2     | Cu 324.752†        | 155390.4         | 163310.4               | 561.06      | ug/L            | 561.06 ppb            | 17:38:21         |
| 2     | Mn 257.610†        | 319883.1         | 348576.1               | 480.11      | ug/L            | 480.11 ppb            | 17:38:21         |
| 2     | Mo 202.031†        | 4730.3           | 5147.5                 | 490.10      | ug/L            | 490.10 ppb            | 17:38:41         |
| 2     | Ni 231.604†        | 12463.8          | 13536.7                | 452.23      | ug/L            | 452.23 ppb            | 17:38:41         |

|   |                    |          |          |             |            |          |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914†         | 3034.1   | 3145.8   | 2397.9 ug/L | 2397.9 ppb | 17:38:41 |
| 2 | Pb 220.353†        | 1986.7   | 2211.0   | 457.03 ug/L | 457.03 ppb | 17:38:41 |
| 2 | S 181.975 Axial†   | 1317.7   | 1406.7   | 2591.1 ug/L | 2591.1 ppb | 17:38:41 |
| 2 | Sb 206.836†        | 1169.6   | 1253.3   | 538.59 ug/L | 538.59 ppb | 17:38:41 |
| 2 | Se 196.026†        | 1990.3   | 2192.0   | 2529.9 ug/L | 2529.9 ppb | 17:38:41 |
| 2 | Si 251.611†        | 125375.0 | 136301.1 | 5323.2 ug/L | 5323.2 ppb | 17:38:21 |
| 2 | Sn 189.927†        | 1569.8   | 1704.8   | 479.22 ug/L | 479.22 ppb | 17:38:41 |
| 2 | Ti 334.940†        | 246867.5 | 270247.3 | 507.13 ug/L | 507.13 ppb | 17:38:21 |
| 2 | Tl 190.801†        | 962.6    | 1076.1   | 446.01 ug/L | 446.01 ppb | 17:38:41 |
| 2 | U 409.014†         | 14642.2  | 17945.9  | 522.91 ug/L | 522.91 ppb | 17:38:21 |
| 2 | V 292.402†         | 57890.8  | 64348.0  | 516.81 ug/L | 516.81 ppb | 17:38:21 |
| 2 | Zn 213.857†        | 38442.9  | 41427.7  | 498.59 ug/L | 498.59 ppb | 17:38:21 |
| 2 | SiO2†              | 123713.8 | 134489.9 | 11286 ug/L  | 11286 ppb  | 17:39:17 |
| 3 | Sc Radial          | 3102.5   | 3102.5   | 96.8 %      |            | 17:37:49 |
| 3 | Y RADIAL           | 2552.3   | 2552.3   | 97.14 %     |            | 17:37:49 |
| 3 | Al 396.153Radial†  | 233950.2 | 241707.9 | 522980 ug/L | 522980 ppb | 17:37:29 |
| 3 | Ca 317.933Radial†  | 111711.2 | 115373.4 | 482050 ug/L | 482050 ppb | 17:37:29 |
| 3 | Fe 238.204 Radial† | 6241.4   | 6437.2   | 185290 ug/L | 185290 ppb | 17:37:49 |
| 3 | K 766.490 Radial†  | 13450.5  | 11866.3  | 5633.2 ug/L | 5633.2 ppb | 17:37:29 |
| 3 | Mg 279.077 IEC†    | 4636.7   | 4787.5   | 495230 ug/L | 495230 ppb | 17:37:49 |
| 3 | Na 589.592 Radial† | 15909.7  | 17165.7  | 5430.3 ug/L | 5430.3 ppb | 17:37:29 |
| 3 | Sr 421.552†        | 51758.3  | 53426.3  | 510.90 ug/L | 510.90 ppb | 17:37:29 |
| 3 | Sc 361.383         | 725559.0 | 725559.0 | 91.615 %    |            | 17:38:47 |
| 3 | Y 371.029          | 608403.4 | 608403.4 | 89.783 %    |            | 17:38:47 |
| 3 | Ag 328.068†        | 38775.6  | 42193.2  | 276.14 ug/L | 276.14 ppb | 17:38:47 |
| 3 | As 188.979†        | 741.3    | 828.0    | 531.48 ug/L | 531.48 ppb | 17:39:07 |
| 3 | B 249.677†         | 17000.5  | 18933.7  | 519.61 ug/L | 519.61 ppb | 17:38:47 |
| 3 | Ba 233.527†        | 45654.5  | 49833.3  | 500.20 ug/L | 500.20 ppb | 17:38:47 |
| 3 | Be 313.107†        | 492926.4 | 541583.0 | 246.04 ug/L | 246.04 ppb | 17:38:47 |
| 3 | Cd 226.502†        | 28859.3  | 31656.9  | 464.16 ug/L | 464.16 ppb | 17:39:07 |
| 3 | Co 228.616†        | 15051.9  | 16475.4  | 451.99 ug/L | 451.99 ppb | 17:39:07 |
| 3 | Cr 267.716†        | 31912.3  | 34780.2  | 485.59 ug/L | 485.59 ppb | 17:38:47 |
| 3 | Cu 324.752†        | 155286.6 | 163287.1 | 560.99 ug/L | 560.99 ppb | 17:38:47 |
| 3 | Mn 257.610†        | 319088.0 | 347893.3 | 479.20 ug/L | 479.20 ppb | 17:38:47 |
| 3 | Mo 202.031†        | 4730.4   | 5150.3   | 490.48 ug/L | 490.48 ppb | 17:39:07 |
| 3 | Ni 231.604†        | 12511.7  | 13596.2  | 454.21 ug/L | 454.21 ppb | 17:39:07 |
| 3 | P 214.914†         | 3063.1   | 3179.2   | 2427.5 ug/L | 2427.5 ppb | 17:39:07 |
| 3 | Pb 220.353†        | 1992.8   | 2218.9   | 460.93 ug/L | 460.93 ppb | 17:39:07 |
| 3 | S 181.975 Axial†   | 1331.9   | 1423.0   | 2620.0 ug/L | 2620.0 ppb | 17:39:07 |
| 3 | Sb 206.836†        | 1194.5   | 1281.1   | 550.28 ug/L | 550.28 ppb | 17:39:07 |
| 3 | Se 196.026†        | 1995.2   | 2198.5   | 2538.8 ug/L | 2538.8 ppb | 17:39:07 |
| 3 | Si 251.611†        | 125099.4 | 136073.0 | 5314.2 ug/L | 5314.2 ppb | 17:38:47 |
| 3 | Sn 189.927†        | 1573.4   | 1709.6   | 482.14 ug/L | 482.14 ppb | 17:39:07 |
| 3 | Ti 334.940†        | 246209.8 | 269672.3 | 507.49 ug/L | 507.49 ppb | 17:38:47 |
| 3 | Tl 190.801†        | 961.8    | 1075.8   | 445.88 ug/L | 445.88 ppb | 17:39:07 |
| 3 | U 409.014†         | 14695.1  | 18012.1  | 524.92 ug/L | 524.92 ppb | 17:38:47 |
| 3 | V 292.402†         | 57762.8  | 64241.8  | 515.92 ug/L | 515.92 ppb | 17:38:47 |
| 3 | Zn 213.857†        | 38492.7  | 41504.4  | 499.54 ug/L | 499.54 ppb | 17:38:47 |
| 3 | SiO2†              | 125479.6 | 136488.9 | 11454 ug/L  | 11454 ppb  | 17:39:23 |

## Mean Data: ICSAB

| Analyte  | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383   | 728123.2                 | 91.939 %    |        | 0.5193   |                    |          | 0.56% |
| Sc Radial  | 3112.7                   | 97.1 %      |        | 0.72     |                    |          | 0.74% |
| Y 371.029  | 610621.8                 | 90.110 %    |        | 0.5811   |                    |          | 0.64% |
| Y RADIAL   | 2558.9                   | 97.39 %     |        | 0.582    |                    |          | 0.60% |
| Ag 328.068†  | 42181.0                  | 276.16 ug/L |        | 0.292    | 276.16 ppb         | 0.292    | 0.11% |
| QC value within limits for Ag 328.068 Recovery = 110.46%       |                          |             |        |          |                    |          |       |
| Al 396.153Radial†  | 239762.7                 | 518770 ug/L |        | 6102.6   | 518770 ppb         | 6102.6   | 1.18% |
| QC value within limits for Al 396.153Radial Recovery = 103.75% |                          |             |        |          |                    |          |       |
| As 188.979†  | 824.4                    | 529.38 ug/L |        | 4.867    | 529.38 ppb         | 4.867    | 0.92% |
| QC value within limits for As 188.979 Recovery = 105.88%       |                          |             |        |          |                    |          |       |
| B 249.677†   | 18930.3                  | 519.50 ug/L |        | 0.362    | 519.50 ppb         | 0.362    | 0.07% |
| QC value within limits for B 249.677 Recovery = 103.90%        |                          |             |        |          |                    |          |       |
| Ba 233.527†  | 49869.5                  | 500.56 ug/L |        | 0.368    | 500.56 ppb         | 0.368    | 0.07% |
| QC value within limits for Ba 233.527 Recovery = 100.11%       |                          |             |        |          |                    |          |       |
| Be 313.107†  | 542473.8                 | 246.45 ug/L |        | 0.389    | 246.45 ppb         | 0.389    | 0.16% |
| QC value within limits for Be 313.107 Recovery = 98.58%        |                          |             |        |          |                    |          |       |
| Ca 317.933Radial†  | 114482.4                 | 478330 ug/L |        | 5433.7   | 478330 ppb         | 5433.7   | 1.14% |

|   |                 |          |             |       |            |       |       |
|---|-----------------|----------|-------------|-------|------------|-------|-------|
| QC value within limits for Ca 317.933 Radial Recovery = 95.67%  |                 |          |             |       |            |       |       |
| Cd  | 226.502†        | 31510.4  | 461.92 ug/L | 1.953 | 461.92 ppb | 1.953 | 0.42% |
| QC value within limits for Cd 226.502 Recovery = 92.38%         |                 |          |             |       |            |       |       |
| Co  | 228.616†        | 16399.1  | 449.88 ug/L | 2.006 | 449.88 ppb | 2.006 | 0.45% |
| QC value within limits for Co 228.616 Recovery = 89.98%         |                 |          |             |       |            |       |       |
| Cr  | 267.716†        | 34811.6  | 486.03 ug/L | 0.417 | 486.03 ppb | 0.417 | 0.09% |
| QC value within limits for Cr 267.716 Recovery = 97.21%         |                 |          |             |       |            |       |       |
| Cu  | 324.752†        | 163338.7 | 561.17 ug/L | 0.249 | 561.17 ppb | 0.249 | 0.04% |
| QC value within limits for Cu 324.752 Recovery = 112.23%        |                 |          |             |       |            |       |       |
| Fe  | 238.204 Radial† | 6439.9   | 185370 ug/L | 223.2 | 185370 ppb | 223.2 | 0.12% |
| QC value within limits for Fe 238.204 Radial Recovery = 92.68%  |                 |          |             |       |            |       |       |
| K   | 766.490 Radial† | 11819.8  | 5611.7 ug/L | 76.78 | 5611.7 ppb | 76.78 | 1.37% |
| QC value within limits for K 766.490 Radial Recovery = 112.23%  |                 |          |             |       |            |       |       |
| Mg  | 279.077 IEC†    | 4792.7   | 495770 ug/L | 476.2 | 495770 ppb | 476.2 | 0.10% |
| QC value within limits for Mg 279.077 IEC Recovery = 99.15%     |                 |          |             |       |            |       |       |
| Mn  | 257.610†        | 348214.1 | 479.63 ug/L | 0.455 | 479.63 ppb | 0.455 | 0.09% |
| QC value within limits for Mn 257.610 Recovery = 95.93%         |                 |          |             |       |            |       |       |
| Mo  | 202.031†        | 5146.9   | 490.13 ug/L | 0.330 | 490.13 ppb | 0.330 | 0.07% |
| QC value within limits for Mo 202.031 Recovery = 98.03%         |                 |          |             |       |            |       |       |
| Na  | 589.592 Radial† | 17082.7  | 5404.0 ug/L | 59.22 | 5404.0 ppb | 59.22 | 1.10% |
| QC value within limits for Na 589.592 Radial Recovery = 108.08% |                 |          |             |       |            |       |       |
| Ni  | 231.604†        | 13548.7  | 452.62 ug/L | 1.432 | 452.62 ppb | 1.432 | 0.32% |
| QC value within limits for Ni 231.604 Recovery = 90.52%         |                 |          |             |       |            |       |       |
| P   | 214.914†        | 3166.9   | 2416.5 ug/L | 16.14 | 2416.5 ppb | 16.14 | 0.67% |
| QC value within limits for P 214.914 Recovery = 96.66%          |                 |          |             |       |            |       |       |
| Pb  | 220.353†        | 2210.7   | 458.58 ug/L | 2.066 | 458.58 ppb | 2.066 | 0.45% |
| QC value within limits for Pb 220.353 Recovery = 91.72%         |                 |          |             |       |            |       |       |
| S   | 181.975 Axial†  | 1415.4   | 2606.3 ug/L | 14.50 | 2606.3 ppb | 14.50 | 0.56% |
| QC value within limits for S 181.975 Axial Recovery = 104.25%   |                 |          |             |       |            |       |       |
| Sb  | 206.836†        | 1268.8   | 545.06 ug/L | 5.947 | 545.06 ppb | 5.947 | 1.09% |
| QC value within limits for Sb 206.836 Recovery = 109.01%        |                 |          |             |       |            |       |       |
| Se  | 196.026†        | 2198.1   | 2537.6 ug/L | 7.15  | 2537.6 ppb | 7.15  | 0.28% |
| QC value within limits for Se 196.026 Recovery = 101.50%        |                 |          |             |       |            |       |       |
| Si  | 251.611†        | 136143.4 | 5317.0 ug/L | 5.35  | 5317.0 ppb | 5.35  | 0.10% |
| QC value within limits for Si 251.611 Recovery = 106.34%        |                 |          |             |       |            |       |       |
| Sn  | 189.927†        | 1701.4   | 479.53 ug/L | 2.478 | 479.53 ppb | 2.478 | 0.52% |
| QC value within limits for Sn 189.927 Recovery = 95.91%         |                 |          |             |       |            |       |       |
| Sr  | 421.552†        | 53108.0  | 507.87 ug/L | 6.603 | 507.87 ppb | 6.603 | 1.30% |
| QC value within limits for Sr 421.552 Recovery = 101.57%        |                 |          |             |       |            |       |       |
| Ti  | 334.940†        | 269816.2 | 507.21 ug/L | 0.255 | 507.21 ppb | 0.255 | 0.05% |
| QC value within limits for Ti 334.940 Recovery = 101.44%        |                 |          |             |       |            |       |       |
| Tl  | 190.801†        | 1074.5   | 445.33 ug/L | 1.066 | 445.33 ppb | 1.066 | 0.24% |
| QC value within limits for Tl 190.801 Recovery = 89.07%         |                 |          |             |       |            |       |       |
| U   | 409.014†        | 17960.9  | 523.35 ug/L | 1.400 | 523.35 ppb | 1.400 | 0.27% |
| QC value within limits for U 409.014 Recovery = 104.67%         |                 |          |             |       |            |       |       |
| V   | 292.402†        | 64311.6  | 516.48 ug/L | 0.490 | 516.48 ppb | 0.490 | 0.09% |
| QC value within limits for V 292.402 Recovery = 103.30%         |                 |          |             |       |            |       |       |
| Zn  | 213.857†        | 41472.6  | 499.13 ug/L | 0.492 | 499.13 ppb | 0.492 | 0.10% |
| QC value within limits for Zn 213.857 Recovery = 99.83%         |                 |          |             |       |            |       |       |
| SiO2†   |                 | 134605.2 | 11296 ug/L  | 153.6 | 11296 ppb  | 153.6 | 1.36% |
| QC value within limits for SiO2 Recovery = 105.62%              |                 |          |             |       |            |       |       |

All analyte(s) passed QC.

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 3/10/2010 17:41:32  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: LR1

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3041.1        | 3041.1              | 94.9 %             |                    | 17:43:45      |
| 1     | Y RADIAL           | 2499.1        | 2499.1              | 95.11 %            |                    | 17:43:45      |
| 1     | Al 396.153Radial†  | 224027.1      | 236133.1            | 510940 ug/L        | 510940 ppb         | 17:43:25      |
| 1     | Ca 317.933Radial†  | 110852.3      | 116799.4            | 488010 ug/L        | 488010 ppb         | 17:43:25      |
| 1     | Fe 238.204 Radial† | 14344.5       | 15106.2             | 434790 ug/L        | 434790 ppb         | 17:43:45      |
| 1     | K 766.490 Radial†  | 2502.4        | 610.3               | -57.796 ug/L       | -57.796 ppb        | 17:43:25      |
| 1     | Mg 279.077 IEC†    | 4641.8        | 4889.7              | 505540 ug/L        | 505540 ppb         | 17:43:45      |
| 1     | Na 589.592 Radial† | 1481728.5     | 1562120.8           | 494170 ug/L        | 494170 ppb         | 17:43:25      |
| 1     | Sr 421.552†        | 1207.8        | 1238.1              | 8.2791 ug/L        | 8.2791 ppb         | 17:43:45      |
| 1     | Sc 361.383         | 708216.3      | 708216.3            | 89.425 %           |                    | 17:44:44      |
| 1     | Y 371.029          | 595223.0      | 595223.0            | 87.838 %           |                    | 17:44:44      |
| 1     | Ag 328.068†        | -20165.8      | -22681.8            | -4.6998 ug/L       | -4.6998 ppb        | 17:44:44      |
| 1     | As 188.979†        | -147.5        | -146.1              | 16.199 ug/L        | 16.199 ppb         | 17:45:04      |
| 1     | B 249.677†         | 1659.5        | 2233.0              | -5.6438 ug/L       | -5.6438 ppb        | 17:44:44      |
| 1     | Ba 233.527†        | -1269.1       | -1418.9             | -0.7581 ug/L       | -0.7581 ppb        | 17:45:04      |
| 1     | Be 313.107†        | -10014.5      | -7656.8             | -3.5144 ug/L       | -3.5144 ppb        | 17:44:44      |
| 1     | Cd 226.502†        | 2875.1        | 3371.3              | 9.4727 ug/L        | 9.4727 ppb         | 17:45:04      |
| 1     | Co 228.616†        | 193.6         | 262.3               | 0.8986 ug/L        | 0.8986 ppb         | 17:45:04      |
| 1     | Cr 267.716†        | -356.0        | -451.0              | 5.6794 ug/L        | 5.6794 ppb         | 17:45:04      |
| 1     | Cu 324.752†        | 1718.6        | -4290.1             | 0.1334 ug/L        | 0.1334 ppb         | 17:44:44      |
| 1     | Mn 257.610†        | -18812.7      | -21436.3            | -7.3944 ug/L       | -7.3944 ppb        | 17:44:44      |
| 1     | Mo 202.031†        | -421.6        | -484.5              | -4.6934 ug/L       | -4.6934 ppb        | 17:45:04      |
| 1     | Ni 231.604†        | 240.9         | 208.8               | 6.9739 ug/L        | 6.9739 ppb         | 17:45:04      |
| 1     | P 214.914†         | 464.6         | 355.2               | 64.359 ug/L        | 64.359 ppb         | 17:45:04      |
| 1     | Pb 220.353†        | -408.3        | -412.9              | -9.8189 ug/L       | -9.8189 ppb        | 17:45:04      |
| 1     | S 181.975 Axial†   | 62.5          | 39.1                | -21.020 ug/L       | -21.020 ppb        | 17:45:04      |
| 1     | Sb 206.836†        | 42.9          | 25.3                | -9.9411 ug/L       | -9.9411 ppb        | 17:45:04      |
| 1     | Se 196.026†        | -1749.3       | -1935.5             | -310.80 ug/L       | -310.80 ppb        | 17:45:04      |
| 1     | Si 251.611†        | -378.6        | -899.5              | -34.622 ug/L       | -34.622 ppb        | 17:45:04      |
| 1     | Sn 189.927†        | -336.4        | -383.9              | -29.694 ug/L       | -29.694 ppb        | 17:45:04      |
| 1     | Ti 334.940†        | -12120.4      | -12625.2            | -5.1736 ug/L       | -5.1736 ppb        | 17:44:44      |
| 1     | Tl 190.801†        | -106.8        | -93.4               | -38.854 ug/L       | -38.854 ppb        | 17:45:04      |
| 1     | U 409.014†         | 444449.2      | 498978.8            | 15107 ug/L         | 15107 ppb          | 17:44:44      |
| 1     | V 292.402†         | 2020.2        | 3451.4              | 3.1328 ug/L        | 3.1328 ppb         | 17:45:04      |
| 1     | Zn 213.857†        | 4727.1        | 4774.7              | -4.0148 ug/L       | -4.0148 ppb        | 17:45:04      |
| 1     | SiO2†              | -403.5        | -926.3              | -76.616 ug/L       | -76.616 ppb        | 17:46:01      |
| 2     | Sc Radial          | 3053.4        | 3053.4              | 95.3 %             |                    | 17:44:11      |
| 2     | Y RADIAL           | 2517.1        | 2517.1              | 95.80 %            |                    | 17:44:11      |
| 2     | Al 396.153Radial†  | 222609.1      | 233690.5            | 505650 ug/L        | 505650 ppb         | 17:43:51      |
| 2     | Ca 317.933Radial†  | 110426.4      | 115880.1            | 484170 ug/L        | 484170 ppb         | 17:43:51      |
| 2     | Fe 238.204 Radial† | 14367.5       | 15069.2             | 433720 ug/L        | 433720 ppb         | 17:44:11      |
| 2     | K 766.490 Radial†  | 2544.7        | 644.0               | -37.702 ug/L       | -37.702 ppb        | 17:43:51      |
| 2     | Mg 279.077 IEC†    | 4647.5        | 4875.8              | 504110 ug/L        | 504110 ppb         | 17:44:11      |
| 2     | Na 589.592 Radial† | 1469738.3     | 1543224.1           | 488190 ug/L        | 488190 ppb         | 17:43:51      |
| 2     | Sr 421.552†        | 1219.9        | 1245.7              | 8.3806 ug/L        | 8.3806 ppb         | 17:44:11      |
| 2     | Sc 361.383         | 711092.3      | 711092.3            | 89.788 %           |                    | 17:45:09      |
| 2     | Y 371.029          | 596632.2      | 596632.2            | 88.046 %           |                    | 17:45:09      |
| 2     | Ag 328.068†        | -20205.8      | -22635.1            | -4.7286 ug/L       | -4.7286 ppb        | 17:45:09      |
| 2     | As 188.979†        | -143.2        | -140.7              | 19.115 ug/L        | 19.115 ppb         | 17:45:30      |
| 2     | B 249.677†         | 1667.4        | 2234.3              | -5.4383 ug/L       | -5.4383 ppb        | 17:45:09      |
| 2     | Ba 233.527†        | -1289.6       | -1436.0             | -0.9587 ug/L       | -0.9587 ppb        | 17:45:30      |
| 2     | Be 313.107†        | -9932.6       | -7520.3             | -3.4529 ug/L       | -3.4529 ppb        | 17:45:09      |
| 2     | Cd 226.502†        | 2863.5        | 3345.5              | 9.1881 ug/L        | 9.1881 ppb         | 17:45:30      |
| 2     | Co 228.616†        | 225.4         | 296.9               | 1.8693 ug/L        | 1.8693 ppb         | 17:45:30      |
| 2     | Cr 267.716†        | -345.0        | -437.1              | 5.8260 ug/L        | 5.8260 ppb         | 17:45:30      |
| 2     | Cu 324.752†        | 1625.7        | -4401.4             | -0.2992 ug/L       | -0.2992 ppb        | 17:45:09      |
| 2     | Mn 257.610†        | -18851.1      | -21393.9            | -7.3822 ug/L       | -7.3822 ppb        | 17:45:09      |
| 2     | Mo 202.031†        | -415.5        | -475.8              | -4.0229 ug/L       | -4.0229 ppb        | 17:45:30      |
| 2     | Ni 231.604†        | 247.1         | 214.6               | 7.1670 ug/L        | 7.1670 ppb         | 17:45:30      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914†         | 464.6     | 353.1     | 62.326 ug/L  | 62.326 ppb  | 17:45:30 |
| 2 | Pb 220.353†        | -417.4    | -421.2    | -12.247 ug/L | -12.247 ppb | 17:45:30 |
| 2 | S 181.975 Axial†   | 51.8      | 26.9      | -43.459 ug/L | -43.459 ppb | 17:45:30 |
| 2 | Sb 206.836†        | 43.8      | 26.1      | -9.3659 ug/L | -9.3659 ppb | 17:45:30 |
| 2 | Se 196.026†        | -1747.8   | -1925.9   | -306.96 ug/L | -306.96 ppb | 17:45:30 |
| 2 | Si 251.611†        | -428.2    | -953.0    | -36.726 ug/L | -36.726 ppb | 17:45:30 |
| 2 | Sn 189.927†        | -324.2    | -368.9    | -26.727 ug/L | -26.727 ppb | 17:45:30 |
| 2 | Ti 334.940†        | -12214.0  | -12674.7  | -5.6606 ug/L | -5.6606 ppb | 17:45:09 |
| 2 | Tl 190.801†        | -87.3     | -71.3     | -29.733 ug/L | -29.733 ppb | 17:45:30 |
| 2 | U 409.014†         | 446273.0  | 498999.9  | 15107 ug/L   | 15107 ppb   | 17:45:09 |
| 2 | V 292.402†         | 2068.3    | 3495.7    | 3.6364 ug/L  | 3.6364 ppb  | 17:45:30 |
| 2 | Zn 213.857†        | 4783.5    | 4816.1    | -3.3264 ug/L | -3.3264 ppb | 17:45:30 |
| 2 | SiO2†              | -441.5    | -966.7    | -80.035 ug/L | -80.035 ppb | 17:46:06 |
| 3 | Sc Radial          | 3066.8    | 3066.8    | 95.7 %       |             | 17:44:37 |
| 3 | Y RADIAL           | 2531.8    | 2531.8    | 96.36 %      |             | 17:44:37 |
| 3 | Al 396.153Radial†  | 226013.2  | 236225.2  | 511140 ug/L  | 511140 ppb  | 17:44:17 |
| 3 | Ca 317.933Radial†  | 111898.3  | 116911.0  | 488480 ug/L  | 488480 ppb  | 17:44:17 |
| 3 | Fe 238.204 Radial† | 14430.4   | 15068.9   | 433710 ug/L  | 433710 ppb  | 17:44:37 |
| 3 | K 766.490 Radial†  | 2419.6    | 501.6     | -109.76 ug/L | -109.76 ppb | 17:44:17 |
| 3 | Mg 279.077 IEC†    | 4676.5    | 4884.8    | 505040 ug/L  | 505040 ppb  | 17:44:37 |
| 3 | Na 589.592 Radial† | 1484470.6 | 1551869.2 | 490930 ug/L  | 490930 ppb  | 17:44:17 |
| 3 | Sr 421.552†        | 1237.6    | 1258.5    | 8.4720 ug/L  | 8.4720 ppb  | 17:44:37 |
| 3 | Sc 361.383         | 711939.5  | 711939.5  | 89.895 %     |             | 17:45:35 |
| 3 | Y 371.029          | 597879.3  | 597879.3  | 88.230 %     |             | 17:45:35 |
| 3 | Ag 328.068†        | -20327.4  | -22743.6  | -5.3750 ug/L | -5.3750 ppb | 17:45:35 |
| 3 | As 188.979†        | -142.4    | -139.6    | 19.751 ug/L  | 19.751 ppb  | 17:45:55 |
| 3 | B 249.677†         | 1583.7    | 2138.9    | -8.2089 ug/L | -8.2089 ppb | 17:45:35 |
| 3 | Ba 233.527†        | -1263.0   | -1404.6   | -0.6509 ug/L | -0.6509 ppb | 17:45:55 |
| 3 | Be 313.107†        | -9913.4   | -7485.8   | -3.4380 ug/L | -3.4380 ppb | 17:45:35 |
| 3 | Cd 226.502†        | 2861.1    | 3338.9    | 9.0895 ug/L  | 9.0895 ppb  | 17:45:55 |
| 3 | Co 228.616†        | 201.4     | 269.9     | 1.1237 ug/L  | 1.1237 ppb  | 17:45:55 |
| 3 | Cr 267.716†        | -343.0    | -434.4    | 5.8593 ug/L  | 5.8593 ppb  | 17:45:55 |
| 3 | Cu 324.752†        | 1575.6    | -4459.2   | -0.4986 ug/L | -0.4986 ppb | 17:45:35 |
| 3 | Mn 257.610†        | -18646.4  | -21141.2  | -7.0716 ug/L | -7.0716 ppb | 17:45:35 |
| 3 | Mo 202.031†        | -424.8    | -485.6    | -4.8673 ug/L | -4.8673 ppb | 17:45:55 |
| 3 | Ni 231.604†        | 197.5     | 159.0     | 5.3119 ug/L  | 5.3119 ppb  | 17:45:55 |
| 3 | P 214.914†         | 455.6     | 342.5     | 55.176 ug/L  | 55.176 ppb  | 17:45:55 |
| 3 | Pb 220.353†        | -438.3    | -443.9    | -14.709 ug/L | -14.709 ppb | 17:45:55 |
| 3 | S 181.975 Axial†   | 66.7      | 43.4      | -12.958 ug/L | -12.958 ppb | 17:45:55 |
| 3 | Sb 206.836†        | 46.2      | 28.6      | -8.4944 ug/L | -8.4944 ppb | 17:45:55 |
| 3 | Se 196.026†        | -1733.8   | -1908.0   | -290.19 ug/L | -290.19 ppb | 17:45:55 |
| 3 | Si 251.611†        | -439.9    | -965.5    | -37.202 ug/L | -37.202 ppb | 17:45:55 |
| 3 | Sn 189.927†        | -337.1    | -382.8    | -29.291 ug/L | -29.291 ppb | 17:45:55 |
| 3 | Ti 334.940†        | -12392.4  | -12857.0  | -5.4887 ug/L | -5.4887 ppb | 17:45:35 |
| 3 | Tl 190.801†        | -96.0     | -80.8     | -33.658 ug/L | -33.658 ppb | 17:45:55 |
| 3 | U 409.014†         | 447003.3  | 499220.9  | 15114 ug/L   | 15114 ppb   | 17:45:35 |
| 3 | V 292.402†         | 1951.7    | 3363.3    | 2.5709 ug/L  | 2.5709 ppb  | 17:45:55 |
| 3 | Zn 213.857†        | 4741.1    | 4762.7    | -3.9963 ug/L | -3.9963 ppb | 17:45:55 |
| 3 | SiO2†              | -438.3    | -962.6    | -79.667 ug/L | -79.667 ppb | 17:46:11 |

## Mean Data: LR1

| Analyte  | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD     |
|--|--------------------------|--------------|--------|----------|-------------|----------|---------|
| Sc 361.383   | 710416.0                 | 89.703 %     |        | 0.2464   |             |          | 0.27%   |
| Sc Radial  | 3053.8                   | 95.3 %       |        | 0.40     |             |          | 0.42%   |
| Y 371.029  | 596578.1                 | 88.038 %     |        | 0.1961   |             |          | 0.22%   |
| Y RADIAL   | 2516.0                   | 95.76 %      |        | 0.622    |             |          | 0.65%   |
| Ag 328.068†  | -22686.8                 | -4.9345 ug/L |        | 0.38180  | -4.9345 ppb | 0.38180  | 7.74%   |
| Al 396.153Radial†  | 235349.6                 | 509240 ug/L  |        | 3110.6   | 509240 ppb  | 3110.6   | 0.61%   |
| QC value within limits for Al 396.153Radial Recovery = 101.85% |                          |              |        |          |             |          |         |
| As 188.979†  | -142.1                   | 18.355 ug/L  |        | 1.8936   | 18.355 ppb  | 1.8936   | 10.32%  |
| B 249.677†   | 2202.1                   | -6.4304 ug/L |        | 1.54371  | -6.4304 ppb | 1.54371  | 24.01%  |
| Ba 233.527†  | -1419.8                  | -0.7892 ug/L |        | 0.15623  | -0.7892 ppb | 0.15623  | 19.80%  |
| Be 313.107†  | -7554.3                  | -3.4685 ug/L |        | 0.04050  | -3.4685 ppb | 0.04050  | 1.17%   |
| Ca 317.933Radial†  | 116530.2                 | 486880 ug/L  |        | 2363.7   | 486880 ppb  | 2363.7   | 0.49%   |
| QC value within limits for Ca 317.933Radial Recovery = 97.38%  |                          |              |        |          |             |          |         |
| Cd 226.502†  | 3351.9                   | 9.2501 ug/L  |        | 0.19899  | 9.2501 ppb  | 0.19899  | 2.15%   |
| Co 228.616†  | 276.4                    | 1.2972 ug/L  |        | 0.50809  | 1.2972 ppb  | 0.50809  | 39.17%  |
| Cr 267.716†  | -440.8                   | 5.7883 ug/L  |        | 0.09573  | 5.7883 ppb  | 0.09573  | 1.65%   |
| Cu 324.752†  | -4383.6                  | -0.2214 ug/L |        | 0.32311  | -0.2214 ppb | 0.32311  | 145.91% |

|  |           |              |         |             |         |        |
|--|-----------|--------------|---------|-------------|---------|--------|
| Fe 238.204 Radial†   | 15081.5   | 434070 ug/L  | 617.2   | 434070 ppb  | 617.2   | 0.14%  |
| QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.81% |           |              |         |             |         |        |
| K 766.490 Radial†  | 585.3     | -68.421 ug/L | 37.1873 | -68.421 ppb | 37.1873 | 54.35% |
| Mg 279.077 IEC†  | 4883.4    | 504900 ug/L  | 728.2   | 504900 ppb  | 728.2   | 0.14%  |
| QC value within limits for Mg 279.077 IEC Recovery = 100.98%               |           |              |         |             |         |        |
| Mn 257.610†  | -21323.8  | -7.2827 ug/L | 0.18293 | -7.2827 ppb | 0.18293 | 2.51%  |
| Mo 202.031†  | -482.0    | -4.5278 ug/L | 0.44586 | -4.5278 ppb | 0.44586 | 9.85%  |
| Na 589.592 Radial†   | 1552404.7 | 491100 ug/L  | 2992.6  | 491100 ppb  | 2992.6  | 0.61%  |
| QC value within limits for Na 589.592 Radial Recovery = 98.22%             |           |              |         |             |         |        |
| Ni 231.604†  | 194.1     | 6.4843 ug/L  | 1.01989 | 6.4843 ppb  | 1.01989 | 15.73% |
| P 214.914†   | 350.3     | 60.620 ug/L  | 4.8232  | 60.620 ppb  | 4.8232  | 7.96%  |
| Pb 220.353†  | -426.0    | -12.258 ug/L | 2.4449  | -12.258 ppb | 2.4449  | 19.95% |
| S 181.975 Axial†   | 36.5      | -25.812 ug/L | 15.8050 | -25.812 ppb | 15.8050 | 61.23% |
| Sb 206.836†  | 26.6      | -9.2671 ug/L | 0.72835 | -9.2671 ppb | 0.72835 | 7.86%  |
| Se 196.026†  | -1923.1   | -302.65 ug/L | 10.961  | -302.65 ppb | 10.961  | 3.62%  |
| Si 251.611†  | -939.3    | -36.183 ug/L | 1.3728  | -36.183 ppb | 1.3728  | 3.79%  |
| Sn 189.927†  | -378.5    | -28.571 ug/L | 1.6091  | -28.571 ppb | 1.6091  | 5.63%  |
| Sr 421.552†  | 1247.4    | 8.3772 ug/L  | 0.09653 | 8.3772 ppb  | 0.09653 | 1.15%  |
| Ti 334.940†  | -12719.0  | -5.4410 ug/L | 0.24699 | -5.4410 ppb | 0.24699 | 4.54%  |
| Tl 190.801†  | -81.8     | -34.082 ug/L | 4.5751  | -34.082 ppb | 4.5751  | 13.42% |
| U 409.014†   | 499066.5  | 15109 ug/L   | 4.1     | 15109 ppb   | 4.1     | 0.03%  |
| QC value within limits for U 409.014 Recovery = 100.73%                    |           |              |         |             |         |        |
| V 292.402†   | 3436.8    | 3.1134 ug/L  | 0.53298 | 3.1134 ppb  | 0.53298 | 17.12% |
| Zn 213.857†  | 4784.5    | -3.7792 ug/L | 0.39222 | -3.7792 ppb | 0.39222 | 10.38% |
| SiO2†  | -951.9    | -78.773 ug/L | 1.8767  | -78.773 ppb | 1.8767  | 2.38%  |

QC Failed. Continue with analysis.



Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/10/2010 17:48:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR2

| Rep# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1    | Sc Radial          | 3310.9        | 3310.9              | 103 %              |                    | 17:50:39      |
| 1    | Y RADIAL           | 2699.3        | 2699.3              | 102.7 %            |                    | 17:50:39      |
| 1    | Al 396.153Radial†  | 156.1         | 213.1               | -15.569 ug/L       | -15.569 ppb        | 17:50:39      |
| 1    | Ca 317.933Radial†  | 22.4          | 9.2                 | 38.554 ug/L        | 38.554 ppb         | 17:50:39      |
| 1    | Fe 238.204 Radial† | -2.5          | -11.9               | -55.942 ug/L       | -55.942 ppb        | 17:50:39      |
| 1    | K 766.490 Radial†  | 663136.4      | 639804.6            | 312560 ug/L        | 312560 ppb         | 17:50:14      |
| 1    | Mg 279.077 IEC†    | -0.1          | -1.8                | -84.716 ug/L       | -84.716 ppb        | 17:50:39      |
| 1    | Na 589.592 Radial† | 149.4         | 877.2               | 277.51 ug/L        | 277.51 ppb         | 17:50:19      |
| 1    | Sr 421.552†        | 1022669.2     | 989778.4            | 9531.7 ug/L        | 9531.7 ppb         | 17:50:14      |
| 1    | Sc 361.383         | 822561.3      | 822561.3            | 103.86 %           |                    | 17:51:56      |
| 1    | Y 371.029          | 688529.6      | 688529.6            | 101.61 %           |                    | 17:51:56      |
| 1    | Ag 328.068†        | -7003.2       | -6874.0             | 4.6347 ug/L        | 4.6347 ppb         | 17:52:01      |
| 1    | As 188.979†        | 17589.7       | 16954.3             | 9993.2 ug/L        | 9993.2 ppb         | 17:52:01      |
| 1    | B 249.677†         | 177345.1      | 171125.7            | 4952.5 ug/L        | 4952.5 ppb         | 17:52:01      |
| 1    | Ba 233.527†        | 1195987.2     | 1151501.3           | 11423 ug/L         | 11423 ppb          | 17:51:56      |
| 1    | Be 313.107†        | 6659337.7     | 6415177.3           | 2924.0 ug/L        | 2924.0 ppb         | 17:51:50      |
| 1    | Cd 226.502†        | 672614.7      | 647752.2            | 9887.3 ug/L        | 9887.3 ppb         | 17:51:56      |
| 1    | Co 228.616†        | 361925.0      | 348508.6            | 9612.1 ug/L        | 9612.1 ppb         | 17:52:01      |
| 1    | Cr 267.716†        | 1856190.1     | 1787094.0           | 24548 ug/L         | 24548 ppb          | 17:51:56      |
| 1    | Cu 324.752†        | 6263520.2     | 6024328.8           | 20346 ug/L         | 20346 ppb          | 17:51:50      |
| 1    | Mn 257.610†        | 7138500.6     | 6872576.4           | 9505.2 ug/L        | 9505.2 ppb         | 17:51:50      |
| 1    | Mo 202.031†        | 111780.8      | 107610.0            | 9827.7 ug/L        | 9827.7 ppb         | 17:52:01      |
| 1    | Ni 231.604†        | 306253.7      | 294801.6            | 9848.7 ug/L        | 9848.7 ppb         | 17:52:01      |
| 1    | P 214.914†         | 24141.2       | 23078.9             | 14581 ug/L         | 14581 ppb          | 17:52:01      |
| 1    | Pb 220.353†        | 151215.4      | 145634.4            | 23902 ug/L         | 23902 ppb          | 17:52:01      |
| 1    | S 181.975 Axial†   | 27940.1       | 26870.0             | 51325 ug/L         | 51325 ppb          | 17:52:01      |
| 1    | Sb 206.836†        | 25183.3       | 24223.8             | 10768 ug/L         | 10768 ppb          | 17:52:01      |
| 1    | Se 196.026†        | 12305.9       | 11868.9             | 10174 ug/L         | 10174 ppb          | 17:52:01      |
| 1    | Si 251.611†        | 1273608.9     | 1225759.4           | 47802 ug/L         | 47802 ppb          | 17:51:56      |
| 1    | Sn 189.927†        | 44509.3       | 42845.9             | 10204 ug/L         | 10204 ppb          | 17:52:01      |
| 1    | Ti 334.940†        | 5743744.8     | 5531027.5           | 9912.2 ug/L        | 9912.2 ppb         | 17:51:50      |
| 1    | Tl 190.801†        | 24460.5       | 23576.6             | 9764.9 ug/L        | 9764.9 ppb         | 17:52:01      |
| 1    | U 409.014†         | -883.8        | 1121.2              | -20.808 ug/L       | -20.808 ppb        | 17:52:01      |
| 1    | V 292.402†         | 1290832.5     | 1244010.7           | 10312 ug/L         | 10312 ppb          | 17:51:56      |
| 1    | Zn 213.857†        | 1160803.2     | 1117114.3           | 14200 ug/L         | 14200 ppb          | 17:51:56      |
| 1    | SiO2†              | 1263382.0     | 1215913.9           | 101890 ug/L        | 101890 ppb         | 17:52:46      |
| 2    | Sc Radial          | 3346.6        | 3346.6              | 104 %              |                    | 17:51:09      |
| 2    | Y RADIAL           | 2710.1        | 2710.1              | 103.1 %            |                    | 17:51:09      |
| 2    | Al 396.153Radial†  | 165.9         | 220.8               | 6.7442 ug/L        | 6.7442 ppb         | 17:51:09      |
| 2    | Ca 317.933Radial†  | 18.4          | 5.1                 | 21.475 ug/L        | 21.475 ppb         | 17:51:09      |
| 2    | Fe 238.204 Radial† | -1.4          | -10.8               | -25.603 ug/L       | -25.603 ppb        | 17:51:09      |
| 2    | K 766.490 Radial†  | 671314.2      | 640798.6            | 313050 ug/L        | 313050 ppb         | 17:50:44      |
| 2    | Mg 279.077 IEC†    | -0.6          | -2.3                | -138.31 ug/L       | -138.31 ppb        | 17:51:09      |
| 2    | Na 589.592 Radial† | 105.4         | 833.6               | 263.69 ug/L        | 263.69 ppb         | 17:50:49      |
| 2    | Sr 421.552†        | 1037954.7     | 993871.8            | 9571.1 ug/L        | 9571.1 ppb         | 17:50:44      |
| 2    | Sc 361.383         | 829293.5      | 829293.5            | 104.71 %           |                    | 17:52:15      |
| 2    | Y 371.029          | 694151.1      | 694151.1            | 102.44 %           |                    | 17:52:15      |
| 2    | Ag 328.068†        | -7055.0       | -6868.8             | 4.5074 ug/L        | 4.5074 ppb         | 17:52:20      |
| 2    | As 188.979†        | 17560.5       | 16788.9             | 9896.0 ug/L        | 9896.0 ppb         | 17:52:20      |
| 2    | B 249.677†         | 176767.2      | 169187.8            | 4896.4 ug/L        | 4896.4 ppb         | 17:52:20      |
| 2    | Ba 233.527†        | 1196895.8     | 1143021.1           | 11339 ug/L         | 11339 ppb          | 17:52:15      |
| 2    | Be 313.107†        | 6643461.6     | 6347966.2           | 2893.4 ug/L        | 2893.4 ppb         | 17:52:09      |
| 2    | Cd 226.502†        | 673207.0      | 643060.6            | 9815.7 ug/L        | 9815.7 ppb         | 17:52:15      |
| 2    | Co 228.616†        | 361763.7      | 345525.8            | 9529.7 ug/L        | 9529.7 ppb         | 17:52:20      |
| 2    | Cr 267.716†        | 1860907.2     | 1777090.7           | 24410 ug/L         | 24410 ppb          | 17:52:15      |
| 2    | Cu 324.752†        | 6264173.8     | 5975997.1           | 20183 ug/L         | 20183 ppb          | 17:52:09      |
| 2    | Mn 257.610†        | 7136298.7     | 6814678.8           | 9425.2 ug/L        | 9425.2 ppb         | 17:52:09      |
| 2    | Mo 202.031†        | 111392.5      | 106365.4            | 9714.0 ug/L        | 9714.0 ppb         | 17:52:20      |
| 2    | Ni 231.604†        | 305911.8      | 292081.4            | 9757.8 ug/L        | 9757.8 ppb         | 17:52:20      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914†         | 24129.9   | 22879.4   | 14453 ug/L   | 14453 ppb   | 17:52:20 |
| 2 | Pb 220.353†        | 151092.9  | 144335.5  | 23689 ug/L   | 23689 ppb   | 17:52:20 |
| 2 | S 181.975 Axial†   | 27816.7   | 26533.8   | 50683 ug/L   | 50683 ppb   | 17:52:20 |
| 2 | Sb 206.836†        | 25076.0   | 23924.5   | 10636 ug/L   | 10636 ppb   | 17:52:20 |
| 2 | Se 196.026†        | 12249.0   | 11718.3   | 10045 ug/L   | 10045 ppb   | 17:52:20 |
| 2 | Si 251.611†        | 1280745.2 | 1222619.8 | 47681 ug/L   | 47681 ppb   | 17:52:15 |
| 2 | Sn 189.927†        | 44493.9   | 42483.3   | 10117 ug/L   | 10117 ppb   | 17:52:20 |
| 2 | Ti 334.940†        | 5747870.5 | 5490074.2 | 9838.8 ug/L  | 9838.8 ppb  | 17:52:09 |
| 2 | Tl 190.801†        | 24503.4   | 23426.4   | 9702.5 ug/L  | 9702.5 ppb  | 17:52:20 |
| 2 | U 409.014†         | -614.6    | 1385.1    | -12.486 ug/L | -12.486 ppb | 17:52:20 |
| 2 | V 292.402†         | 1296375.1 | 1239214.6 | 10271 ug/L   | 10271 ppb   | 17:52:15 |
| 2 | Zn 213.857†        | 1162813.1 | 1109960.8 | 14109 ug/L   | 14109 ppb   | 17:52:15 |
| 2 | SiO2†              | 1280815.6 | 1222688.2 | 102460 ug/L  | 102460 ppb  | 17:52:52 |
| 3 | Sc Radial          | 3342.7    | 3342.7    | 104 %        |             | 17:51:40 |
| 3 | Y RADIAL           | 2709.8    | 2709.8    | 103.1 %      |             | 17:51:40 |
| 3 | Al 396.153Radial†  | 158.2     | 213.7     | -10.572 ug/L | -10.572 ppb | 17:51:40 |
| 3 | Ca 317.933Radial†  | 17.8      | 4.6       | 19.339 ug/L  | 19.339 ppb  | 17:51:40 |
| 3 | Fe 238.204 Radial† | -0.8      | -10.2     | -7.9875 ug/L | -7.9875 ppb | 17:51:40 |
| 3 | K 766.490 Radial†  | 670775.3  | 641035.0  | 313160 ug/L  | 313160 ppb  | 17:51:15 |
| 3 | Mg 279.077 IEC†    | -0.7      | -2.4      | -143.24 ug/L | -143.24 ppb | 17:51:40 |
| 3 | Na 589.592 Radial† | -10.4     | 722.6     | 228.61 ug/L  | 228.61 ppb  | 17:51:20 |
| 3 | Sr 421.552†        | 1035317.5 | 992507.9  | 9558.0 ug/L  | 9558.0 ppb  | 17:51:15 |
| 3 | Sc 361.383         | 833102.2  | 833102.2  | 105.19 %     |             | 17:52:35 |
| 3 | Y 371.029          | 697383.7  | 697383.7  | 102.91 %     |             | 17:52:35 |
| 3 | Ag 328.068†        | -6999.7   | -6785.4   | 4.8083 ug/L  | 4.8083 ppb  | 17:52:40 |
| 3 | As 188.979†        | 17712.5   | 16856.7   | 9935.3 ug/L  | 9935.3 ppb  | 17:52:40 |
| 3 | B 249.677†         | 178852.2  | 170398.1  | 4931.6 ug/L  | 4931.6 ppb  | 17:52:40 |
| 3 | Ba 233.527†        | 1198334.4 | 1139163.1 | 11301 ug/L   | 11301 ppb   | 17:52:35 |
| 3 | Be 313.107†        | 6648023.9 | 6323298.2 | 2882.2 ug/L  | 2882.2 ppb  | 17:52:29 |
| 3 | Cd 226.502†        | 672850.2  | 639782.4  | 9765.7 ug/L  | 9765.7 ppb  | 17:52:35 |
| 3 | Co 228.616†        | 364065.8  | 346134.8  | 9546.7 ug/L  | 9546.7 ppb  | 17:52:40 |
| 3 | Cr 267.716†        | 1859800.7 | 1767914.2 | 24284 ug/L   | 24284 ppb   | 17:52:35 |
| 3 | Cu 324.752†        | 6290536.1 | 5973708.7 | 20175 ug/L   | 20175 ppb   | 17:52:29 |
| 3 | Mn 257.610†        | 7135665.3 | 6782920.0 | 9381.2 ug/L  | 9381.2 ppb  | 17:52:29 |
| 3 | Mo 202.031†        | 112338.5  | 106778.4  | 9751.8 ug/L  | 9751.8 ppb  | 17:52:40 |
| 3 | Ni 231.604†        | 308014.4  | 292744.6  | 9780.0 ug/L  | 9780.0 ppb  | 17:52:40 |
| 3 | P 214.914†         | 24237.9   | 22876.8   | 14452 ug/L   | 14452 ppb   | 17:52:40 |
| 3 | Pb 220.353†        | 152104.9  | 144637.9  | 23738 ug/L   | 23738 ppb   | 17:52:40 |
| 3 | S 181.975 Axial†   | 28125.7   | 26706.1   | 51012 ug/L   | 51012 ppb   | 17:52:40 |
| 3 | Sb 206.836†        | 25258.7   | 23988.7   | 10664 ug/L   | 10664 ppb   | 17:52:40 |
| 3 | Se 196.026†        | 12377.5   | 11787.1   | 10104 ug/L   | 10104 ppb   | 17:52:40 |
| 3 | Si 251.611†        | 1282768.0 | 1218951.1 | 47537 ug/L   | 47537 ppb   | 17:52:35 |
| 3 | Sn 189.927†        | 44681.5   | 42467.4   | 10113 ug/L   | 10113 ppb   | 17:52:40 |
| 3 | Ti 334.940†        | 5757137.2 | 5473788.5 | 9809.6 ug/L  | 9809.6 ppb  | 17:52:29 |
| 3 | Tl 190.801†        | 24657.0   | 23465.4   | 9718.1 ug/L  | 9718.1 ppb  | 17:52:40 |
| 3 | U 409.014†         | -650.3    | 1353.9    | -13.157 ug/L | -13.157 ppb | 17:52:40 |
| 3 | V 292.402†         | 1297654.6 | 1234771.0 | 10235 ug/L   | 10235 ppb   | 17:52:35 |
| 3 | Zn 213.857†        | 1161863.2 | 1103981.1 | 14032 ug/L   | 14032 ppb   | 17:52:35 |
| 3 | SiO2†              | 1279027.0 | 1215395.9 | 101840 ug/L  | 101840 ppb  | 17:52:58 |

## Mean Data: LR2

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 828319.0                 | 104.59 %           | 0.674    |                    |          | 0.64%   |
| Sc Radial   | 3333.4                   | 104 %              | 0.6      |                    |          | 0.59%   |
| Y 371.029   | 693354.8                 | 102.32 %           | 0.661    |                    |          | 0.65%   |
| Y RADIAL  | 2706.4                   | 103.0 %            | 0.24     |                    |          | 0.23%   |
| Ag 328.068†   | -6842.8                  | 4.6501 ug/L        | 0.15105  | 4.6501 ppb         | 0.15105  | 3.25%   |
| Al 396.153Radial†   | 215.9                    | -6.4656 ug/L       | 11.70960 | -6.4656 ppb        | 11.70960 | 181.11% |
| As 188.979†   | 16866.6                  | 9941.5 ug/L        | 48.89    | 9941.5 ppb         | 48.89    | 0.49%   |
| QC value within limits for As 188.979 Recovery = 99.41%             |                          |                    |          |                    |          |         |
| B 249.677†  | 170237.2                 | 4926.8 ug/L        | 28.38    | 4926.8 ppb         | 28.38    | 0.58%   |
| QC value within limits for B 249.677 Recovery = 98.54%              |                          |                    |          |                    |          |         |
| Ba 233.527†   | 1144561.8                | 11355 ug/L         | 62.6     | 11355 ppb          | 62.6     | 0.55%   |
| QC value less than the lower limit for Ba 233.527 Recovery = 75.70% |                          |                    |          |                    |          |         |
| Be 313.107†   | 6362147.3                | 2899.9 ug/L        | 21.63    | 2899.9 ppb         | 21.63    | 0.75%   |
| QC value within limits for Be 313.107 Recovery = 96.66%             |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 6.3                      | 26.456 ug/L        | 10.5318  | 26.456 ppb         | 10.5318  | 39.81%  |
| Cd 226.502†   | 643531.7                 | 9822.9 ug/L        | 61.13    | 9822.9 ppb         | 61.13    | 0.62%   |
| QC value within limits for Cd 226.502 Recovery = 98.23%             |                          |                    |          |                    |          |         |

|  |           |              |         |             |         |        |
|--|-----------|--------------|---------|-------------|---------|--------|
| Co 228.616†  | 346723.1  | 9562.9 ug/L  | 43.50   | 9562.9 ppb  | 43.50   | 0.45%  |
| QC value within limits for Co 228.616 Recovery = 95.63%        |           |              |         |             |         |        |
| Cr 267.716†  | 1777366.3 | 24414 ug/L   | 131.7   | 24414 ppb   | 131.7   | 0.54%  |
| QC value within limits for Cr 267.716 Recovery = 97.66%        |           |              |         |             |         |        |
| Cu 324.752†  | 5991344.9 | 20235 ug/L   | 96.6    | 20235 ppb   | 96.6    | 0.48%  |
| QC value within limits for Cu 324.752 Recovery = 101.18%       |           |              |         |             |         |        |
| Fe 238.204 Radial†   | -11.0     | -29.844 ug/L | 24.2570 | -29.844 ppb | 24.2570 | 81.28% |
| K 766.490 Radial†  | 640546.1  | 312920 ug/L  | 319.1   | 312920 ppb  | 319.1   | 0.10%  |
| QC value within limits for K 766.490 Radial Recovery = 104.31% |           |              |         |             |         |        |
| Mg 279.077 IEC†  | -2.2      | -122.09 ug/L | 32.458  | -122.09 ppb | 32.458  | 26.59% |
| Mn 257.610†  | 6823391.7 | 9437.2 ug/L  | 62.87   | 9437.2 ppb  | 62.87   | 0.67%  |
| QC value within limits for Mn 257.610 Recovery = 94.37%        |           |              |         |             |         |        |
| Mo 202.031†  | 106917.9  | 9764.5 ug/L  | 57.89   | 9764.5 ppb  | 57.89   | 0.59%  |
| QC value within limits for Mo 202.031 Recovery = 97.64%        |           |              |         |             |         |        |
| Na 589.592 Radial†   | 811.1     | 256.60 ug/L  | 25.213  | 256.60 ppb  | 25.213  | 9.83%  |
| Ni 231.604†  | 293209.2  | 9795.5 ug/L  | 47.39   | 9795.5 ppb  | 47.39   | 0.48%  |
| QC value within limits for Ni 231.604 Recovery = 97.95%        |           |              |         |             |         |        |
| P 214.914†   | 22945.0   | 14495 ug/L   | 74.4    | 14495 ppb   | 74.4    | 0.51%  |
| QC value within limits for P 214.914 Recovery = 96.63%         |           |              |         |             |         |        |
| Pb 220.353†  | 144869.3  | 23776 ug/L   | 111.6   | 23776 ppb   | 111.6   | 0.47%  |
| QC value within limits for Pb 220.353 Recovery = 95.10%        |           |              |         |             |         |        |
| S 181.975 Axial†   | 26703.3   | 51006 ug/L   | 321.1   | 51006 ppb   | 321.1   | 0.63%  |
| QC value within limits for S 181.975 Axial Recovery = 102.01%  |           |              |         |             |         |        |
| Sb 206.836†  | 24045.7   | 10689 ug/L   | 69.6    | 10689 ppb   | 69.6    | 0.65%  |
| QC value within limits for Sb 206.836 Recovery = 106.89%       |           |              |         |             |         |        |
| Se 196.026†  | 11791.4   | 10107 ug/L   | 64.5    | 10107 ppb   | 64.5    | 0.64%  |
| QC value within limits for Se 196.026 Recovery = 101.07%       |           |              |         |             |         |        |
| Si 251.611†  | 1222443.4 | 47673 ug/L   | 132.8   | 47673 ppb   | 132.8   | 0.28%  |
| QC value within limits for Si 251.611 Recovery = 95.35%        |           |              |         |             |         |        |
| Sn 189.927†  | 42598.9   | 10145 ug/L   | 51.0    | 10145 ppb   | 51.0    | 0.50%  |
| QC value within limits for Sn 189.927 Recovery = 101.45%       |           |              |         |             |         |        |
| Sr 421.552†  | 992052.7  | 9553.6 ug/L  | 20.07   | 9553.6 ppb  | 20.07   | 0.21%  |
| QC value within limits for Sr 421.552 Recovery = 95.54%        |           |              |         |             |         |        |
| Ti 334.940†  | 5498296.7 | 9853.5 ug/L  | 52.85   | 9853.5 ppb  | 52.85   | 0.54%  |
| QC value within limits for Ti 334.940 Recovery = 98.54%        |           |              |         |             |         |        |
| Tl 190.801†  | 23489.5   | 9728.5 ug/L  | 32.45   | 9728.5 ppb  | 32.45   | 0.33%  |
| QC value within limits for Tl 190.801 Recovery = 97.29%        |           |              |         |             |         |        |
| U 409.014†   | 1286.7    | -15.484 ug/L | 4.6231  | -15.484 ppb | 4.6231  | 29.86% |
| V 292.402†   | 1239332.1 | 10272 ug/L   | 38.3    | 10272 ppb   | 38.3    | 0.37%  |
| QC value within limits for V 292.402 Recovery = 102.72%        |           |              |         |             |         |        |
| Zn 213.857†  | 1110352.1 | 14114 ug/L   | 83.8    | 14114 ppb   | 83.8    | 0.59%  |
| QC value within limits for Zn 213.857 Recovery = 94.09%        |           |              |         |             |         |        |
| SiO2†  | 1217999.3 | 102060 ug/L  | 343.0   | 102060 ppb  | 343.0   | 0.34%  |
| QC value within limits for SiO2 Recovery = 95.39%              |           |              |         |             |         |        |
| QC Failed. Continue with analysis.                             |           |              |         |             |         |        |

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/10/2010 17:55:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3327.0           | 3327.0                 | 104 %                 |                       | 17:57:21         |
| 1     | Y RADIAL           | 2697.8           | 2697.8                 | 102.7 %               |                       | 17:57:21         |
| 1     | Al 396.153Radial†  | 2292.4           | 2270.1                 | 4887.5 ug/L           | 4887.5 ppb            | 17:57:01         |
| 1     | Ca 317.933Radial†  | 1294.2           | 1234.1                 | 5156.2 ug/L           | 5156.2 ppb            | 17:57:21         |
| 1     | Fe 238.204 Radial† | 189.8            | 173.4                  | 5005.0 ug/L           | 5005.0 ppb            | 17:57:21         |
| 1     | K 766.490 Radial†  | 14217.9          | 11668.1                | 5694.3 ug/L           | 5694.3 ppb            | 17:57:01         |
| 1     | Mg 279.077 IEC†    | 58.7             | 54.8                   | 5670.3 ug/L           | 5670.3 ppb            | 17:57:21         |
| 1     | Na 589.592 Radial† | 30156.7          | 29779.8                | 9420.7 ug/L           | 9420.7 ppb            | 17:57:01         |
| 1     | Sr 421.552†        | 52544.7          | 50576.9                | 487.02 ug/L           | 487.02 ppb            | 17:57:01         |
| 1     | Sc 361.383         | 842360.9         | 842360.9               | 106.36 %              |                       | 17:58:18         |
| 1     | Y 371.029          | 712833.7         | 712833.7               | 105.19 %              |                       | 17:58:18         |
| 1     | Ag 328.068†        | 101430.1         | 95230.6                | 508.02 ug/L           | 508.02 ppb            | 17:58:24         |
| 1     | As 188.979†        | 940.8            | 903.3                  | 533.37 ug/L           | 533.37 ppb            | 17:58:44         |
| 1     | B 249.677†         | 19429.6          | 18644.4                | 540.29 ug/L           | 540.29 ppb            | 17:58:24         |
| 1     | Ba 233.527†        | 54364.5          | 51112.3                | 507.33 ug/L           | 507.33 ppb            | 17:58:24         |
| 1     | Be 313.107†        | 1177228.5        | 1110340.6              | 503.31 ug/L           | 503.31 ppb            | 17:58:18         |
| 1     | Cd 226.502†        | 35304.6          | 33348.7                | 508.62 ug/L           | 508.62 ppb            | 17:58:24         |
| 1     | Co 228.616†        | 19899.3          | 18754.7                | 517.53 ug/L           | 517.53 ppb            | 17:58:24         |
| 1     | Cr 267.716†        | 39336.7          | 36930.5                | 507.70 ug/L           | 507.70 ppb            | 17:58:24         |
| 1     | Cu 324.752†        | 164770.8         | 148701.1               | 502.20 ug/L           | 502.20 ppb            | 17:58:24         |
| 1     | Mn 257.610†        | 381685.5         | 358451.6               | 496.03 ug/L           | 496.03 ppb            | 17:58:24         |
| 1     | Mo 202.031†        | 5892.1           | 5526.6                 | 505.18 ug/L           | 505.18 ppb            | 17:58:44         |
| 1     | Ni 231.604†        | 16510.5          | 15462.1                | 516.55 ug/L           | 516.55 ppb            | 17:58:24         |
| 1     | P 214.914†         | 3506.5           | 3132.4                 | 2416.7 ug/L           | 2416.7 ppb            | 17:58:44         |
| 1     | Pb 220.353†        | 3283.3           | 3130.5                 | 514.93 ug/L           | 514.93 ppb            | 17:58:44         |
| 1     | S 181.975 Axial†   | 595.4            | 529.0                  | 1009.4 ug/L           | 1009.4 ppb            | 17:58:44         |
| 1     | Sb 206.836†        | 1296.1           | 1195.8                 | 531.79 ug/L           | 531.79 ppb            | 17:58:44         |
| 1     | Se 196.026†        | 614.1            | 598.1                  | 527.88 ug/L           | 527.88 ppb            | 17:58:44         |
| 1     | Si 251.611†        | 69155.5          | 64542.0                | 2517.2 ug/L           | 2517.2 ppb            | 17:58:24         |
| 1     | Sn 189.927†        | 2264.6           | 2121.3                 | 505.82 ug/L           | 505.82 ppb            | 17:58:44         |
| 1     | Ti 334.940†        | 292894.9         | 276300.3               | 495.42 ug/L           | 495.42 ppb            | 17:58:24         |
| 1     | Tl 190.801†        | 1287.3           | 1236.3                 | 511.83 ug/L           | 511.83 ppb            | 17:58:44         |
| 1     | U 409.014†         | 15916.6          | 16936.4                | 512.73 ug/L           | 512.73 ppb            | 17:58:24         |
| 1     | V 292.402†         | 64171.7          | 61524.8                | 510.86 ug/L           | 510.86 ppb            | 17:58:24         |
| 1     | Zn 213.857†        | 42943.0          | 39862.4                | 505.19 ug/L           | 505.19 ppb            | 17:58:24         |
| 1     | SiO2†              | 68947.2          | 64347.3                | 5392.3 ug/L           | 5392.3 ppb            | 17:59:51         |
| 2     | Sc Radial          | 3347.3           | 3347.3                 | 104 %                 |                       | 17:57:46         |
| 2     | Y RADIAL           | 2718.4           | 2718.4                 | 103.5 %               |                       | 17:57:46         |
| 2     | Al 396.153Radial†  | 2261.6           | 2227.1                 | 4794.6 ug/L           | 4794.6 ppb            | 17:57:26         |
| 2     | Ca 317.933Radial†  | 1297.9           | 1230.1                 | 5139.6 ug/L           | 5139.6 ppb            | 17:57:46         |
| 2     | Fe 238.204 Radial† | 191.9            | 174.3                  | 5030.7 ug/L           | 5030.7 ppb            | 17:57:46         |
| 2     | K 766.490 Radial†  | 13958.3          | 11336.3                | 5532.2 ug/L           | 5532.2 ppb            | 17:57:26         |
| 2     | Mg 279.077 IEC†    | 51.0             | 47.1                   | 4871.3 ug/L           | 4871.3 ppb            | 17:57:46         |
| 2     | Na 589.592 Radial† | 29958.5          | 29413.3                | 9304.8 ug/L           | 9304.8 ppb            | 17:57:26         |
| 2     | Sr 421.552†        | 52096.0          | 49839.3                | 479.92 ug/L           | 479.92 ppb            | 17:57:26         |
| 2     | Sc 361.383         | 843961.5         | 843961.5               | 106.57 %              |                       | 17:58:49         |
| 2     | Y 371.029          | 712814.2         | 712814.2               | 105.19 %              |                       | 17:58:49         |
| 2     | Ag 328.068†        | 100655.5         | 94322.8                | 503.21 ug/L           | 503.21 ppb            | 17:58:54         |
| 2     | As 188.979†        | 936.1            | 897.2                  | 529.78 ug/L           | 529.78 ppb            | 17:59:14         |
| 2     | B 249.677†         | 19228.1          | 18420.7                | 533.78 ug/L           | 533.78 ppb            | 17:58:54         |
| 2     | Ba 233.527†        | 54091.4          | 50759.1                | 503.82 ug/L           | 503.82 ppb            | 17:58:54         |
| 2     | Be 313.107†        | 1177292.7        | 1108301.6              | 502.38 ug/L           | 502.38 ppb            | 17:58:49         |
| 2     | Cd 226.502†        | 35247.7          | 33232.3                | 506.84 ug/L           | 506.84 ppb            | 17:58:54         |
| 2     | Co 228.616†        | 19840.7          | 18664.2                | 515.04 ug/L           | 515.04 ppb            | 17:58:54         |
| 2     | Cr 267.716†        | 39100.3          | 36638.5                | 503.69 ug/L           | 503.69 ppb            | 17:58:54         |
| 2     | Cu 324.752†        | 162774.5         | 146534.0               | 494.89 ug/L           | 494.89 ppb            | 17:58:54         |
| 2     | Mn 257.610†        | 380112.2         | 356294.7               | 493.08 ug/L           | 493.08 ppb            | 17:58:54         |
| 2     | Mo 202.031†        | 5876.5           | 5501.4                 | 502.88 ug/L           | 502.88 ppb            | 17:59:14         |
| 2     | Ni 231.604†        | 16449.7          | 15375.6                | 513.66 ug/L           | 513.66 ppb            | 17:58:54         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 3486.1    | 3107.0    | 2397.6 ug/L | 2397.6 ppb | 17:59:14 |
| 2 | Pb 220.353†        | 3261.0    | 3103.7    | 510.50 ug/L | 510.50 ppb | 17:59:14 |
| 2 | S 181.975 Axial†   | 592.1     | 524.8     | 1001.5 ug/L | 1001.5 ppb | 17:59:14 |
| 2 | Sb 206.836†        | 1293.1    | 1190.7    | 529.49 ug/L | 529.49 ppb | 17:59:14 |
| 2 | Se 196.026†        | 609.9     | 593.0     | 523.62 ug/L | 523.62 ppb | 17:59:14 |
| 2 | Si 251.611†        | 68559.9   | 63859.8   | 2490.5 ug/L | 2490.5 ppb | 17:58:54 |
| 2 | Sn 189.927†        | 2253.0    | 2106.4    | 502.24 ug/L | 502.24 ppb | 17:59:14 |
| 2 | Ti 334.940†        | 290993.9  | 273994.2  | 491.35 ug/L | 491.35 ppb | 17:58:54 |
| 2 | Tl 190.801†        | 1283.6    | 1230.5    | 509.41 ug/L | 509.41 ppb | 17:59:14 |
| 2 | U 409.014†         | 15768.1   | 16768.7   | 507.64 ug/L | 507.64 ppb | 17:58:54 |
| 2 | V 292.402†         | 63774.8   | 61038.0   | 506.81 ug/L | 506.81 ppb | 17:58:54 |
| 2 | Zn 213.857†        | 42749.9   | 39604.7   | 501.92 ug/L | 501.92 ppb | 17:58:54 |
| 2 | SiO2†              | 68218.2   | 63540.2   | 5324.6 ug/L | 5324.6 ppb | 17:59:56 |
| 3 | Sc Radial          | 3302.8    | 3302.8    | 103 %       |            | 17:58:11 |
| 3 | Y RADIAL           | 2690.4    | 2690.4    | 102.4 %     |            | 17:58:11 |
| 3 | Al 396.153Radial†  | 2264.1    | 2258.8    | 4863.3 ug/L | 4863.3 ppb | 17:57:51 |
| 3 | Ca 317.933Radial†  | 1283.2    | 1232.5    | 5149.7 ug/L | 5149.7 ppb | 17:58:11 |
| 3 | Fe 238.204 Radial† | 191.0     | 175.8     | 5075.5 ug/L | 5075.5 ppb | 17:58:11 |
| 3 | K 766.490 Radial†  | 13803.5   | 11366.5   | 5546.9 ug/L | 5546.9 ppb | 17:57:51 |
| 3 | Mg 279.077 IEC†    | 55.5      | 52.2      | 5396.8 ug/L | 5396.8 ppb | 17:58:11 |
| 3 | Na 589.592 Radial† | 29763.7   | 29611.5   | 9367.5 ug/L | 9367.5 ppb | 17:57:51 |
| 3 | Sr 421.552†        | 51991.2   | 50410.8   | 485.42 ug/L | 485.42 ppb | 17:57:51 |
| 3 | Sc 361.383         | 845363.3  | 845363.3  | 106.74 %    |            | 17:59:20 |
| 3 | Y 371.029          | 714121.5  | 714121.5  | 105.38 %    |            | 17:59:20 |
| 3 | Ag 328.068†        | 100676.2  | 94185.6   | 502.48 ug/L | 502.48 ppb | 17:59:25 |
| 3 | As 188.979†        | 918.8     | 879.6     | 519.45 ug/L | 519.45 ppb | 17:59:45 |
| 3 | B 249.677†         | 19028.9   | 18204.2   | 527.48 ug/L | 527.48 ppb | 17:59:25 |
| 3 | Ba 233.527†        | 53872.0   | 50469.5   | 500.95 ug/L | 500.95 ppb | 17:59:25 |
| 3 | Be 313.107†        | 1176126.8 | 1105377.5 | 501.05 ug/L | 501.05 ppb | 17:59:20 |
| 3 | Cd 226.502†        | 34898.6   | 32850.5   | 501.01 ug/L | 501.01 ppb | 17:59:25 |
| 3 | Co 228.616†        | 19754.2   | 18552.3   | 511.94 ug/L | 511.94 ppb | 17:59:25 |
| 3 | Cr 267.716†        | 38938.6   | 36426.2   | 500.77 ug/L | 500.77 ppb | 17:59:25 |
| 3 | Cu 324.752†        | 162933.0  | 146429.2  | 494.53 ug/L | 494.53 ppb | 17:59:25 |
| 3 | Mn 257.610†        | 378744.2  | 354421.6  | 490.47 ug/L | 490.47 ppb | 17:59:25 |
| 3 | Mo 202.031†        | 5845.4    | 5463.1    | 499.38 ug/L | 499.38 ppb | 17:59:45 |
| 3 | Ni 231.604†        | 16434.6   | 15335.9   | 512.33 ug/L | 512.33 ppb | 17:59:25 |
| 3 | P 214.914†         | 3465.8    | 3082.5    | 2378.0 ug/L | 2378.0 ppb | 17:59:45 |
| 3 | Pb 220.353†        | 3234.4    | 3073.8    | 505.59 ug/L | 505.59 ppb | 17:59:45 |
| 3 | S 181.975 Axial†   | 585.0     | 517.2     | 987.09 ug/L | 987.09 ppb | 17:59:45 |
| 3 | Sb 206.836†        | 1286.7    | 1182.7    | 525.93 ug/L | 525.93 ppb | 17:59:45 |
| 3 | Se 196.026†        | 612.8     | 594.8     | 525.22 ug/L | 525.22 ppb | 17:59:45 |
| 3 | Si 251.611†        | 68494.6   | 63691.9   | 2484.0 ug/L | 2484.0 ppb | 17:59:25 |
| 3 | Sn 189.927†        | 2240.5    | 2091.1    | 498.62 ug/L | 498.62 ppb | 17:59:45 |
| 3 | Ti 334.940†        | 290044.2  | 272651.6  | 488.90 ug/L | 488.90 ppb | 17:59:25 |
| 3 | Tl 190.801†        | 1281.6    | 1226.6    | 507.79 ug/L | 507.79 ppb | 17:59:45 |
| 3 | U 409.014†         | 15856.4   | 16826.9   | 509.41 ug/L | 509.41 ppb | 17:59:25 |
| 3 | V 292.402†         | 63554.7   | 60732.4   | 504.27 ug/L | 504.27 ppb | 17:59:25 |
| 3 | Zn 213.857†        | 42459.3   | 39265.9   | 497.59 ug/L | 497.59 ppb | 17:59:25 |
| 3 | SiO2†              | 68315.1   | 63524.9   | 5323.4 ug/L | 5323.4 ppb | 18:00:01 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383  | 843895.2                 | 106.56 %    |        | 0.190    |                    |          | 0.18% |
| Sc Radial   | 3325.7                   | 104 %       |        | 0.7      |                    |          | 0.67% |
| Y 371.029   | 713256.4                 | 105.26 %    |        | 0.111    |                    |          | 0.11% |
| Y RADIAL  | 2702.2                   | 102.8 %     |        | 0.55     |                    |          | 0.54% |
| Ag 328.068†   | 94579.6                  | 504.57 ug/L |        | 3.012    | 504.57 ppb         | 3.012    | 0.60% |
| QC value within limits for Ag 328.068 Recovery = 100.91%      |                          |             |        |          |                    |          |       |
| Al 396.153Radial†   | 2252.0                   | 4848.5 ug/L |        | 48.17    | 4848.5 ppb         | 48.17    | 0.99% |
| QC value within limits for Al 396.153Radial Recovery = 96.97% |                          |             |        |          |                    |          |       |
| As 188.979†   | 893.4                    | 527.53 ug/L |        | 7.227    | 527.53 ppb         | 7.227    | 1.37% |
| QC value within limits for As 188.979 Recovery = 105.51%      |                          |             |        |          |                    |          |       |
| B 249.677†  | 18423.1                  | 533.85 ug/L |        | 6.403    | 533.85 ppb         | 6.403    | 1.20% |
| QC value within limits for B 249.677 Recovery = 106.77%       |                          |             |        |          |                    |          |       |
| Ba 233.527†   | 50780.3                  | 504.03 ug/L |        | 3.194    | 504.03 ppb         | 3.194    | 0.63% |
| QC value within limits for Ba 233.527 Recovery = 100.81%      |                          |             |        |          |                    |          |       |
| Be 313.107†   | 1108006.6                | 502.25 ug/L |        | 1.136    | 502.25 ppb         | 1.136    | 0.23% |
| QC value within limits for Be 313.107 Recovery = 100.45%      |                          |             |        |          |                    |          |       |
| Ca 317.933Radial†   | 1232.2                   | 5148.5 ug/L |        | 8.39     | 5148.5 ppb         | 8.39     | 0.16% |

QC value within limits for Ca 317.933 Radial Recovery = 102.97%

|   |          |             |        |            |        |       |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502†   | 33143.8  | 505.49 ug/L | 3.981  | 505.49 ppb | 3.981  | 0.79% |
| QC value within limits for Cd 226.502 Recovery = 101.10%                      |          |             |        |            |        |       |
| Co 228.616†   | 18657.1  | 514.84 ug/L | 2.798  | 514.84 ppb | 2.798  | 0.54% |
| QC value within limits for Co 228.616 Recovery = 102.97%                      |          |             |        |            |        |       |
| Cr 267.716†   | 36665.1  | 504.05 ug/L | 3.479  | 504.05 ppb | 3.479  | 0.69% |
| QC value within limits for Cr 267.716 Recovery = 100.81%                      |          |             |        |            |        |       |
| Cu 324.752†   | 147221.4 | 497.21 ug/L | 4.329  | 497.21 ppb | 4.329  | 0.87% |
| QC value within limits for Cu 324.752 Recovery = 99.44%                       |          |             |        |            |        |       |
| Fe 238.204 Radial†  | 174.5    | 5037.1 ug/L | 35.67  | 5037.1 ppb | 35.67  | 0.71% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.74%               |          |             |        |            |        |       |
| K 766.490 Radial†   | 11457.0  | 5591.2 ug/L | 89.62  | 5591.2 ppb | 89.62  | 1.60% |
| QC value greater than the upper limit for K 766.490 Radial Recovery = 111.82% |          |             |        |            |        |       |
| Mg 279.077 IEC†   | 51.3     | 5312.8 ug/L | 406.06 | 5312.8 ppb | 406.06 | 7.64% |
| QC value within limits for Mg 279.077 IEC Recovery = 106.26%                  |          |             |        |            |        |       |
| Mn 257.610†   | 356389.3 | 493.19 ug/L | 2.780  | 493.19 ppb | 2.780  | 0.56% |
| QC value within limits for Mn 257.610 Recovery = 98.64%                       |          |             |        |            |        |       |
| Mo 202.031†   | 5497.0   | 502.48 ug/L | 2.917  | 502.48 ppb | 2.917  | 0.58% |
| QC value within limits for Mo 202.031 Recovery = 100.50%                      |          |             |        |            |        |       |
| Na 589.592 Radial†  | 29601.5  | 9364.3 ug/L | 58.04  | 9364.3 ppb | 58.04  | 0.62% |
| QC value within limits for Na 589.592 Radial Recovery = 93.64%                |          |             |        |            |        |       |
| Ni 231.604†   | 15391.2  | 514.18 ug/L | 2.156  | 514.18 ppb | 2.156  | 0.42% |
| QC value within limits for Ni 231.604 Recovery = 102.84%                      |          |             |        |            |        |       |
| P 214.914†  | 3107.3   | 2397.5 ug/L | 19.31  | 2397.5 ppb | 19.31  | 0.81% |
| QC value within limits for P 214.914 Recovery = 95.90%                        |          |             |        |            |        |       |
| Pb 220.353†   | 3102.7   | 510.34 ug/L | 4.672  | 510.34 ppb | 4.672  | 0.92% |
| QC value within limits for Pb 220.353 Recovery = 102.07%                      |          |             |        |            |        |       |
| S 181.975 Axial†  | 523.7    | 999.33 ug/L | 11.331 | 999.33 ppb | 11.331 | 1.13% |
| QC value within limits for S 181.975 Axial Recovery = 99.93%                  |          |             |        |            |        |       |
| Sb 206.836†   | 1189.7   | 529.07 ug/L | 2.953  | 529.07 ppb | 2.953  | 0.56% |
| QC value within limits for Sb 206.836 Recovery = 105.81%                      |          |             |        |            |        |       |
| Se 196.026†   | 595.3    | 525.57 ug/L | 2.151  | 525.57 ppb | 2.151  | 0.41% |
| QC value within limits for Se 196.026 Recovery = 105.11%                      |          |             |        |            |        |       |
| Si 251.611†   | 64031.3  | 2497.2 ug/L | 17.57  | 2497.2 ppb | 17.57  | 0.70% |
| QC value within limits for Si 251.611 Recovery = 99.89%                       |          |             |        |            |        |       |
| Sn 189.927†   | 2106.3   | 502.23 ug/L | 3.599  | 502.23 ppb | 3.599  | 0.72% |
| QC value within limits for Sn 189.927 Recovery = 100.45%                      |          |             |        |            |        |       |
| Sr 421.552†   | 50275.7  | 484.12 ug/L | 3.726  | 484.12 ppb | 3.726  | 0.77% |
| QC value within limits for Sr 421.552 Recovery = 96.82%                       |          |             |        |            |        |       |
| Ti 334.940†   | 274315.4 | 491.89 ug/L | 3.293  | 491.89 ppb | 3.293  | 0.67% |
| QC value within limits for Ti 334.940 Recovery = 98.38%                       |          |             |        |            |        |       |
| Tl 190.801†   | 1231.1   | 509.68 ug/L | 2.030  | 509.68 ppb | 2.030  | 0.40% |
| QC value within limits for Tl 190.801 Recovery = 101.94%                      |          |             |        |            |        |       |
| U 409.014†  | 16844.0  | 509.93 ug/L | 2.583  | 509.93 ppb | 2.583  | 0.51% |
| QC value within limits for U 409.014 Recovery = 101.99%                       |          |             |        |            |        |       |
| V 292.402†  | 61098.4  | 507.31 ug/L | 3.321  | 507.31 ppb | 3.321  | 0.65% |
| QC value within limits for V 292.402 Recovery = 101.46%                       |          |             |        |            |        |       |
| Zn 213.857†   | 39577.7  | 501.56 ug/L | 3.814  | 501.56 ppb | 3.814  | 0.76% |
| QC value within limits for Zn 213.857 Recovery = 100.31%                      |          |             |        |            |        |       |
| SiO2†   | 63804.1  | 5346.8 ug/L | 39.46  | 5346.8 ppb | 39.46  | 0.74% |
| QC value within limits for SiO2 Recovery = 99.99%                             |          |             |        |            |        |       |

QC Failed. Continue with analysis.

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/10/2010 18:02:10  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3227.2           | 3227.2                 | 101 %                 |                       | 18:04:23         |
| 1     | Y RADIAL           | 2637.0           | 2637.0                 | 100.4 %               |                       | 18:04:23         |
| 1     | Al 396.153Radial†  | -62.0            | 0.4                    | 0.9021 ug/L           | 0.9021 ppb            | 18:04:23         |
| 1     | Ca 317.933Radial†  | 10.0             | -2.6                   | -10.853 ug/L          | -10.853 ppb           | 18:04:23         |
| 1     | Fe 238.204 Radial† | 11.0             | 1.4                    | 40.155 ug/L           | 40.155 ppb            | 18:04:23         |
| 1     | K 766.490 Radial†  | 2611.7           | 566.7                  | 276.85 ug/L           | 276.85 ppb            | 18:04:03         |
| 1     | Mg 279.077 IEC†    | 2.7              | 1.0                    | 105.38 ug/L           | 105.38 ppb            | 18:04:23         |
| 1     | Na 589.592 Radial† | -622.4           | 114.6                  | 36.240 ug/L           | 36.240 ppb            | 18:04:03         |
| 1     | Sr 421.552†        | 59.3             | 24.2                   | 0.2332 ug/L           | 0.2332 ppb            | 18:04:03         |
| 1     | Sc 361.383         | 801551.8         | 801551.8               | 101.21 %              |                       | 18:05:20         |
| 1     | Y 371.029          | 685310.5         | 685310.5               | 101.13 %              |                       | 18:05:20         |
| 1     | Ag 328.068†        | 208.7            | 74.9                   | 0.4057 ug/L           | 0.4057 ppb            | 18:05:20         |
| 1     | As 188.979†        | 0.2              | 19.0                   | 11.134 ug/L           | 11.134 ppb            | 18:05:40         |
| 1     | B 249.677†         | 536.7            | 907.5                  | 26.402 ug/L           | 26.402 ppb            | 18:05:40         |
| 1     | Ba 233.527†        | 26.6             | 26.6                   | 0.2645 ug/L           | 0.2645 ppb            | 18:05:40         |
| 1     | Be 313.107†        | -3432.2          | 150.8                  | 0.0686 ug/L           | 0.0686 ppb            | 18:05:20         |
| 1     | Cd 226.502†        | -89.2            | 68.1                   | 1.0362 ug/L           | 1.0362 ppb            | 18:05:40         |
| 1     | Co 228.616†        | -38.9            | 7.5                    | 0.2065 ug/L           | 0.2065 ppb            | 18:05:40         |
| 1     | Cr 267.716†        | 109.4            | 55.3                   | 0.7588 ug/L           | 0.7588 ppb            | 18:05:40         |
| 1     | Cu 324.752†        | 6442.4           | 153.4                  | 0.5178 ug/L           | 0.5178 ppb            | 18:05:20         |
| 1     | Mn 257.610†        | 483.2            | 78.6                   | 0.1083 ug/L           | 0.1083 ppb            | 18:05:40         |
| 1     | Mo 202.031†        | 22.4             | 9.1                    | 0.8379 ug/L           | 0.8379 ppb            | 18:05:40         |
| 1     | Ni 231.604†        | 61.1             | -0.3                   | -0.0098 ug/L          | -0.0098 ppb           | 18:05:40         |
| 1     | P 214.914†         | 174.8            | 8.4                    | 6.6581 ug/L           | 6.6581 ppb            | 18:05:40         |
| 1     | Pb 220.353†        | -13.4            | 30.4                   | 4.9889 ug/L           | 4.9889 ppb            | 18:05:40         |
| 1     | S 181.975 Axial†   | 27.3             | -3.8                   | -7.2599 ug/L          | -7.2599 ppb           | 18:05:40         |
| 1     | Sb 206.836†        | 37.2             | 14.0                   | 6.0756 ug/L           | 6.0756 ppb            | 18:05:40         |
| 1     | Se 196.026†        | -17.6            | 3.3                    | 2.9326 ug/L           | 2.9326 ppb            | 18:05:40         |
| 1     | Si 251.611†        | 555.8            | 73.0                   | 2.8442 ug/L           | 2.8442 ppb            | 18:05:40         |
| 1     | Sn 189.927†        | 18.6             | 10.6                   | 2.5162 ug/L           | 2.5162 ppb            | 18:05:40         |
| 1     | Ti 334.940†        | -840.8           | 97.7                   | 0.1630 ug/L           | 0.1630 ppb            | 18:05:20         |
| 1     | Tl 190.801†        | -20.9            | 5.3                    | 2.1866 ug/L           | 2.1866 ppb            | 18:05:40         |
| 1     | U 409.014†         | -1849.0          | 145.2                  | 4.4040 ug/L           | 4.4040 ppb            | 18:05:20         |
| 1     | V 292.402†         | -1213.1          | -6.3                   | -0.0355 ug/L          | -0.0355 ppb           | 18:05:20         |
| 1     | Zn 213.857†        | 651.2            | 132.0                  | 1.6815 ug/L           | 1.6815 ppb            | 18:05:40         |
| 1     | SiO2†              | 568.4            | 86.6                   | 7.2506 ug/L           | 7.2506 ppb            | 18:06:51         |
| 2     | Sc Radial          | 3220.7           | 3220.7                 | 101 %                 |                       | 18:04:48         |
| 2     | Y RADIAL           | 2630.2           | 2630.2                 | 100.1 %               |                       | 18:04:48         |
| 2     | Al 396.153Radial†  | -60.4            | 1.9                    | 4.1114 ug/L           | 4.1114 ppb            | 18:04:48         |
| 2     | Ca 317.933Radial†  | 14.9             | 2.4                    | 9.8541 ug/L           | 9.8541 ppb            | 18:04:48         |
| 2     | Fe 238.204 Radial† | 8.1              | -1.4                   | -40.593 ug/L          | -40.593 ppb           | 18:04:48         |
| 2     | K 766.490 Radial†  | 2451.4           | 412.5                  | 201.51 ug/L           | 201.51 ppb            | 18:04:28         |
| 2     | Mg 279.077 IEC†    | -0.0             | -1.7                   | -180.99 ug/L          | -180.99 ppb           | 18:04:48         |
| 2     | Na 589.592 Radial† | -634.4           | 101.4                  | 32.071 ug/L           | 32.071 ppb            | 18:04:28         |
| 2     | Sr 421.552†        | 28.1             | -6.7                   | -0.0645 ug/L          | -0.0645 ppb           | 18:04:28         |
| 2     | Sc 361.383         | 798262.6         | 798262.6               | 100.80 %              |                       | 18:05:45         |
| 2     | Y 371.029          | 681956.8         | 681956.8               | 100.64 %              |                       | 18:05:45         |
| 2     | Ag 328.068†        | 190.6            | 57.8                   | 0.2956 ug/L           | 0.2956 ppb            | 18:05:45         |
| 2     | As 188.979†        | -4.3             | 14.5                   | 8.5111 ug/L           | 8.5111 ppb            | 18:06:05         |
| 2     | B 249.677†         | 531.1            | 904.2                  | 26.318 ug/L           | 26.318 ppb            | 18:06:05         |
| 2     | Ba 233.527†        | 29.0             | 29.1                   | 0.2865 ug/L           | 0.2865 ppb            | 18:06:05         |
| 2     | Be 313.107†        | -3496.2          | 73.3                   | 0.0333 ug/L           | 0.0333 ppb            | 18:05:45         |
| 2     | Cd 226.502†        | -88.3            | 68.7                   | 1.0515 ug/L           | 1.0515 ppb            | 18:06:05         |
| 2     | Co 228.616†        | -34.1            | 12.1                   | 0.3338 ug/L           | 0.3338 ppb            | 18:06:05         |
| 2     | Cr 267.716†        | 69.8             | 16.4                   | 0.2247 ug/L           | 0.2247 ppb            | 18:06:05         |
| 2     | Cu 324.752†        | 6380.4           | 118.1                  | 0.3980 ug/L           | 0.3980 ppb            | 18:05:45         |
| 2     | Mn 257.610†        | 440.4            | 38.1                   | 0.0560 ug/L           | 0.0560 ppb            | 18:06:05         |
| 2     | Mo 202.031†        | 16.3             | 3.1                    | 0.2836 ug/L           | 0.2836 ppb            | 18:06:05         |
| 2     | Ni 231.604†        | 62.9             | 1.8                    | 0.0602 ug/L           | 0.0602 ppb            | 18:06:05         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 170.7    | 5.0      | 4.0051 ug/L  | 4.0051 ppb  | 18:06:05 |
| 2 | Pb 220.353†        | -9.0     | 34.7     | 5.7000 ug/L  | 5.7000 ppb  | 18:06:05 |
| 2 | S 181.975 Axial†   | 27.5     | -3.5     | -6.7256 ug/L | -6.7256 ppb | 18:06:05 |
| 2 | Sb 206.836†        | 45.9     | 22.8     | 9.8572 ug/L  | 9.8572 ppb  | 18:06:05 |
| 2 | Se 196.026†        | -9.5     | 11.3     | 9.5567 ug/L  | 9.5567 ppb  | 18:06:05 |
| 2 | Si 251.611†        | 570.6    | 90.0     | 3.5168 ug/L  | 3.5168 ppb  | 18:06:05 |
| 2 | Sn 189.927†        | 20.8     | 12.8     | 3.0569 ug/L  | 3.0569 ppb  | 18:06:05 |
| 2 | Ti 334.940†        | -910.8   | 24.8     | 0.0615 ug/L  | 0.0615 ppb  | 18:05:45 |
| 2 | Tl 190.801†        | -15.2    | 10.9     | 4.4761 ug/L  | 4.4761 ppb  | 18:06:05 |
| 2 | U 409.014†         | -2066.9  | -78.5    | -2.3813 ug/L | -2.3813 ppb | 18:05:45 |
| 2 | V 292.402†         | -1204.1  | -2.3     | -0.0169 ug/L | -0.0169 ppb | 18:05:45 |
| 2 | Zn 213.857†        | 636.8    | 120.4    | 1.5452 ug/L  | 1.5452 ppb  | 18:06:05 |
| 2 | SiO2†              | 560.6    | 81.2     | 6.8101 ug/L  | 6.8101 ppb  | 18:07:11 |
| 3 | Sc Radial          | 3231.4   | 3231.4   | 101 %        |             | 18:05:13 |
| 3 | Y RADIAL           | 2643.6   | 2643.6   | 100.6 %      |             | 18:05:13 |
| 3 | Al 396.153Radial†  | -60.5    | 2.0      | 4.3874 ug/L  | 4.3874 ppb  | 18:05:13 |
| 3 | Ca 317.933Radial†  | 9.0      | -3.5     | -14.721 ug/L | -14.721 ppb | 18:05:13 |
| 3 | Fe 238.204 Radial† | 6.4      | -3.2     | -90.928 ug/L | -90.928 ppb | 18:05:13 |
| 3 | K 766.490 Radial†  | 2495.2   | 447.8    | 218.77 ug/L  | 218.77 ppb  | 18:04:53 |
| 3 | Mg 279.077 IEC†    | -1.5     | -3.2     | -331.69 ug/L | -331.69 ppb | 18:05:13 |
| 3 | Na 589.592 Radial† | -645.7   | 92.3     | 29.203 ug/L  | 29.203 ppb  | 18:04:53 |
| 3 | Sr 421.552†        | 63.7     | 28.5     | 0.2749 ug/L  | 0.2749 ppb  | 18:04:53 |
| 3 | Sc 361.383         | 797964.2 | 797964.2 | 100.76 %     |             | 18:06:10 |
| 3 | Y 371.029          | 682101.6 | 682101.6 | 100.66 %     |             | 18:06:10 |
| 3 | Ag 328.068†        | 224.9    | 91.9     | 0.4561 ug/L  | 0.4561 ppb  | 18:06:10 |
| 3 | As 188.979†        | -2.6     | 16.2     | 9.4899 ug/L  | 9.4899 ppb  | 18:06:30 |
| 3 | B 249.677†         | 519.7    | 893.1    | 26.004 ug/L  | 26.004 ppb  | 18:06:30 |
| 3 | Ba 233.527†        | 34.0     | 34.1     | 0.3344 ug/L  | 0.3344 ppb  | 18:06:30 |
| 3 | Be 313.107†        | -3534.5  | 33.9     | 0.0158 ug/L  | 0.0158 ppb  | 18:06:10 |
| 3 | Cd 226.502†        | -100.6   | 56.4     | 0.8705 ug/L  | 0.8705 ppb  | 18:06:30 |
| 3 | Co 228.616†        | -51.0    | -4.7     | -0.1296 ug/L | -0.1296 ppb | 18:06:30 |
| 3 | Cr 267.716†        | 86.6     | 33.1     | 0.4488 ug/L  | 0.4488 ppb  | 18:06:30 |
| 3 | Cu 324.752†        | 6479.3   | 218.6    | 0.7314 ug/L  | 0.7314 ppb  | 18:06:10 |
| 3 | Mn 257.610†        | 442.2    | 40.0     | 0.0599 ug/L  | 0.0599 ppb  | 18:06:30 |
| 3 | Mo 202.031†        | 13.2     | 0.1      | 0.0006 ug/L  | 0.0006 ppb  | 18:06:30 |
| 3 | Ni 231.604†        | 74.3     | 13.1     | 0.4388 ug/L  | 0.4388 ppb  | 18:06:30 |
| 3 | P 214.914†         | 175.7    | 10.1     | 8.0102 ug/L  | 8.0102 ppb  | 18:06:30 |
| 3 | Pb 220.353†        | -14.1    | 29.6     | 4.8763 ug/L  | 4.8763 ppb  | 18:06:30 |
| 3 | S 181.975 Axial†   | 34.7     | 3.7      | 6.9712 ug/L  | 6.9712 ppb  | 18:06:30 |
| 3 | Sb 206.836†        | 44.0     | 20.9     | 9.0017 ug/L  | 9.0017 ppb  | 18:06:30 |
| 3 | Se 196.026†        | -17.2    | 3.6      | 2.8362 ug/L  | 2.8362 ppb  | 18:06:30 |
| 3 | Si 251.611†        | 561.2    | 80.9     | 3.1620 ug/L  | 3.1620 ppb  | 18:06:30 |
| 3 | Sn 189.927†        | 14.4     | 6.5      | 1.5535 ug/L  | 1.5535 ppb  | 18:06:30 |
| 3 | Ti 334.940†        | -827.9   | 106.8    | 0.2148 ug/L  | 0.2148 ppb  | 18:06:10 |
| 3 | Tl 190.801†        | -15.0    | 11.1     | 4.5764 ug/L  | 4.5764 ppb  | 18:06:30 |
| 3 | U 409.014†         | -1860.0  | 126.0    | 3.8376 ug/L  | 3.8376 ppb  | 18:06:10 |
| 3 | V 292.402†         | -1202.3  | -1.0     | 0.0056 ug/L  | 0.0056 ppb  | 18:06:10 |
| 3 | Zn 213.857†        | 629.6    | 113.4    | 1.4607 ug/L  | 1.4607 ppb  | 18:06:30 |
| 3 | SiO2†              | 582.4    | 103.0    | 8.6510 ug/L  | 8.6510 ppb  | 18:07:31 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383  | 799259.6                 | 100.92 %     |        | 0.251    |                    |          | 0.25%   |
| Sc Radial   | 3226.5                   | 101 %        |        | 0.2      |                    |          | 0.17%   |
| Y 371.029   | 683123.0                 | 100.81 %     |        | 0.280    |                    |          | 0.28%   |
| Y RADIAL  | 2636.9                   | 100.4 %      |        | 0.25     |                    |          | 0.25%   |
| Ag 328.068†   | 74.8                     | 0.3858 ug/L  |        | 0.08206  | 0.3858 ppb         | 0.08206  | 21.27%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Al 396.153Radial†   | 1.5                      | 3.1336 ug/L  |        | 1.93747  | 3.1336 ppb         | 1.93747  | 61.83%  |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |        |          |                    |          |         |
| As 188.979†   | 16.6                     | 9.7118 ug/L  |        | 1.32567  | 9.7118 ppb         | 1.32567  | 13.65%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| B 249.677†  | 901.6                    | 26.241 ug/L  |        | 0.2096   | 26.241 ppb         | 0.2096   | 0.80%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |        |          |                    |          |         |
| Ba 233.527†   | 29.9                     | 0.2951 ug/L  |        | 0.03575  | 0.2951 ppb         | 0.03575  | 12.11%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Be 313.107†   | 86.0                     | 0.0392 ug/L  |        | 0.02691  | 0.0392 ppb         | 0.02691  | 68.61%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Ca 317.933Radial†   | -1.3                     | -5.2400 ug/L |        | 13.21411 | -5.2400 ppb        | 13.21411 | 252.18% |



|  |       |              |         |             |         |         |  |
|--|-------|--------------|---------|-------------|---------|---------|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated               |       |              |         |             |         |         |  |
| Cd 226.502†  | 64.4  | 0.9861 ug/L  | 0.10034 | 0.9861 ppb  | 0.10034 | 10.18%  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Co 228.616†  | 4.9   | 0.1369 ug/L  | 0.23941 | 0.1369 ppb  | 0.23941 | 174.92% |  |
| QC value within limits for Co 228.616 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Cr 267.716†  | 34.9  | 0.4774 ug/L  | 0.26821 | 0.4774 ppb  | 0.26821 | 56.18%  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Cu 324.752†  | 163.4 | 0.5491 ug/L  | 0.16889 | 0.5491 ppb  | 0.16889 | 30.76%  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Fe 238.204 Radial†   | -1.1  | -30.455 ug/L | 66.1266 | -30.455 ppb | 66.1266 | 217.13% |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated               |       |              |         |             |         |         |  |
| K 766.490 Radial†  | 475.7 | 232.38 ug/L  | 39.468  | 232.38 ppb  | 39.468  | 16.98%  |  |
| QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated |       |              |         |             |         |         |  |
| Mg 279.077 IEC†  | -1.3  | -135.77 ug/L | 222.014 | -135.77 ppb | 222.014 | 163.52% |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated                  |       |              |         |             |         |         |  |
| Mn 257.610†  | 52.2  | 0.0748 ug/L  | 0.02913 | 0.0748 ppb  | 0.02913 | 38.97%  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Mo 202.031†  | 4.1   | 0.3740 ug/L  | 0.42591 | 0.3740 ppb  | 0.42591 | 113.87% |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Na 589.592 Radial†   | 102.7 | 32.505 ug/L  | 3.5384  | 32.505 ppb  | 3.5384  | 10.89%  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated               |       |              |         |             |         |         |  |
| Ni 231.604†  | 4.9   | 0.1631 ug/L  | 0.24139 | 0.1631 ppb  | 0.24139 | 148.03% |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| P 214.914†   | 7.8   | 6.2245 ug/L  | 2.03744 | 6.2245 ppb  | 2.03744 | 32.73%  |  |
| QC value within limits for P 214.914 Recovery = Not calculated                       |       |              |         |             |         |         |  |
| Pb 220.353†  | 31.6  | 5.1884 ug/L  | 0.44660 | 5.1884 ppb  | 0.44660 | 8.61%   |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| S 181.975 Axial†   | -1.2  | -2.3381 ug/L | 8.06652 | -2.3381 ppb | 8.06652 | 345.00% |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated                 |       |              |         |             |         |         |  |
| Sb 206.836†  | 19.2  | 8.3115 ug/L  | 1.98300 | 8.3115 ppb  | 1.98300 | 23.86%  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Se 196.026†  | 6.1   | 5.1085 ug/L  | 3.85258 | 5.1085 ppb  | 3.85258 | 75.41%  |  |
| QC value within limits for Se 196.026 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Si 251.611†  | 81.3  | 3.1743 ug/L  | 0.33647 | 3.1743 ppb  | 0.33647 | 10.60%  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Sn 189.927†  | 10.0  | 2.3756 ug/L  | 0.76151 | 2.3756 ppb  | 0.76151 | 32.06%  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Sr 421.552†  | 15.4  | 0.1479 ug/L  | 0.18509 | 0.1479 ppb  | 0.18509 | 125.17% |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Ti 334.940†  | 76.4  | 0.1464 ug/L  | 0.07800 | 0.1464 ppb  | 0.07800 | 53.27%  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| Tl 190.801†  | 9.1   | 3.7464 ug/L  | 1.35174 | 3.7464 ppb  | 1.35174 | 36.08%  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| U 409.014†   | 64.2  | 1.9534 ug/L  | 3.76465 | 1.9534 ppb  | 3.76465 | 192.72% |  |
| QC value within limits for U 409.014 Recovery = Not calculated                       |       |              |         |             |         |         |  |
| V 292.402†   | -3.2  | -0.0156 ug/L | 0.02060 | -0.0156 ppb | 0.02060 | 132.00% |  |
| QC value within limits for V 292.402 Recovery = Not calculated                       |       |              |         |             |         |         |  |
| Zn 213.857†  | 121.9 | 1.5625 ug/L  | 0.11142 | 1.5625 ppb  | 0.11142 | 7.13%   |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated                      |       |              |         |             |         |         |  |
| SiO2†  | 90.2  | 7.5706 ug/L  | 0.96128 | 7.5706 ppb  | 0.96128 | 12.70%  |  |
| QC value within limits for SiO2 Recovery = Not calculated                            |       |              |         |             |         |         |  |
| QC Failed. Continue with analysis.   |       |              |         |             |         |         |  |

=====  
Analysis Begun

Start Time: 3/10/2010 18:15:20

Plasma On Time: 3/8/2010 08:27:38

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif

Batch ID:

Results Data Set: 031010

Results Library: C:\pe\Optima3\Results\Results.mdb  
=====

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/10/2010 15:33:04

IEC File: 011110.iec

MSF File:

Method Description:

| Analyte           | Calibration Equation | Processing | View   | Internal Standard | IEC |
|-------------------|----------------------|------------|--------|-------------------|-----|
| Ag 328.068        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Al 396.153Radial  | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | Yes |
| As 188.979        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| B 249.677         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ba 233.527        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Be 313.107        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Ca 317.933Radial  | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | No  |
| Cd 226.502        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Co 228.616        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cr 267.716        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Cu 324.752        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Fe 238.204 Radial | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | Yes |
| K 766.490 Radial  | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | Yes |
| Mg 279.077 IEC    | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | Yes |
| Mn 257.610        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Mo 202.031        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Na 589.592 Radial | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | No  |
| Ni 231.604        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| P 214.914         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Pb 220.353        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| S 181.975 Axial   | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sb 206.836        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sc 361.383        | Lin Thru 0           | Peak Area  | Axial  | n/a               | n/a |
| Sc Radial         | Lin, Calc Int        | Peak Area  | Radial | n/a               | n/a |
| Se 196.026        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Si 251.611        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sn 189.927        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Sr 421.552        | Lin Thru 0           | Peak Area  | Radial | Sc Radial         | Yes |
| Ti 334.940        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Tl 190.801        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| U 409.014         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| V 292.402         | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Y 371.029         | Lin, Calc Int        | Peak Area  | Axial  | n/a               | n/a |
| Zn 213.857        | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |
| Y RADIAL          | Lin, Calc Int        | Peak Area  | Radial | n/a               | n/a |
| SiO2              | Lin Thru 0           | Peak Area  | Axial  | Sc 361.383        | Yes |

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/10/2010 18:15:21

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

-----  
Replicate Data: CCV

| Repl# | Analyte           | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|-------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial         | 3320.2        | 3320.2              | 104 %              |                    | 18:17:34      |
| 1     | Y RADIAL          | 2690.9        | 2690.9              | 102.4 %            |                    | 18:17:34      |
| 1     | Al 396.153Radial† | 2242.7        | 2226.6              | 4793.8 ug/L        | 4793.8 ppb         | 18:17:14      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 1 | Ca 317.933Radial†  | 1285.7    | 1228.5    | 5132.8 ug/L | 5132.8 ppb | 18:17:34 |
| 1 | Fe 238.204 Radial† | 189.8     | 173.7     | 5014.0 ug/L | 5014.0 ppb | 18:17:34 |
| 1 | K 766.490 Radial†  | 12873.0   | 10398.1   | 5073.8 ug/L | 5073.8 ppb | 18:17:14 |
| 1 | Mg 279.077 IEC†    | 53.9      | 50.4      | 5210.9 ug/L | 5210.9 ppb | 18:17:34 |
| 1 | Na 589.592 Radial† | 29813.3   | 29507.6   | 9334.6 ug/L | 9334.6 ppb | 18:17:14 |
| 1 | Sr 421.552†        | 52432.3   | 50571.6   | 486.97 ug/L | 486.97 ppb | 18:17:14 |
| 1 | Sc 361.383         | 850750.2  | 850750.2  | 107.42 %    |            | 18:18:31 |
| 1 | Y 371.029          | 718366.4  | 718366.4  | 106.01 %    |            | 18:18:31 |
| 1 | Ag 328.068†        | 100975.7  | 93867.2   | 500.77 ug/L | 500.77 ppb | 18:18:36 |
| 1 | As 188.979†        | 888.4     | 845.8     | 499.65 ug/L | 499.65 ppb | 18:18:56 |
| 1 | B 249.677†         | 18233.2   | 17350.6   | 502.65 ug/L | 502.65 ppb | 18:18:36 |
| 1 | Ba 233.527†        | 54001.5   | 50270.3   | 498.97 ug/L | 498.97 ppb | 18:18:36 |
| 1 | Be 313.107†        | 1186732.6 | 1108273.6 | 502.36 ug/L | 502.36 ppb | 18:18:31 |
| 1 | Cd 226.502†        | 35101.4   | 32832.3   | 500.74 ug/L | 500.74 ppb | 18:18:36 |
| 1 | Co 228.616†        | 19854.2   | 18528.2   | 511.28 ug/L | 511.28 ppb | 18:18:36 |
| 1 | Cr 267.716†        | 39168.7   | 36409.4   | 500.54 ug/L | 500.54 ppb | 18:18:36 |
| 1 | Cu 324.752†        | 163316.4  | 145819.6  | 492.47 ug/L | 492.47 ppb | 18:18:36 |
| 1 | Mn 257.610†        | 379947.9  | 353295.4  | 488.91 ug/L | 488.91 ppb | 18:18:36 |
| 1 | Mo 202.031†        | 5862.5    | 5444.4    | 497.67 ug/L | 497.67 ppb | 18:18:56 |
| 1 | Ni 231.604†        | 16507.8   | 15306.5   | 511.35 ug/L | 511.35 ppb | 18:18:36 |
| 1 | P 214.914†         | 3490.6    | 3085.1    | 2380.5 ug/L | 2380.5 ppb | 18:18:56 |
| 1 | Pb 220.353†        | 3241.4    | 3061.1    | 503.50 ug/L | 503.50 ppb | 18:18:56 |
| 1 | S 181.975 Axial†   | 585.7     | 514.4     | 981.72 ug/L | 981.72 ppb | 18:18:56 |
| 1 | Sb 206.836†        | 1262.0    | 1152.1    | 512.76 ug/L | 512.76 ppb | 18:18:56 |
| 1 | Se 196.026†        | 604.0     | 583.0     | 514.95 ug/L | 514.95 ppb | 18:18:56 |
| 1 | Si 251.611†        | 68428.6   | 63224.2   | 2465.7 ug/L | 2465.7 ppb | 18:18:36 |
| 1 | Sn 189.927†        | 2255.6    | 2091.9    | 498.81 ug/L | 498.81 ppb | 18:18:56 |
| 1 | Ti 334.940†        | 291086.2  | 271901.2  | 487.57 ug/L | 487.57 ppb | 18:18:36 |
| 1 | Tl 190.801†        | 1270.0    | 1208.3    | 500.23 ug/L | 500.23 ppb | 18:18:56 |
| 1 | U 409.014†         | 15882.7   | 16757.3   | 507.30 ug/L | 507.30 ppb | 18:18:36 |
| 1 | V 292.402†         | 63829.9   | 60611.6   | 503.26 ug/L | 503.26 ppb | 18:18:36 |
| 1 | Zn 213.857†        | 42516.3   | 39067.1   | 495.06 ug/L | 495.06 ppb | 18:18:36 |
| 1 | SiO2†              | 67843.4   | 62680.5   | 5252.5 ug/L | 5252.5 ppb | 18:20:03 |
| 2 | Sc Radial          | 3350.6    | 3350.6    | 105 %       |            | 18:17:59 |
| 2 | Y RADIAL           | 2721.8    | 2721.8    | 103.6 %     |            | 18:17:59 |
| 2 | Al 396.153Radial†  | 2238.4    | 2202.9    | 4742.3 ug/L | 4742.3 ppb | 18:17:39 |
| 2 | Ca 317.933Radial†  | 1296.9    | 1227.9    | 5130.3 ug/L | 5130.3 ppb | 18:17:59 |
| 2 | Fe 238.204 Radial† | 191.8     | 173.9     | 5021.1 ug/L | 5021.1 ppb | 18:17:59 |
| 2 | K 766.490 Radial†  | 12820.1   | 10234.5   | 4994.0 ug/L | 4994.0 ppb | 18:17:39 |
| 2 | Mg 279.077 IEC†    | 53.9      | 49.8      | 5156.0 ug/L | 5156.0 ppb | 18:17:59 |
| 2 | Na 589.592 Radial† | 29467.8   | 28915.7   | 9147.4 ug/L | 9147.4 ppb | 18:17:39 |
| 2 | Sr 421.552†        | 51520.4   | 49239.6   | 474.15 ug/L | 474.15 ppb | 18:17:39 |
| 2 | Sc 361.383         | 847016.5  | 847016.5  | 106.95 %    |            | 18:19:02 |
| 2 | Y 371.029          | 716019.2  | 716019.2  | 105.66 %    |            | 18:19:02 |
| 2 | Ag 328.068†        | 101555.4  | 94823.6   | 505.87 ug/L | 505.87 ppb | 18:19:07 |
| 2 | As 188.979†        | 898.3     | 858.7     | 507.24 ug/L | 507.24 ppb | 18:19:27 |
| 2 | B 249.677†         | 18365.3   | 17548.9   | 508.41 ug/L | 508.41 ppb | 18:19:07 |
| 2 | Ba 233.527†        | 54402.6   | 50867.0   | 504.89 ug/L | 504.89 ppb | 18:19:07 |
| 2 | Be 313.107†        | 1182644.5 | 1109321.1 | 502.84 ug/L | 502.84 ppb | 18:19:02 |
| 2 | Cd 226.502†        | 35341.0   | 33200.3   | 506.36 ug/L | 506.36 ppb | 18:19:07 |
| 2 | Co 228.616†        | 19935.1   | 18685.3   | 515.60 ug/L | 515.60 ppb | 18:19:07 |
| 2 | Cr 267.716†        | 39419.1   | 36804.3   | 505.96 ug/L | 505.96 ppb | 18:19:07 |
| 2 | Cu 324.752†        | 164400.0  | 147503.0  | 498.16 ug/L | 498.16 ppb | 18:19:07 |
| 2 | Mn 257.610†        | 382215.9  | 356975.1  | 494.01 ug/L | 494.01 ppb | 18:19:07 |
| 2 | Mo 202.031†        | 5841.6    | 5448.9    | 498.08 ug/L | 498.08 ppb | 18:19:27 |
| 2 | Ni 231.604†        | 16523.1   | 15388.5   | 514.09 ug/L | 514.09 ppb | 18:19:07 |
| 2 | P 214.914†         | 3469.1    | 3079.3    | 2374.8 ug/L | 2374.8 ppb | 18:19:27 |
| 2 | Pb 220.353†        | 3213.9    | 3048.7    | 501.45 ug/L | 501.45 ppb | 18:19:27 |
| 2 | S 181.975 Axial†   | 582.0     | 513.4     | 979.73 ug/L | 979.73 ppb | 18:19:27 |
| 2 | Sb 206.836†        | 1266.3    | 1161.2    | 516.68 ug/L | 516.68 ppb | 18:19:27 |
| 2 | Se 196.026†        | 600.3     | 581.9     | 514.07 ug/L | 514.07 ppb | 18:19:27 |
| 2 | Si 251.611†        | 68904.8   | 63950.2   | 2494.1 ug/L | 2494.1 ppb | 18:19:07 |
| 2 | Sn 189.927†        | 2241.4    | 2087.9    | 497.85 ug/L | 497.85 ppb | 18:19:27 |
| 2 | Ti 334.940†        | 292830.5  | 274726.6  | 492.64 ug/L | 492.64 ppb | 18:19:07 |
| 2 | Tl 190.801†        | 1276.0    | 1219.0    | 504.71 ug/L | 504.71 ppb | 18:19:27 |
| 2 | U 409.014†         | 15892.6   | 16831.7   | 509.55 ug/L | 509.55 ppb | 18:19:07 |
| 2 | V 292.402†         | 64308.6   | 61321.2   | 509.07 ug/L | 509.07 ppb | 18:19:07 |
| 2 | Zn 213.857†        | 42771.1   | 39479.8   | 500.31 ug/L | 500.31 ppb | 18:19:07 |
| 2 | SiO2†              | 68661.1   | 63723.5   | 5340.1 ug/L | 5340.1 ppb | 18:20:08 |
| 3 | Sc Radial          | 3333.2    | 3333.2    | 104 %       |            | 18:18:24 |
| 3 | Y RADIAL           | 2705.0    | 2705.0    | 102.9 %     |            | 18:18:24 |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 3 | Al 396.153Radial†  | 2277.3    | 2251.4    | 4847.1 ug/L | 4847.1 ppb | 18:18:04 |
| 3 | Ca 317.933Radial†  | 1289.9    | 1227.6    | 5129.3 ug/L | 5129.3 ppb | 18:18:24 |
| 3 | Fe 238.204 Radial† | 191.1     | 174.3     | 5030.7 ug/L | 5030.7 ppb | 18:18:24 |
| 3 | K 766.490 Radial†  | 12944.6   | 10418.4   | 5083.8 ug/L | 5083.8 ppb | 18:18:04 |
| 3 | Mg 279.077 IEC†    | 50.4      | 46.7      | 4835.8 ug/L | 4835.8 ppb | 18:18:24 |
| 3 | Na 589.592 Radial† | 29941.4   | 29518.7   | 9338.1 ug/L | 9338.1 ppb | 18:18:04 |
| 3 | Sr 421.552†        | 52446.1   | 50387.7   | 485.20 ug/L | 485.20 ppb | 18:18:04 |
| 3 | Sc 361.383         | 844128.7  | 844128.7  | 106.59 %    |            | 18:19:32 |
| 3 | Y 371.029          | 713545.1  | 713545.1  | 105.30 %    |            | 18:19:32 |
| 3 | Ag 328.068†        | 100848.0  | 94484.6   | 504.07 ug/L | 504.07 ppb | 18:19:38 |
| 3 | As 188.979†        | 900.0     | 863.2     | 509.85 ug/L | 509.85 ppb | 18:19:58 |
| 3 | B 249.677†         | 18240.2   | 17490.3   | 506.70 ug/L | 506.70 ppb | 18:19:38 |
| 3 | Ba 233.527†        | 54177.5   | 50829.9   | 504.52 ug/L | 504.52 ppb | 18:19:38 |
| 3 | Be 313.107†        | 1178522.9 | 1109237.0 | 502.80 ug/L | 502.80 ppb | 18:19:32 |
| 3 | Cd 226.502†        | 35108.7   | 33095.4   | 504.75 ug/L | 504.75 ppb | 18:19:38 |
| 3 | Co 228.616†        | 19895.6   | 18712.0   | 516.35 ug/L | 516.35 ppb | 18:19:38 |
| 3 | Cr 267.716†        | 39128.9   | 36658.0   | 503.95 ug/L | 503.95 ppb | 18:19:38 |
| 3 | Cu 324.752†        | 163284.9  | 146982.6  | 496.40 ug/L | 496.40 ppb | 18:19:38 |
| 3 | Mn 257.610†        | 380726.7  | 356800.5  | 493.78 ug/L | 493.78 ppb | 18:19:38 |
| 3 | Mo 202.031†        | 5871.7    | 5495.8    | 502.36 ug/L | 502.36 ppb | 18:19:58 |
| 3 | Ni 231.604†        | 16471.9   | 15393.4   | 514.25 ug/L | 514.25 ppb | 18:19:38 |
| 3 | P 214.914†         | 3506.0    | 3125.0    | 2411.9 ug/L | 2411.9 ppb | 18:19:58 |
| 3 | Pb 220.353†        | 3267.2    | 3109.0    | 511.37 ug/L | 511.37 ppb | 18:19:58 |
| 3 | S 181.975 Axial†   | 583.5     | 516.6     | 985.85 ug/L | 985.85 ppb | 18:19:58 |
| 3 | Sb 206.836†        | 1275.5    | 1174.0    | 522.35 ug/L | 522.35 ppb | 18:19:58 |
| 3 | Se 196.026†        | 611.2     | 594.1     | 524.55 ug/L | 524.55 ppb | 18:19:58 |
| 3 | Si 251.611†        | 68631.2   | 63914.0   | 2492.7 ug/L | 2492.7 ppb | 18:19:38 |
| 3 | Sn 189.927†        | 2264.6    | 2116.9    | 504.75 ug/L | 504.75 ppb | 18:19:58 |
| 3 | Ti 334.940†        | 290909.9  | 273861.3  | 491.12 ug/L | 491.12 ppb | 18:19:38 |
| 3 | Tl 190.801†        | 1278.2    | 1225.2    | 507.21 ug/L | 507.21 ppb | 18:19:58 |
| 3 | U 409.014†         | 15739.2   | 16738.7   | 506.73 ug/L | 506.73 ppb | 18:19:38 |
| 3 | V 292.402†         | 63823.1   | 61071.3   | 507.08 ug/L | 507.08 ppb | 18:19:38 |
| 3 | Zn 213.857†        | 42660.5   | 39512.9   | 500.74 ug/L | 500.74 ppb | 18:19:38 |
| 3 | SiO2†              | 68828.7   | 64100.3   | 5371.6 ug/L | 5371.6 ppb | 18:20:13 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383  | 847298.5                 | 106.99 %           | 0.419    |                    |          | 0.39% |
| Sc Radial   | 3334.7                   | 104 %              | 0.5      |                    |          | 0.46% |
| Y 371.029   | 715976.9                 | 105.66 %           | 0.356    |                    |          | 0.34% |
| Y RADIAL  | 2705.9                   | 103.0 %            | 0.59     |                    |          | 0.57% |
| Ag 328.068†   | 94391.8                  | 503.57 ug/L        | 2.584    | 503.57 ppb         | 2.584    | 0.51% |
| QC value within limits for Ag 328.068 Recovery = 100.71%        |                          |                    |          |                    |          |       |
| Al 396.153Radial†   | 2227.0                   | 4794.4 ug/L        | 52.42    | 4794.4 ppb         | 52.42    | 1.09% |
| QC value within limits for Al 396.153Radial Recovery = 95.89%   |                          |                    |          |                    |          |       |
| As 188.979†   | 855.9                    | 505.58 ug/L        | 5.297    | 505.58 ppb         | 5.297    | 1.05% |
| QC value within limits for As 188.979 Recovery = 101.12%        |                          |                    |          |                    |          |       |
| B 249.677†  | 17463.3                  | 505.92 ug/L        | 2.957    | 505.92 ppb         | 2.957    | 0.58% |
| QC value within limits for B 249.677 Recovery = 101.18%         |                          |                    |          |                    |          |       |
| Ba 233.527†   | 50655.7                  | 502.80 ug/L        | 3.316    | 502.80 ppb         | 3.316    | 0.66% |
| QC value within limits for Ba 233.527 Recovery = 100.56%        |                          |                    |          |                    |          |       |
| Be 313.107†   | 1108943.9                | 502.67 ug/L        | 0.269    | 502.67 ppb         | 0.269    | 0.05% |
| QC value within limits for Be 313.107 Recovery = 100.53%        |                          |                    |          |                    |          |       |
| Ca 317.933Radial†   | 1228.0                   | 5130.8 ug/L        | 1.80     | 5130.8 ppb         | 1.80     | 0.04% |
| QC value within limits for Ca 317.933Radial Recovery = 102.62%  |                          |                    |          |                    |          |       |
| Cd 226.502†   | 33042.6                  | 503.95 ug/L        | 2.893    | 503.95 ppb         | 2.893    | 0.57% |
| QC value within limits for Cd 226.502 Recovery = 100.79%        |                          |                    |          |                    |          |       |
| Co 228.616†   | 18641.8                  | 514.41 ug/L        | 2.739    | 514.41 ppb         | 2.739    | 0.53% |
| QC value within limits for Co 228.616 Recovery = 102.88%        |                          |                    |          |                    |          |       |
| Cr 267.716†   | 36623.9                  | 503.48 ug/L        | 2.744    | 503.48 ppb         | 2.744    | 0.55% |
| QC value within limits for Cr 267.716 Recovery = 100.70%        |                          |                    |          |                    |          |       |
| Cu 324.752†   | 146768.4                 | 495.68 ug/L        | 2.911    | 495.68 ppb         | 2.911    | 0.59% |
| QC value within limits for Cu 324.752 Recovery = 99.14%         |                          |                    |          |                    |          |       |
| Fe 238.204 Radial†  | 173.9                    | 5021.9 ug/L        | 8.36     | 5021.9 ppb         | 8.36     | 0.17% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.44% |                          |                    |          |                    |          |       |
| K 766.490 Radial†   | 10350.3                  | 5050.5 ug/L        | 49.22    | 5050.5 ppb         | 49.22    | 0.97% |
| QC value within limits for K 766.490 Radial Recovery = 101.01%  |                          |                    |          |                    |          |       |
| Mg 279.077 IEC†   | 49.0                     | 5067.6 ug/L        | 202.61   | 5067.6 ppb         | 202.61   | 4.00% |
| QC value within limits for Mg 279.077 IEC Recovery = 101.35%    |                          |                    |          |                    |          |       |

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/10/2010 18:22:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Conc. Units  | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|--------------------|---------------|
| 1     | Sc Radial          | 3227.3        | 3227.3              | 101 %        |              |                    | 18:24:36      |
| 1     | Y RADIAL           | 2633.8        | 2633.8              | 100.2 %      |              |                    | 18:24:36      |
| 1     | Al 396.153Radial†  | -62.3         | 0.2                 | 0.4027 ug/L  |              | 0.4027 ppb         | 18:24:36      |
| 1     | Ca 317.933Radial†  | 9.8           | -2.8                | -11.501 ug/L |              | -11.501 ppb        | 18:24:36      |
| 1     | Fe 238.204 Radial† | 11.9          | 2.3                 | 66.432 ug/L  |              | 66.432 ppb         | 18:24:36      |
| 1     | K 766.490 Radial†  | 2235.2        | 192.8               | 94.195 ug/L  |              | 94.195 ppb         | 18:24:16      |
| 1     | Mg 279.077 IEC†    | 0.4           | -1.3                | -135.94 ug/L |              | -135.94 ppb        | 18:24:36      |
| 1     | Na 589.592 Radial† | -686.5        | 51.0                | 16.126 ug/L  |              | 16.126 ppb         | 18:24:16      |
| 1     | Sr 421.552†        | 31.7          | -3.2                | -0.0303 ug/L |              | -0.0303 ppb        | 18:24:16      |
| 1     | Sc 361.383         | 800872.2      | 800872.2            | 101.12 %     |              |                    | 18:25:33      |
| 1     | Y 371.029          | 684513.5      | 684513.5            | 101.01 %     |              |                    | 18:25:33      |
| 1     | Ag 328.068†        | 149.5         | 16.5                | 0.1056 ug/L  |              | 0.1056 ppb         | 18:25:33      |
| 1     | As 188.979†        | -10.7         | 8.2                 | 4.8474 ug/L  |              | 4.8474 ppb         | 18:25:53      |
| 1     | B 249.677†         | 165.5         | 540.9               | 15.730 ug/L  |              | 15.730 ppb         | 18:25:53      |
| 1     | Ba 233.527†        | 30.2          | 30.1                | 0.3002 ug/L  |              | 0.3002 ppb         | 18:25:53      |
| 1     | Be 313.107†        | -3466.2       | 114.2               | 0.0519 ug/L  |              | 0.0519 ppb         | 18:25:33      |
| 1     | Cd 226.502†        | -114.1        | 43.4                | 0.6565 ug/L  |              | 0.6565 ppb         | 18:25:53      |
| 1     | Co 228.616†        | -39.6         | 6.7                 | 0.1855 ug/L  |              | 0.1855 ppb         | 18:25:53      |
| 1     | Cr 267.716†        | 83.7          | 29.9                | 0.4120 ug/L  |              | 0.4120 ppb         | 18:25:53      |
| 1     | Cu 324.752†        | 6395.8        | 112.7               | 0.3822 ug/L  |              | 0.3822 ppb         | 18:25:33      |
| 1     | Mn 257.610†        | 442.0         | 38.2                | 0.0649 ug/L  |              | 0.0649 ppb         | 18:25:53      |
| 1     | Mo 202.031†        | 15.9          | 2.7                 | 0.2546 ug/L  |              | 0.2546 ppb         | 18:25:53      |
| 1     | Ni 231.604†        | 73.0          | 11.6                | 0.3875 ug/L  |              | 0.3875 ppb         | 18:25:53      |
| 1     | P 214.914†         | 171.0         | 4.8                 | 3.7495 ug/L  |              | 3.7495 ppb         | 18:25:53      |
| 1     | Pb 220.353†        | -30.7         | 13.3                | 2.1704 ug/L  |              | 2.1704 ppb         | 18:25:53      |
| 1     | S 181.975 Axial†   | 27.6          | -3.5                | -6.6644 ug/L |              | -6.6644 ppb        | 18:25:53      |
| 1     | Sb 206.836†        | 32.4          | 9.3                 | 4.0214 ug/L  |              | 4.0214 ppb         | 18:25:53      |
| 1     | Se 196.026†        | -21.4         | -0.5                | -0.2581 ug/L |              | -0.2581 ppb        | 18:25:53      |
| 1     | Si 251.611†        | 513.7         | 31.9                | 1.2431 ug/L  |              | 1.2431 ppb         | 18:25:53      |
| 1     | Sn 189.927†        | 13.3          | 5.3                 | 1.2627 ug/L  |              | 1.2627 ppb         | 18:25:53      |
| 1     | Ti 334.940†        | -880.8        | 57.4                | 0.1108 ug/L  |              | 0.1108 ppb         | 18:25:33      |
| 1     | Tl 190.801†        | -25.1         | 1.2                 | 0.4857 ug/L  |              | 0.4857 ppb         | 18:25:53      |
| 1     | U 409.014†         | -1881.8       | 111.2               | 3.3687 ug/L  |              | 3.3687 ppb         | 18:25:33      |
| 1     | V 292.402†         | -1202.7       | 2.9                 | 0.0215 ug/L  |              | 0.0215 ppb         | 18:25:33      |
| 1     | Zn 213.857†        | 639.3         | 120.8               | 1.5321 ug/L  |              | 1.5321 ppb         | 18:25:53      |
| 1     | SiO2†              | 517.0         | 36.3                | 3.0397 ug/L  |              | 3.0397 ppb         | 18:27:04      |
| 2     | Sc Radial          | 3212.2        | 3212.2              | 100 %        |              |                    | 18:25:01      |
| 2     | Y RADIAL           | 2626.4        | 2626.4              | 99.96 %      |              |                    | 18:25:01      |
| 2     | Al 396.153Radial†  | -58.9         | 3.3                 | 7.0798 ug/L  |              | 7.0798 ppb         | 18:25:01      |
| 2     | Ca 317.933Radial†  | 16.2          | 3.6                 | 15.174 ug/L  |              | 15.174 ppb         | 18:25:01      |
| 2     | Fe 238.204 Radial† | 8.7           | -0.8                | -23.955 ug/L |              | -23.955 ppb        | 18:25:01      |
| 2     | K 766.490 Radial†  | 2254.7        | 222.6               | 108.76 ug/L  |              | 108.76 ppb         | 18:24:41      |
| 2     | Mg 279.077 IEC†    | 2.0           | 0.3                 | 29.523 ug/L  |              | 29.523 ppb         | 18:25:01      |
| 2     | Na 589.592 Radial† | -683.6        | 50.7                | 16.023 ug/L  |              | 16.023 ppb         | 18:24:41      |
| 2     | Sr 421.552†        | 22.4          | -12.3               | -0.1184 ug/L |              | -0.1184 ppb        | 18:24:41      |
| 2     | Sc 361.383         | 805773.8      | 805773.8            | 101.74 %     |              |                    | 18:25:58      |
| 2     | Y 371.029          | 689268.2      | 689268.2            | 101.72 %     |              |                    | 18:25:58      |
| 2     | Ag 328.068†        | 126.2         | -7.3                | -0.0466 ug/L |              | -0.0466 ppb        | 18:25:58      |
| 2     | As 188.979†        | -16.4         | 2.7                 | 1.6009 ug/L  |              | 1.6009 ppb         | 18:26:18      |
| 2     | B 249.677†         | 135.6         | 510.5               | 14.860 ug/L  |              | 14.860 ppb         | 18:26:18      |
| 2     | Ba 233.527†        | 20.3          | 20.2                | 0.1999 ug/L  |              | 0.1999 ppb         | 18:26:18      |
| 2     | Be 313.107†        | -3485.7       | 115.9               | 0.0525 ug/L  |              | 0.0525 ppb         | 18:25:58      |
| 2     | Cd 226.502†        | -114.2        | 44.0                | 0.6748 ug/L  |              | 0.6748 ppb         | 18:26:18      |
| 2     | Co 228.616†        | -45.6         | 1.1                 | 0.0293 ug/L  |              | 0.0293 ppb         | 18:26:18      |
| 2     | Cr 267.716†        | 95.0          | 40.5                | 0.5551 ug/L  |              | 0.5551 ppb         | 18:26:18      |
| 2     | Cu 324.752†        | 6400.3        | 78.7                | 0.2635 ug/L  |              | 0.2635 ppb         | 18:25:58      |
| 2     | Mn 257.610†        | 472.0         | 65.1                | 0.0864 ug/L  |              | 0.0864 ppb         | 18:26:18      |
| 2     | Mo 202.031†        | 7.7           | -5.5                | -0.5052 ug/L |              | -0.5052 ppb        | 18:26:18      |
| 2     | Ni 231.604†        | 66.7          | 4.9                 | 0.1636 ug/L  |              | 0.1636 ppb         | 18:26:18      |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 169.4    | 2.1      | 1.6886 ug/L  | 1.6886 ppb  | 18:26:18 |
| 2 | Pb 220.353†        | -44.4    | 0.0      | 0.0076 ug/L  | 0.0076 ppb  | 18:26:18 |
| 2 | S 181.975 Axial†   | 29.8     | -1.5     | -2.8657 ug/L | -2.8657 ppb | 18:26:18 |
| 2 | Sb 206.836†        | 28.9     | 5.6      | 2.4129 ug/L  | 2.4129 ppb  | 18:26:18 |
| 2 | Se 196.026†        | -19.5    | 1.5      | 1.2117 ug/L  | 1.2117 ppb  | 18:26:18 |
| 2 | Si 251.611†        | 511.9    | 27.0     | 1.0629 ug/L  | 1.0629 ppb  | 18:26:18 |
| 2 | Sn 189.927†        | 6.9      | -1.0     | -0.2287 ug/L | -0.2287 ppb | 18:26:18 |
| 2 | Ti 334.940†        | -917.1   | 27.0     | 0.0471 ug/L  | 0.0471 ppb  | 18:25:58 |
| 2 | Tl 190.801†        | -21.9    | 4.5      | 1.8339 ug/L  | 1.8339 ppb  | 18:26:18 |
| 2 | U 409.014†         | -1952.1  | 53.4     | 1.6246 ug/L  | 1.6246 ppb  | 18:25:58 |
| 2 | V 292.402†         | -1189.0  | 23.7     | 0.1936 ug/L  | 0.1936 ppb  | 18:25:58 |
| 2 | Zn 213.857†        | 638.6    | 116.2    | 1.4891 ug/L  | 1.4891 ppb  | 18:26:18 |
| 2 | SiO2†              | 504.0    | 20.3     | 1.7203 ug/L  | 1.7203 ppb  | 18:27:24 |
| 3 | Sc Radial          | 3194.8   | 3194.8   | 99.7 %       |             | 18:25:27 |
| 3 | Y RADIAL           | 2604.3   | 2604.3   | 99.12 %      |             | 18:25:27 |
| 3 | Al 396.153Radial†  | -52.3    | 9.5      | 20.620 ug/L  | 20.620 ppb  | 18:25:27 |
| 3 | Ca 317.933Radial†  | 15.6     | 3.1      | 13.089 ug/L  | 13.089 ppb  | 18:25:27 |
| 3 | Fe 238.204 Radial† | 8.7      | -0.8     | -23.088 ug/L | -23.088 ppb | 18:25:27 |
| 3 | K 766.490 Radial†  | 2242.0   | 222.2    | 108.55 ug/L  | 108.55 ppb  | 18:25:06 |
| 3 | Mg 279.077 IEC†    | 3.0      | 1.3      | 139.22 ug/L  | 139.22 ppb  | 18:25:27 |
| 3 | Na 589.592 Radial† | -689.1   | 41.4     | 13.091 ug/L  | 13.091 ppb  | 18:25:06 |
| 3 | Sr 421.552†        | 54.0     | 19.5     | 0.1875 ug/L  | 0.1875 ppb  | 18:25:06 |
| 3 | Sc 361.383         | 804978.2 | 804978.2 | 101.64 %     |             | 18:26:24 |
| 3 | Y 371.029          | 687861.3 | 687861.3 | 101.51 %     |             | 18:26:24 |
| 3 | Ag 328.068†        | 125.5    | -7.9     | -0.0469 ug/L | -0.0469 ppb | 18:26:24 |
| 3 | As 188.979†        | -22.7    | -3.5     | -2.0507 ug/L | -2.0507 ppb | 18:26:44 |
| 3 | B 249.677†         | 135.5    | 510.5    | 14.861 ug/L  | 14.861 ppb  | 18:26:44 |
| 3 | Ba 233.527†        | 14.5     | 14.6     | 0.1436 ug/L  | 0.1436 ppb  | 18:26:44 |
| 3 | Be 313.107†        | -3362.7  | 233.6    | 0.1061 ug/L  | 0.1061 ppb  | 18:26:24 |
| 3 | Cd 226.502†        | -119.4   | 38.8     | 0.5936 ug/L  | 0.5936 ppb  | 18:26:44 |
| 3 | Co 228.616†        | -41.1    | 5.4      | 0.1500 ug/L  | 0.1500 ppb  | 18:26:44 |
| 3 | Cr 267.716†        | 93.2     | 38.8     | 0.5333 ug/L  | 0.5333 ppb  | 18:26:44 |
| 3 | Cu 324.752†        | 6472.9   | 156.3    | 0.5278 ug/L  | 0.5278 ppb  | 18:26:24 |
| 3 | Mn 257.610†        | 466.8    | 60.4     | 0.0755 ug/L  | 0.0755 ppb  | 18:26:44 |
| 3 | Mo 202.031†        | 14.7     | 1.4      | 0.1264 ug/L  | 0.1264 ppb  | 18:26:44 |
| 3 | Ni 231.604†        | 69.3     | 7.5      | 0.2522 ug/L  | 0.2522 ppb  | 18:26:44 |
| 3 | P 214.914†         | 175.9    | 8.8      | 6.9549 ug/L  | 6.9549 ppb  | 18:26:44 |
| 3 | Pb 220.353†        | -22.6    | 21.4     | 3.5264 ug/L  | 3.5264 ppb  | 18:26:44 |
| 3 | S 181.975 Axial†   | 31.1     | -0.2     | -0.4665 ug/L | -0.4665 ppb | 18:26:44 |
| 3 | Sb 206.836†        | 33.8     | 10.5     | 4.5075 ug/L  | 4.5075 ppb  | 18:26:44 |
| 3 | Se 196.026†        | -16.9    | 4.1      | 3.4215 ug/L  | 3.4215 ppb  | 18:26:44 |
| 3 | Si 251.611†        | 507.5    | 23.2     | 0.9048 ug/L  | 0.9048 ppb  | 18:26:44 |
| 3 | Sn 189.927†        | 8.0      | 0.1      | 0.0320 ug/L  | 0.0320 ppb  | 18:26:44 |
| 3 | Ti 334.940†        | -821.1   | 120.6    | 0.2074 ug/L  | 0.2074 ppb  | 18:26:24 |
| 3 | Tl 190.801†        | -22.8    | 3.6      | 1.4662 ug/L  | 1.4662 ppb  | 18:26:44 |
| 3 | U 409.014†         | -2078.2  | -72.6    | -2.2031 ug/L | -2.2031 ppb | 18:26:24 |
| 3 | V 292.402†         | -1200.2  | 11.4     | 0.0969 ug/L  | 0.0969 ppb  | 18:26:24 |
| 3 | Zn 213.857†        | 647.3    | 125.4    | 1.6056 ug/L  | 1.6056 ppb  | 18:26:44 |
| 3 | SiO2†              | 510.3    | 27.0     | 2.2651 ug/L  | 2.2651 ppb  | 18:27:44 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383  | 803874.7                 | 101.50 %           | 0.332    |                    |          | 0.33%   |
| Sc Radial   | 3211.4                   | 100 %              | 0.5      |                    |          | 0.51%   |
| Y 371.029   | 687214.3                 | 101.41 %           | 0.360    |                    |          | 0.36%   |
| Y RADIAL  | 2621.5                   | 99.77 %            | 0.584    |                    |          | 0.59%   |
| Ag 328.068†   | 0.5                      | 0.0040 ug/L        | 0.08799  | 0.0040 ppb         | 0.08799  | >999.9% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Al 396.153Radial†   | 4.3                      | 9.3674 ug/L        | 10.30069 | 9.3674 ppb         | 10.30069 | 109.96% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |                    |          |                    |          |         |
| As 188.979†   | 2.5                      | 1.4659 ug/L        | 3.45102  | 1.4659 ppb         | 3.45102  | 235.42% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| B 249.677†  | 520.7                    | 15.150 ug/L        | 0.5022   | 15.150 ppb         | 0.5022   | 3.31%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |                    |          |                    |          |         |
| Ba 233.527†   | 21.6                     | 0.2146 ug/L        | 0.07934  | 0.2146 ppb         | 0.07934  | 36.98%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Be 313.107†   | 154.6                    | 0.0702 ug/L        | 0.03114  | 0.0702 ppb         | 0.03114  | 44.36%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |                    |          |                    |          |         |
| Ca 317.933Radial†   | 1.3                      | 5.5873 ug/L        | 14.83543 | 5.5873 ppb         | 14.83543 | 265.52% |

|  |                 |       |              |          |             |          |         |  |  |
|--|-----------------|-------|--------------|----------|-------------|----------|---------|--|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| Cd   | 226.502†        | 42.1  | 0.6416 ug/L  | 0.04261  | 0.6416 ppb  | 0.04261  | 6.64%   |  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Co   | 228.616†        | 4.4   | 0.1216 ug/L  | 0.08189  | 0.1216 ppb  | 0.08189  | 67.35%  |  |  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Cr   | 267.716†        | 36.4  | 0.5001 ug/L  | 0.07711  | 0.5001 ppb  | 0.07711  | 15.42%  |  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Cu   | 324.752†        | 115.9 | 0.3911 ug/L  | 0.13238  | 0.3911 ppb  | 0.13238  | 33.84%  |  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Fe   | 238.204 Radial† | 0.2   | 6.4631 ug/L  | 51.93633 | 6.4631 ppb  | 51.93633 | 803.58% |  |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| K  | 766.490 Radial† | 212.6 | 103.84 ug/L  | 8.350    | 103.84 ppb  | 8.350    | 8.04%   |  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |          |             |          |         |  |  |
| Mg   | 279.077 IEC†    | 0.1   | 10.935 ug/L  | 138.5216 | 10.935 ppb  | 138.5216 | >999.9% |  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |          |             |          |         |  |  |
| Mn   | 257.610†        | 54.5  | 0.0756 ug/L  | 0.01076  | 0.0756 ppb  | 0.01076  | 14.24%  |  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Mo   | 202.031†        | -0.5  | -0.0414 ug/L | 0.40674  | -0.0414 ppb | 0.40674  | 982.27% |  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Na   | 589.592 Radial† | 47.7  | 15.080 ug/L  | 1.7234   | 15.080 ppb  | 1.7234   | 11.43%  |  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| Ni   | 231.604†        | 8.0   | 0.2678 ug/L  | 0.11275  | 0.2678 ppb  | 0.11275  | 42.11%  |  |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| P  | 214.914†        | 5.2   | 4.1310 ug/L  | 2.65380  | 4.1310 ppb  | 2.65380  | 64.24%  |  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| Pb   | 220.353†        | 11.6  | 1.9015 ug/L  | 1.77477  | 1.9015 ppb  | 1.77477  | 93.34%  |  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| S  | 181.975 Axial†  | -1.7  | -3.3322 ug/L | 3.12518  | -3.3322 ppb | 3.12518  | 93.79%  |  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |          |             |          |         |  |  |
| Sb   | 206.836†        | 8.5   | 3.6473 ug/L  | 1.09627  | 3.6473 ppb  | 1.09627  | 30.06%  |  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Se   | 196.026†        | 1.7   | 1.4583 ug/L  | 1.85215  | 1.4583 ppb  | 1.85215  | 127.00% |  |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Si   | 251.611†        | 27.4  | 1.0703 ug/L  | 0.16930  | 1.0703 ppb  | 0.16930  | 15.82%  |  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Sn   | 189.927†        | 1.5   | 0.3553 ug/L  | 0.79657  | 0.3553 ppb  | 0.79657  | 224.18% |  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Sr   | 421.552†        | 1.3   | 0.0129 ug/L  | 0.15749  | 0.0129 ppb  | 0.15749  | >999.9% |  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Ti   | 334.940†        | 68.3  | 0.1218 ug/L  | 0.08070  | 0.1218 ppb  | 0.08070  | 66.26%  |  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Tl   | 190.801†        | 3.1   | 1.2619 ug/L  | 0.69691  | 1.2619 ppb  | 0.69691  | 55.23%  |  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| U  | 409.014†        | 30.7  | 0.9301 ug/L  | 2.85008  | 0.9301 ppb  | 2.85008  | 306.43% |  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| V  | 292.402†        | 12.7  | 0.1040 ug/L  | 0.08624  | 0.1040 ppb  | 0.08624  | 82.91%  |  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| Zn   | 213.857†        | 120.8 | 1.5422 ug/L  | 0.05890  | 1.5422 ppb  | 0.05890  | 3.82%   |  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| SiO2†  |                 | 27.9  | 2.3417 ug/L  | 0.66300  | 2.3417 ppb  | 0.66300  | 28.31%  |  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |          |             |          |         |  |  |

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 3/10/2010 18:29:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: LR1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3299.0           | 3299.0                 | 103 %                 |                       | 18:32:08         |
| 1     | Y RADIAL           | 2712.7           | 2712.7                 | 103.2 %               |                       | 18:32:08         |
| 1     | Al 396.153Radial†  | -74.5            | -10.3                  | -21.194 ug/L          | -21.194 ppb           | 18:32:08         |
| 1     | Ca 317.933Radial†  | 14.7             | 1.8                    | 7.4376 ug/L           | 7.4376 ppb            | 18:32:08         |
| 1     | Fe 238.204 Radial† | 13699.8          | 13298.2                | 382750 ug/L           | 382750 ppb            | 18:31:48         |
| 1     | K 766.490 Radial†  | 2176.8           | 87.9                   | 42.957 ug/L           | 42.957 ppb            | 18:31:48         |
| 1     | Mg 279.077 IEC†    | 5.3              | 3.5                    | -42.139 ug/L          | -42.139 ppb           | 18:32:08         |
| 1     | Na 589.592 Radial† | -672.8           | 79.0                   | 24.999 ug/L           | 24.999 ppb            | 18:31:48         |
| 1     | Sr 421.552†        | 61.3             | 24.9                   | 0.2397 ug/L           | 0.2397 ppb            | 18:31:48         |
| 1     | Sc 361.383         | 835088.3         | 835088.3               | 105.45 %              |                       | 18:33:05         |
| 1     | Y 371.029          | 711830.1         | 711830.1               | 105.05 %              |                       | 18:33:05         |
| 1     | Ag 328.068†        | -22917.5         | -21865.4               | 2.6053 ug/L           | 2.6053 ppb            | 18:33:05         |
| 1     | As 188.979†        | -166.5           | -139.1                 | 8.2483 ug/L           | 8.2483 ppb            | 18:33:25         |
| 1     | B 249.677†         | 2101.6           | 2370.3                 | 6.7745 ug/L           | 6.7745 ppb            | 18:33:05         |
| 1     | Ba 233.527†        | -1508.5          | -1430.3                | -2.3917 ug/L          | -2.3917 ppb           | 18:33:05         |
| 1     | Be 313.107†        | -3526.8          | 197.3                  | 0.0891 ug/L           | 0.0891 ppb            | 18:33:05         |
| 1     | Cd 226.502†        | 2743.7           | 2758.3                 | 2.5543 ug/L           | 2.5543 ppb            | 18:33:05         |
| 1     | Co 228.616†        | 600.0            | 614.9                  | 11.376 ug/L           | 11.376 ppb            | 18:33:25         |
| 1     | Cr 267.716†        | -464.3           | -493.2                 | 8.9876 ug/L           | 8.9876 ppb            | 18:33:25         |
| 1     | Cu 324.752†        | 538.8            | -5701.0                | 0.9689 ug/L           | 0.9689 ppb            | 18:33:05         |
| 1     | Mn 257.610†        | -30454.8         | -29281.0               | -2.7097 ug/L          | -2.7097 ppb           | 18:33:05         |
| 1     | Mo 202.031†        | -268.8           | -267.9                 | 5.2444 ug/L           | 5.2444 ppb            | 18:33:05         |
| 1     | Ni 231.604†        | 152.9            | 84.4                   | 2.8116 ug/L           | 2.8116 ppb            | 18:33:25         |
| 1     | P 214.914†         | 583.1            | 388.6                  | 7.4665 ug/L           | 7.4665 ppb            | 18:33:25         |
| 1     | Pb 220.353†        | 200.0            | 233.3                  | -16.242 ug/L          | -16.242 ppb           | 18:33:25         |
| 1     | S 181.975 Axial†   | 47.7             | 14.4                   | 27.499 ug/L           | 27.499 ppb            | 18:33:25         |
| 1     | Sb 206.836†        | 16.5             | -7.1                   | -7.7157 ug/L          | -7.7157 ppb           | 18:33:25         |
| 1     | Se 196.026†        | -1529.8          | -1430.1                | -165.96 ug/L          | -165.96 ppb           | 18:33:25         |
| 1     | Si 251.611†        | -427.2           | -881.2                 | -34.152 ug/L          | -34.152 ppb           | 18:33:05         |
| 1     | Sn 189.927†        | -8.2             | -15.5                  | -25.673 ug/L          | -25.673 ppb           | 18:33:25         |
| 1     | Ti 334.940†        | -997.7           | -17.8                  | -0.0860 ug/L          | -0.0860 ppb           | 18:33:05         |
| 1     | Tl 190.801†        | -29.0            | -1.6                   | -1.0208 ug/L          | -1.0208 ppb           | 18:33:25         |
| 1     | U 409.014†         | 150.1            | 2114.4                 | 20.606 ug/L           | 20.606 ppb            | 18:33:05         |
| 1     | V 292.402†         | 6012.0           | 6893.8                 | 0.5226 ug/L           | 0.5226 ppb            | 18:33:05         |
| 1     | Zn 213.857†        | 4194.3           | 3466.3                 | -12.930 ug/L          | -12.930 ppb           | 18:33:25         |
| 1     | SiO2†              | -287.4           | -747.6                 | -62.144 ug/L          | -62.144 ppb           | 18:34:23         |
| 2     | Sc Radial          | 3315.3           | 3315.3                 | 103 %                 |                       | 18:32:33         |
| 2     | Y RADIAL           | 2728.0           | 2728.0                 | 103.8 %               |                       | 18:32:33         |
| 2     | Al 396.153Radial†  | -68.0            | -3.7                   | -6.6133 ug/L          | -6.6133 ppb           | 18:32:33         |
| 2     | Ca 317.933Radial†  | 17.3             | 4.2                    | 17.677 ug/L           | 17.677 ppb            | 18:32:33         |
| 2     | Fe 238.204 Radial† | 13500.8          | 13040.4                | 375330 ug/L           | 375330 ppb            | 18:32:13         |
| 2     | K 766.490 Radial†  | 2171.1           | 71.9                   | 35.158 ug/L           | 35.158 ppb            | 18:32:13         |
| 2     | Mg 279.077 IEC†    | 7.3              | 5.4                    | 165.53 ug/L           | 165.53 ppb            | 18:32:33         |
| 2     | Na 589.592 Radial† | -710.2           | 46.1                   | 14.585 ug/L           | 14.585 ppb            | 18:32:13         |
| 2     | Sr 421.552†        | 60.2             | 23.6                   | 0.2270 ug/L           | 0.2270 ppb            | 18:32:13         |
| 2     | Sc 361.383         | 836336.8         | 836336.8               | 105.60 %              |                       | 18:33:31         |
| 2     | Y 371.029          | 712288.5         | 712288.5               | 105.11 %              |                       | 18:33:31         |
| 2     | Ag 328.068†        | -22982.1         | -21894.1               | 0.1606 ug/L           | 0.1606 ppb            | 18:33:31         |
| 2     | As 188.979†        | -169.9           | -142.0                 | 4.8042 ug/L           | 4.8042 ppb            | 18:33:51         |
| 2     | B 249.677†         | 2072.6           | 2339.9                 | 7.0948 ug/L           | 7.0948 ppb            | 18:33:31         |
| 2     | Ba 233.527†        | -1536.6          | -1454.8                | -2.8587 ug/L          | -2.8587 ppb           | 18:33:31         |
| 2     | Be 313.107†        | -3511.1          | 217.1                  | 0.0982 ug/L           | 0.0982 ppb            | 18:33:31         |
| 2     | Cd 226.502†        | 2757.9           | 2767.9                 | 3.4673 ug/L           | 3.4673 ppb            | 18:33:31         |
| 2     | Co 228.616†        | 599.6            | 613.7                  | 11.440 ug/L           | 11.440 ppb            | 18:33:51         |
| 2     | Cr 267.716†        | -459.9           | -488.3                 | 8.7512 ug/L           | 8.7512 ppb            | 18:33:51         |
| 2     | Cu 324.752†        | 600.8            | -5643.0                | 0.7718 ug/L           | 0.7718 ppb            | 18:33:31         |
| 2     | Mn 257.610†        | -30156.0         | -28955.0               | -2.9999 ug/L          | -2.9999 ppb           | 18:33:31         |
| 2     | Mo 202.031†        | -319.7           | -315.8                 | 0.2962 ug/L           | 0.2962 ppb            | 18:33:31         |
| 2     | Ni 231.604†        | 147.4            | 79.0                   | 2.6308 ug/L           | 2.6308 ppb            | 18:33:51         |



|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 585.0    | 389.7    | 14.243 ug/L  | 14.243 ppb  | 18:33:51 |
| 2 | Pb 220.353†        | 210.1    | 242.6    | -13.675 ug/L | -13.675 ppb | 18:33:51 |
| 2 | S 181.975 Axial†   | 47.1     | 13.8     | 26.437 ug/L  | 26.437 ppb  | 18:33:51 |
| 2 | Sb 206.836†        | 17.6     | -6.0     | -7.2590 ug/L | -7.2590 ppb | 18:33:51 |
| 2 | Se 196.026†        | -1521.1  | -1419.7  | -177.54 ug/L | -177.54 ppb | 18:33:51 |
| 2 | Si 251.611†        | -410.6   | -864.9   | -33.460 ug/L | -33.460 ppb | 18:33:31 |
| 2 | Sn 189.927†        | -10.3    | -17.5    | -25.714 ug/L | -25.714 ppb | 18:33:51 |
| 2 | Ti 334.940†        | -977.7   | 2.6      | -0.0644 ug/L | -0.0644 ppb | 18:33:31 |
| 2 | Tl 190.801†        | -23.3    | 3.9      | 1.2203 ug/L  | 1.2203 ppb  | 18:33:51 |
| 2 | U 409.014†         | 155.3    | 2119.1   | 21.595 ug/L  | 21.595 ppb  | 18:33:31 |
| 2 | V 292.402†         | 6119.3   | 6986.9   | 2.3084 ug/L  | 2.3084 ppb  | 18:33:31 |
| 2 | Zn 213.857†        | 4189.0   | 3455.3   | -11.959 ug/L | -11.959 ppb | 18:33:51 |
| 2 | SiO2†              | -495.2   | -944.0   | -78.523 ug/L | -78.523 ppb | 18:34:28 |
| 3 | Sc Radial          | 3327.0   | 3327.0   | 104 %        |             | 18:32:58 |
| 3 | Y RADIAL           | 2725.1   | 2725.1   | 103.7 %      |             | 18:32:58 |
| 3 | Al 396.153Radial†  | -70.6    | -6.0     | -11.709 ug/L | -11.709 ppb | 18:32:58 |
| 3 | Ca 317.933Radial†  | 14.4     | 1.4      | 5.9621 ug/L  | 5.9621 ppb  | 18:32:58 |
| 3 | Fe 238.204 Radial† | 13732.8  | 13217.8  | 380430 ug/L  | 380430 ppb  | 18:32:38 |
| 3 | K 766.490 Radial†  | 2149.7   | 44.0     | 21.512 ug/L  | 21.512 ppb  | 18:32:38 |
| 3 | Mg 279.077 IEC†    | 4.6      | 2.7      | -114.70 ug/L | -114.70 ppb | 18:32:58 |
| 3 | Na 589.592 Radial† | -662.4   | 94.6     | 29.917 ug/L  | 29.917 ppb  | 18:32:38 |
| 3 | Sr 421.552†        | 68.9     | 31.7     | 0.3051 ug/L  | 0.3051 ppb  | 18:32:38 |
| 3 | Sc 361.383         | 841109.2 | 841109.2 | 106.21 %     |             | 18:33:57 |
| 3 | Y 371.029          | 716378.6 | 716378.6 | 105.72 %     |             | 18:33:57 |
| 3 | Ag 328.068†        | -23034.0 | -21819.5 | 2.1337 ug/L  | 2.1337 ppb  | 18:33:57 |
| 3 | As 188.979†        | -162.8   | -134.5   | 10.421 ug/L  | 10.421 ppb  | 18:34:17 |
| 3 | B 249.677†         | 2188.5   | 2437.8   | 9.1149 ug/L  | 9.1149 ppb  | 18:33:57 |
| 3 | Ba 233.527†        | -1631.0  | -1535.4  | -3.5041 ug/L | -3.5041 ppb | 18:33:57 |
| 3 | Be 313.107†        | -3561.7  | 188.4    | 0.0853 ug/L  | 0.0853 ppb  | 18:33:57 |
| 3 | Cd 226.502†        | 2779.2   | 2773.1   | 3.0191 ug/L  | 3.0191 ppb  | 18:33:57 |
| 3 | Co 228.616†        | 606.8    | 617.2    | 11.472 ug/L  | 11.472 ppb  | 18:34:17 |
| 3 | Cr 267.716†        | -471.5   | -496.7   | 8.8447 ug/L  | 8.8447 ppb  | 18:34:17 |
| 3 | Cu 324.752†        | 585.4    | -5660.8  | 0.9844 ug/L  | 0.9844 ppb  | 18:33:57 |
| 3 | Mn 257.610†        | -30722.5 | -29326.3 | -2.9979 ug/L | -2.9979 ppb | 18:33:57 |
| 3 | Mo 202.031†        | -282.8   | -279.3   | 4.0238 ug/L  | 4.0238 ppb  | 18:33:57 |
| 3 | Ni 231.604†        | 160.5    | 90.5     | 3.0161 ug/L  | 3.0161 ppb  | 18:34:17 |
| 3 | P 214.914†         | 579.1    | 380.9    | 3.0828 ug/L  | 3.0828 ppb  | 18:34:17 |
| 3 | Pb 220.353†        | 177.0    | 210.3    | -19.684 ug/L | -19.684 ppb | 18:34:17 |
| 3 | S 181.975 Axial†   | 54.0     | 20.1     | 38.307 ug/L  | 38.307 ppb  | 18:34:17 |
| 3 | Sb 206.836†        | 17.8     | -6.0     | -7.2923 ug/L | -7.2923 ppb | 18:34:17 |
| 3 | Se 196.026†        | -1517.1  | -1407.8  | -153.23 ug/L | -153.23 ppb | 18:34:17 |
| 3 | Si 251.611†        | -457.8   | -907.1   | -35.151 ug/L | -35.151 ppb | 18:33:57 |
| 3 | Sn 189.927†        | -23.2    | -29.6    | -28.892 ug/L | -28.892 ppb | 18:34:17 |
| 3 | Ti 334.940†        | -946.7   | 37.0     | 0.0200 ug/L  | 0.0200 ppb  | 18:33:57 |
| 3 | Tl 190.801†        | -38.7    | -10.5    | -4.6755 ug/L | -4.6755 ppb | 18:34:17 |
| 3 | U 409.014†         | 15.9     | 1987.1   | 17.001 ug/L  | 17.001 ppb  | 18:33:57 |
| 3 | V 292.402†         | 5996.2   | 6838.2   | 0.3804 ug/L  | 0.3804 ppb  | 18:33:57 |
| 3 | Zn 213.857†        | 4165.7   | 3410.9   | -13.295 ug/L | -13.295 ppb | 18:34:17 |
| 3 | SiO2†              | -432.1   | -881.9   | -73.397 ug/L | -73.397 ppb | 18:34:33 |

## Mean Data: LR1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD    |
|--------------------|--------------------------|--------------|--------------|----------|--------------------|----------|--------|
| Sc 361.383         | 837511.5                 | 105.75 %     | %            | 0.401    |                    |          | 0.38%  |
| Sc Radial          | 3313.8                   | 103 %        | %            | 0.4      |                    |          | 0.43%  |
| Y 371.029          | 713499.1                 | 105.29 %     | %            | 0.370    |                    |          | 0.35%  |
| Y RADIAL           | 2721.9                   | 103.6 %      | %            | 0.31     |                    |          | 0.30%  |
| Ag 328.068†        | -21859.7                 | 1.6332 ug/L  | ug/L         | 1.29693  | 1.6332 ppb         | 1.29693  | 79.41% |
| Al 396.153Radial†  | -6.7                     | -13.172 ug/L | ug/L         | 7.3997   | -13.172 ppb        | 7.3997   | 56.18% |
| As 188.979†        | -138.5                   | 7.8245 ug/L  | ug/L         | 2.83239  | 7.8245 ppb         | 2.83239  | 36.20% |
| B 249.677†         | 2382.7                   | 7.6614 ug/L  | ug/L         | 1.26893  | 7.6614 ppb         | 1.26893  | 16.56% |
| Ba 233.527†        | -1473.5                  | -2.9181 ug/L | ug/L         | 0.55859  | -2.9181 ppb        | 0.55859  | 19.14% |
| Be 313.107†        | 200.9                    | 0.0909 ug/L  | ug/L         | 0.00660  | 0.0909 ppb         | 0.00660  | 7.26%  |
| Ca 317.933Radial†  | 2.5                      | 10.359 ug/L  | ug/L         | 6.3804   | 10.359 ppb         | 6.3804   | 61.59% |
| Cd 226.502†        | 2766.4                   | 3.0136 ug/L  | ug/L         | 0.45652  | 3.0136 ppb         | 0.45652  | 15.15% |
| Co 228.616†        | 615.3                    | 11.429 ug/L  | ug/L         | 0.0487   | 11.429 ppb         | 0.0487   | 0.43%  |
| Cr 267.716†        | -492.7                   | 8.8612 ug/L  | ug/L         | 0.11906  | 8.8612 ppb         | 0.11906  | 1.34%  |
| Cu 324.752†        | -5668.3                  | 0.9084 ug/L  | ug/L         | 0.11850  | 0.9084 ppb         | 0.11850  | 13.05% |
| Fe 238.204 Radial† | 13185.5                  | 379500 ug/L  | ug/L         | 3797.6   | 379500 ppb         | 3797.6   | 1.00%  |
| K 766.490 Radial†  | 67.9                     | 33.209 ug/L  | ug/L         | 10.8547  | 33.209 ppb         | 10.8547  | 32.69% |

|                    |          |              |           |             |           |         |
|--------------------|----------|--------------|-----------|-------------|-----------|---------|
| Mg 279.077 IEC†    | 3.9      | 2.8938 ug/L  | 145.44150 | 2.8938 ppb  | 145.44150 | >999.9% |
| Mn 257.610†        | -29187.4 | -2.9025 ug/L | 0.16700   | -2.9025 ppb | 0.16700   | 5.75%   |
| Mo 202.031†        | -287.7   | 3.1882 ug/L  | 2.57779   | 3.1882 ppb  | 2.57779   | 80.86%  |
| Na 589.592 Radial† | 73.2     | 23.167 ug/L  | 7.8285    | 23.167 ppb  | 7.8285    | 33.79%  |
| Ni 231.604†        | 84.7     | 2.8195 ug/L  | 0.19276   | 2.8195 ppb  | 0.19276   | 6.84%   |
| P 214.914†         | 386.4    | 8.2642 ug/L  | 5.62290   | 8.2642 ppb  | 5.62290   | 68.04%  |
| Pb 220.353†        | 228.8    | -16.533 ug/L | 3.0152    | -16.533 ppb | 3.0152    | 18.24%  |
| S 181.975 Axial†   | 16.1     | 30.748 ug/L  | 6.5681    | 30.748 ppb  | 6.5681    | 21.36%  |
| Sb 206.836†        | -6.4     | -7.4223 ug/L | 0.25461   | -7.4223 ppb | 0.25461   | 3.43%   |
| Se 196.026†        | -1419.2  | -165.58 ug/L | 12.157    | -165.58 ppb | 12.157    | 7.34%   |
| Si 251.611†        | -884.4   | -34.255 ug/L | 0.8505    | -34.255 ppb | 0.8505    | 2.48%   |
| Sn 189.927†        | -20.9    | -26.760 ug/L | 1.8466    | -26.760 ppb | 1.8466    | 6.90%   |
| Sr 421.552†        | 26.7     | 0.2573 ug/L  | 0.04189   | 0.2573 ppb  | 0.04189   | 16.28%  |
| Ti 334.940†        | 7.3      | -0.0435 ug/L | 0.05601   | -0.0435 ppb | 0.05601   | 128.87% |
| Tl 190.801†        | -2.7     | -1.4920 ug/L | 2.97604   | -1.4920 ppb | 2.97604   | 199.47% |
| U 409.014†         | 2073.5   | 19.734 ug/L  | 2.4178    | 19.734 ppb  | 2.4178    | 12.25%  |
| V 292.402†         | 6906.3   | 1.0705 ug/L  | 1.07448   | 1.0705 ppb  | 1.07448   | 100.37% |
| Zn 213.857†        | 3444.2   | -12.728 ug/L | 0.6903    | -12.728 ppb | 0.6903    | 5.42%   |
| SiO2†              | -857.8   | -71.355 ug/L | 8.3784    | -71.355 ppb | 8.3784    | 11.74%  |

Sequence No.: 4  
 Sample ID: LR2  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 37  
 Date Collected: 3/10/2010 18:36:44  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: LR2

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3242.4        | 3242.4              | 101 %              |                    | 18:38:57      |
| 1     | Y RADIAL           | 2656.6        | 2656.6              | 101.1 %            |                    | 18:38:57      |
| 1     | Al 396.153Radial†  | -66.3         | -3.5                | -7.6666 ug/L       | -7.6666 ppb        | 18:38:57      |
| 1     | Ca 317.933Radial†  | 17.8          | 5.1                 | 21.446 ug/L        | 21.446 ppb         | 18:38:57      |
| 1     | Fe 238.204 Radial† | 6.8           | -2.8                | -79.692 ug/L       | -79.692 ppb        | 18:38:57      |
| 1     | K 766.490 Radial†  | 2131.8        | 80.2                | 39.196 ug/L        | 39.196 ppb         | 18:38:37      |
| 1     | Mg 279.077 IEC†    | 1.2           | -0.6                | -58.351 ug/L       | -58.351 ppb        | 18:38:57      |
| 1     | Na 589.592 Radial† | -777.0        | -35.3               | -11.166 ug/L       | -11.166 ppb        | 18:38:37      |
| 1     | Sr 421.552†        | 30.4          | -4.6                | -0.0448 ug/L       | -0.0448 ppb        | 18:38:37      |
| 1     | Sc 361.383         | 828242.6      | 828242.6            | 104.58 %           |                    | 18:39:54      |
| 1     | Y 371.029          | 708739.1      | 708739.1            | 104.59 %           |                    | 18:39:54      |
| 1     | Ag 328.068†        | 211.6         | 71.0                | 0.3608 ug/L        | 0.3608 ppb         | 18:39:59      |
| 1     | As 188.979†        | -17.4         | 2.2                 | 1.2486 ug/L        | 1.2486 ppb         | 18:40:19      |
| 1     | B 249.677†         | -141.7        | 241.7               | 7.0616 ug/L        | 7.0616 ppb         | 18:40:19      |
| 1     | Ba 233.527†        | 1063128.1     | 1016562.8           | 10065 ug/L         | 10065 ppb          | 18:39:54      |
| 1     | Be 313.107†        | -3535.6       | 161.2               | 0.0729 ug/L        | 0.0729 ppb         | 18:39:59      |
| 1     | Cd 226.502†        | -126.1        | 35.7                | 0.5511 ug/L        | 0.5511 ppb         | 18:40:19      |
| 1     | Co 228.616†        | -230.6        | -174.6              | 0.0297 ug/L        | 0.0297 ppb         | 18:40:19      |
| 1     | Cr 267.716†        | 95.5          | 38.5                | 0.5292 ug/L        | 0.5292 ppb         | 18:40:19      |
| 1     | Cu 324.752†        | 6413.7        | -79.2               | -0.2652 ug/L       | -0.2652 ppb        | 18:39:59      |
| 1     | Mn 257.610†        | 445.3         | 26.9                | 0.0318 ug/L        | 0.0318 ppb         | 18:40:19      |
| 1     | Mo 202.031†        | 13.8          | 0.2                 | 0.0124 ug/L        | 0.0124 ppb         | 18:40:19      |
| 1     | Ni 231.604†        | 78.1          | 14.0                | 0.4719 ug/L        | 0.4719 ppb         | 18:40:19      |
| 1     | P 214.914†         | 165.1         | -6.4                | -5.0322 ug/L       | -5.0322 ppb        | 18:40:19      |
| 1     | Pb 220.353†        | -32.8         | 12.3                | 2.0266 ug/L        | 2.0266 ppb         | 18:40:19      |
| 1     | S 181.975 Axial†   | 33.8          | 1.5                 | 2.8828 ug/L        | 2.8828 ppb         | 18:40:19      |
| 1     | Sb 206.836†        | 25.2          | 1.4                 | 0.6293 ug/L        | 0.6293 ppb         | 18:40:19      |
| 1     | Se 196.026†        | -19.7         | 1.8                 | 1.3421 ug/L        | 1.3421 ppb         | 18:40:19      |
| 1     | Si 251.611†        | 497.6         | -0.3                | -0.0136 ug/L       | -0.0136 ppb        | 18:40:19      |
| 1     | Sn 189.927†        | 19.3          | 10.7                | 2.5510 ug/L        | 2.5510 ppb         | 18:40:19      |
| 1     | Ti 334.940†        | -966.1        | 4.6                 | 0.0208 ug/L        | 0.0208 ppb         | 18:39:59      |
| 1     | Tl 190.801†        | -27.9         | -0.7                | -0.2854 ug/L       | -0.2854 ppb        | 18:40:19      |
| 1     | U 409.014†         | -2458.2       | -378.4              | -11.486 ug/L       | -11.486 ppb        | 18:39:59      |
| 1     | V 292.402†         | -1251.7       | -4.6                | -0.0490 ug/L       | -0.0490 ppb        | 18:39:59      |
| 1     | Zn 213.857†        | 596.7         | 59.2                | 0.7663 ug/L        | 0.7663 ppb         | 18:40:19      |
| 1     | SiO2†              | 494.9         | -1.8                | -0.1495 ug/L       | -0.1495 ppb        | 18:41:40      |
| 2     | Sc Radial          | 3296.6        | 3296.6              | 103 %              |                    | 18:39:22      |
| 2     | Y RADIAL           | 2701.0        | 2701.0              | 102.8 %            |                    | 18:39:22      |
| 2     | Al 396.153Radial†  | -64.4         | -0.6                | -1.1689 ug/L       | -1.1689 ppb        | 18:39:22      |
| 2     | Ca 317.933Radial†  | 22.9          | 9.8                 | 40.927 ug/L        | 40.927 ppb         | 18:39:22      |
| 2     | Fe 238.204 Radial† | 8.6           | -1.1                | -31.939 ug/L       | -31.939 ppb        | 18:39:22      |
| 2     | K 766.490 Radial†  | 2168.7        | 81.4                | 39.766 ug/L        | 39.766 ppb         | 18:39:02      |
| 2     | Mg 279.077 IEC†    | 1.1           | -0.6                | -63.060 ug/L       | -63.060 ppb        | 18:39:22      |
| 2     | Na 589.592 Radial† | -702.0        | 50.3                | 15.900 ug/L        | 15.900 ppb         | 18:39:02      |
| 2     | Sr 421.552†        | 37.1          | 1.4                 | 0.0135 ug/L        | 0.0135 ppb         | 18:39:02      |
| 2     | Sc 361.383         | 834419.7      | 834419.7            | 105.36 %           |                    | 18:40:24      |
| 2     | Y 371.029          | 712949.5      | 712949.5            | 105.21 %           |                    | 18:40:24      |
| 2     | Ag 328.068†        | 144.2         | 5.5                 | 0.0297 ug/L        | 0.0297 ppb         | 18:40:29      |
| 2     | As 188.979†        | -13.1         | 6.4                 | 3.7219 ug/L        | 3.7219 ppb         | 18:40:49      |
| 2     | B 249.677†         | -139.0        | 245.3               | 7.1587 ug/L        | 7.1587 ppb         | 18:40:49      |
| 2     | Ba 233.527†        | 1072584.0     | 1018012.1           | 10079 ug/L         | 10079 ppb          | 18:40:24      |
| 2     | Be 313.107†        | -3546.4       | 176.0               | 0.0799 ug/L        | 0.0799 ppb         | 18:40:29      |
| 2     | Cd 226.502†        | -117.7        | 44.5                | 0.6801 ug/L        | 0.6801 ppb         | 18:40:49      |
| 2     | Co 228.616†        | -240.6        | -182.5              | -0.1840 ug/L       | -0.1840 ppb        | 18:40:49      |
| 2     | Cr 267.716†        | 54.2          | -1.4                | -0.0154 ug/L       | -0.0154 ppb        | 18:40:49      |
| 2     | Cu 324.752†        | 6400.4        | -137.2              | -0.4579 ug/L       | -0.4579 ppb        | 18:40:29      |
| 2     | Mn 257.610†        | 456.6         | 34.5                | 0.0472 ug/L        | 0.0472 ppb         | 18:40:49      |
| 2     | Mo 202.031†        | 5.8           | -7.5                | -0.6855 ug/L       | -0.6855 ppb        | 18:40:49      |
| 2     | Ni 231.604†        | 68.3          | 4.2                 | 0.1432 ug/L        | 0.1432 ppb         | 18:40:49      |

|   |                    |           |           |              |             |          |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914†         | 181.3     | 7.8       | 6.3466 ug/L  | 6.3466 ppb  | 18:40:49 |
| 2 | Pb 220.353†        | -14.3     | 30.1      | 4.9374 ug/L  | 4.9374 ppb  | 18:40:49 |
| 2 | S 181.975 Axial†   | 28.9      | -3.4      | -6.4427 ug/L | -6.4427 ppb | 18:40:49 |
| 2 | Sb 206.836†        | 23.9      | -0.0      | -0.0322 ug/L | -0.0322 ppb | 18:40:49 |
| 2 | Se 196.026†        | -16.7     | 4.8       | 4.0380 ug/L  | 4.0380 ppb  | 18:40:49 |
| 2 | Si 251.611†        | 520.0     | 17.4      | 0.6898 ug/L  | 0.6898 ppb  | 18:40:49 |
| 2 | Sn 189.927†        | 6.5       | -1.6      | -0.3726 ug/L | -0.3726 ppb | 18:40:49 |
| 2 | Ti 334.940†        | -902.9    | 71.5      | 0.1445 ug/L  | 0.1445 ppb  | 18:40:29 |
| 2 | Tl 190.801†        | -25.5     | 1.8       | 0.7548 ug/L  | 0.7548 ppb  | 18:40:49 |
| 2 | U 409.014†         | -2528.3   | -427.6    | -12.985 ug/L | -12.985 ppb | 18:40:29 |
| 2 | V 292.402†         | -1250.8   | 5.1       | 0.0104 ug/L  | 0.0104 ppb  | 18:40:29 |
| 2 | Zn 213.857†        | 610.8     | 68.4      | 0.8790 ug/L  | 0.8790 ppb  | 18:40:49 |
| 2 | SiO2†              | 520.9     | 19.4      | 1.6492 ug/L  | 1.6492 ppb  | 18:42:00 |
| 3 | Sc Radial          | 3288.2    | 3288.2    | 103 %        |             | 18:39:47 |
| 3 | Y RADIAL           | 2689.8    | 2689.8    | 102.4 %      |             | 18:39:47 |
| 3 | Al 396.153Radial†  | -69.7     | -5.9      | -12.849 ug/L | -12.849 ppb | 18:39:47 |
| 3 | Ca 317.933Radial†  | 20.4      | 7.4       | 31.106 ug/L  | 31.106 ppb  | 18:39:47 |
| 3 | Fe 238.204 Radial† | 10.1      | 0.3       | 9.5900 ug/L  | 9.5900 ppb  | 18:39:47 |
| 3 | K 766.490 Radial†  | 2237.6    | 154.0     | 75.221 ug/L  | 75.221 ppb  | 18:39:27 |
| 3 | Mg 279.077 IEC†    | 1.1       | -0.7      | -69.271 ug/L | -69.271 ppb | 18:39:47 |
| 3 | Na 589.592 Radial† | -727.5    | 23.7      | 7.4886 ug/L  | 7.4886 ppb  | 18:39:27 |
| 3 | Sr 421.552†        | 55.4      | 19.4      | 0.1864 ug/L  | 0.1864 ppb  | 18:39:27 |
| 3 | Sc 361.383         | 829105.7  | 829105.7  | 104.69 %     |             | 18:40:55 |
| 3 | Y 371.029          | 709316.5  | 709316.5  | 104.67 %     |             | 18:40:55 |
| 3 | Ag 328.068†        | 209.1     | 68.4      | 0.3708 ug/L  | 0.3708 ppb  | 18:41:00 |
| 3 | As 188.979†        | -8.9      | 10.3      | 6.0621 ug/L  | 6.0621 ppb  | 18:41:20 |
| 3 | B 249.677†         | -134.8    | 248.4     | 7.2427 ug/L  | 7.2427 ppb  | 18:41:20 |
| 3 | Ba 233.527†        | 1062914.4 | 1015300.4 | 10052 ug/L   | 10052 ppb   | 18:40:55 |
| 3 | Be 313.107†        | -3605.2   | 98.2      | 0.0444 ug/L  | 0.0444 ppb  | 18:41:00 |
| 3 | Cd 226.502†        | -117.6    | 44.0      | 0.6683 ug/L  | 0.6683 ppb  | 18:41:20 |
| 3 | Co 228.616†        | -236.3    | -179.9    | -0.1211 ug/L | -0.1211 ppb | 18:41:20 |
| 3 | Cr 267.716†        | 76.5      | 20.2      | 0.2806 ug/L  | 0.2806 ppb  | 18:41:20 |
| 3 | Cu 324.752†        | 6395.6    | -102.9    | -0.3421 ug/L | -0.3421 ppb | 18:41:00 |
| 3 | Mn 257.610†        | 425.8     | 7.9       | 0.0147 ug/L  | 0.0147 ppb  | 18:41:20 |
| 3 | Mo 202.031†        | 21.3      | 7.3       | 0.6655 ug/L  | 0.6655 ppb  | 18:41:20 |
| 3 | Ni 231.604†        | 78.2      | 14.1      | 0.4752 ug/L  | 0.4752 ppb  | 18:41:20 |
| 3 | P 214.914†         | 173.2     | 1.1       | 0.9555 ug/L  | 0.9555 ppb  | 18:41:20 |
| 3 | Pb 220.353†        | -36.4     | 8.9       | 1.4644 ug/L  | 1.4644 ppb  | 18:41:20 |
| 3 | S 181.975 Axial†   | 28.5      | -3.6      | -6.7800 ug/L | -6.7800 ppb | 18:41:20 |
| 3 | Sb 206.836†        | 25.9      | 2.0       | 0.8750 ug/L  | 0.8750 ppb  | 18:41:20 |
| 3 | Se 196.026†        | -14.4     | 6.9       | 5.9647 ug/L  | 5.9647 ppb  | 18:41:20 |
| 3 | Si 251.611†        | 513.6     | 14.4      | 0.5567 ug/L  | 0.5567 ppb  | 18:41:20 |
| 3 | Sn 189.927†        | 3.9       | -4.0      | -0.9570 ug/L | -0.9570 ppb | 18:41:20 |
| 3 | Ti 334.940†        | -968.7    | 3.1       | 0.0191 ug/L  | 0.0191 ppb  | 18:41:00 |
| 3 | Tl 190.801†        | -17.0     | 9.7       | 4.0191 ug/L  | 4.0191 ppb  | 18:41:20 |
| 3 | U 409.014†         | -2366.2   | -288.1    | -8.7528 ug/L | -8.7528 ppb | 18:41:00 |
| 3 | V 292.402†         | -1305.9   | -55.2     | -0.4623 ug/L | -0.4623 ppb | 18:41:00 |
| 3 | Zn 213.857†        | 589.6     | 51.8      | 0.6590 ug/L  | 0.6590 ppb  | 18:41:20 |
| 3 | SiO2†              | 523.2     | 24.7      | 2.0583 ug/L  | 2.0583 ppb  | 18:42:20 |

## Mean Data: LR2

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383         | 830589.3                 | 104.88 %     |        | 0.422    |                    |          | 0.40%   |
| Sc Radial          | 3275.8                   | 102 %        |        | 0.9      |                    |          | 0.89%   |
| Y 371.029          | 710335.0                 | 104.82 %     |        | 0.337    |                    |          | 0.32%   |
| Y RADIAL           | 2682.5                   | 102.1 %      |        | 0.88     |                    |          | 0.86%   |
| Ag 328.068†        | 48.3                     | 0.2538 ug/L  |        | 0.19409  | 0.2538 ppb         | 0.19409  | 76.48%  |
| Al 396.153Radial†  | -3.3                     | -7.2281 ug/L |        | 5.85228  | -7.2281 ppb        | 5.85228  | 80.97%  |
| As 188.979†        | 6.3                      | 3.6775 ug/L  |        | 2.40705  | 3.6775 ppb         | 2.40705  | 65.45%  |
| B 249.677†         | 245.2                    | 7.1543 ug/L  |        | 0.09062  | 7.1543 ppb         | 0.09062  | 1.27%   |
| Ba 233.527†        | 1016625.1                | 10066 ug/L   |        | 13.4     | 10066 ppb          | 13.4     | 0.13%   |
| Be 313.107†        | 145.1                    | 0.0657 ug/L  |        | 0.01879  | 0.0657 ppb         | 0.01879  | 28.59%  |
| Ca 317.933Radial†  | 7.5                      | 31.159 ug/L  |        | 9.7405   | 31.159 ppb         | 9.7405   | 31.26%  |
| Cd 226.502†        | 41.4                     | 0.6332 ug/L  |        | 0.07131  | 0.6332 ppb         | 0.07131  | 11.26%  |
| Co 228.616†        | -179.0                   | -0.0918 ug/L |        | 0.10986  | -0.0918 ppb        | 0.10986  | 119.65% |
| Cr 267.716†        | 19.1                     | 0.2648 ug/L  |        | 0.27266  | 0.2648 ppb         | 0.27266  | 102.97% |
| Cu 324.752†        | -106.4                   | -0.3551 ug/L |        | 0.09700  | -0.3551 ppb        | 0.09700  | 27.32%  |
| Fe 238.204 Radial† | -1.2                     | -34.014 ug/L |        | 44.6773  | -34.014 ppb        | 44.6773  | 131.35% |
| K 766.490 Radial†  | 105.2                    | 51.394 ug/L  |        | 20.6365  | 51.394 ppb         | 20.6365  | 40.15%  |

|                    |        |              |          |             |          |         |
|--------------------|--------|--------------|----------|-------------|----------|---------|
| Mg 279.077 IEC†    | -0.6   | -63.561 ug/L | 5.4774   | -63.561 ppb | 5.4774   | 8.62%   |
| Mn 257.610†        | 23.1   | 0.0312 ug/L  | 0.01626  | 0.0312 ppb  | 0.01626  | 52.05%  |
| Mo 202.031†        | -0.0   | -0.0025 ug/L | 0.67560  | -0.0025 ppb | 0.67560  | >999.9% |
| Na 589.592 Radial† | 12.9   | 4.0740 ug/L  | 13.85234 | 4.0740 ppb  | 13.85234 | 340.02% |
| Ni 231.604†        | 10.8   | 0.3634 ug/L  | 0.19072  | 0.3634 ppb  | 0.19072  | 52.48%  |
| P 214.914†         | 0.8    | 0.7566 ug/L  | 5.69201  | 0.7566 ppb  | 5.69201  | 752.28% |
| Pb 220.353†        | 17.1   | 2.8094 ug/L  | 1.86415  | 2.8094 ppb  | 1.86415  | 66.35%  |
| S 181.975 Axial†   | -1.8   | -3.4466 ug/L | 5.48406  | -3.4466 ppb | 5.48406  | 159.11% |
| Sb 206.836†        | 1.1    | 0.4907 ug/L  | 0.46923  | 0.4907 ppb  | 0.46923  | 95.63%  |
| Se 196.026†        | 4.5    | 3.7816 ug/L  | 2.32197  | 3.7816 ppb  | 2.32197  | 61.40%  |
| Si 251.611†        | 10.5   | 0.4110 ug/L  | 0.37370  | 0.4110 ppb  | 0.37370  | 90.93%  |
| Sn 189.927†        | 1.7    | 0.4071 ug/L  | 1.87949  | 0.4071 ppb  | 1.87949  | 461.67% |
| Sr 421.552†        | 5.4    | 0.0517 ug/L  | 0.12024  | 0.0517 ppb  | 0.12024  | 232.57% |
| Ti 334.940†        | 26.4   | 0.0615 ug/L  | 0.07193  | 0.0615 ppb  | 0.07193  | 117.02% |
| Tl 190.801†        | 3.6    | 1.4962 ug/L  | 2.24598  | 1.4962 ppb  | 2.24598  | 150.11% |
| U 409.014†         | -364.7 | -11.075 ug/L | 2.1459   | -11.075 ppb | 2.1459   | 19.38%  |
| V 292.402†         | -18.2  | -0.1670 ug/L | 0.25750  | -0.1670 ppb | 0.25750  | 154.22% |
| Zn 213.857†        | 59.8   | 0.7681 ug/L  | 0.11004  | 0.7681 ppb  | 0.11004  | 14.33%  |
| SiO2†              | 14.1   | 1.1860 ug/L  | 1.17452  | 1.1860 ppb  | 1.17452  | 99.03%  |

Sequence No.: 5  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/10/2010 18:44:32  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3350.1        | 3350.1              | 105 %              |                    | 18:46:44      |
| 1     | Y RADIAL           | 2718.9        | 2718.9              | 103.5 %            |                    | 18:46:44      |
| 1     | Al 396.153Radial†  | 2287.2        | 2249.8              | 4844.1 ug/L        | 4844.1 ppb         | 18:46:24      |
| 1     | Ca 317.933Radial†  | 1282.4        | 1214.2              | 5073.0 ug/L        | 5073.0 ppb         | 18:46:44      |
| 1     | Fe 238.204 Radial† | 191.1         | 173.4               | 5004.5 ug/L        | 5004.5 ppb         | 18:46:44      |
| 1     | K 766.490 Radial†  | 12852.7       | 10267.7             | 5010.3 ug/L        | 5010.3 ppb         | 18:46:24      |
| 1     | Mg 279.077 IEC†    | 53.8          | 49.8                | 5149.5 ug/L        | 5149.5 ppb         | 18:46:44      |
| 1     | Na 589.592 Radial† | 29085.5       | 28554.6             | 9033.1 ug/L        | 9033.1 ppb         | 18:46:24      |
| 1     | Sr 421.552†        | 51763.3       | 49479.9             | 476.46 ug/L        | 476.46 ppb         | 18:46:24      |
| 1     | Sc 361.383         | 854038.2      | 854038.2            | 107.84 %           |                    | 18:47:41      |
| 1     | Y 371.029          | 721390.4      | 721390.4            | 106.46 %           |                    | 18:47:41      |
| 1     | Ag 328.068†        | 99828.1       | 92441.0             | 493.19 ug/L        | 493.19 ppb         | 18:47:46      |
| 1     | As 188.979†        | 890.7         | 844.8               | 498.95 ug/L        | 498.95 ppb         | 18:48:06      |
| 1     | B 249.677†         | 17758.3       | 16844.8             | 487.95 ug/L        | 487.95 ppb         | 18:47:46      |
| 1     | Ba 233.527†        | 53731.1       | 49826.1             | 494.56 ug/L        | 494.56 ppb         | 18:47:46      |
| 1     | Be 313.107†        | 1186547.3     | 1103848.8           | 500.34 ug/L        | 500.34 ppb         | 18:47:41      |
| 1     | Cd 226.502†        | 34850.7       | 32474.0             | 495.27 ug/L        | 495.27 ppb         | 18:47:46      |
| 1     | Co 228.616†        | 19674.9       | 18290.8             | 504.74 ug/L        | 504.74 ppb         | 18:47:46      |
| 1     | Cr 267.716†        | 38753.8       | 35884.3             | 493.32 ug/L        | 493.32 ppb         | 18:47:46      |
| 1     | Cu 324.752†        | 160965.0      | 143053.8            | 483.14 ug/L        | 483.14 ppb         | 18:47:46      |
| 1     | Mn 257.610†        | 376361.4      | 348607.9            | 482.43 ug/L        | 482.43 ppb         | 18:47:46      |
| 1     | Mo 202.031†        | 5853.0        | 5414.6              | 494.95 ug/L        | 494.95 ppb         | 18:48:06      |
| 1     | Ni 231.604†        | 16308.4       | 15062.4             | 503.19 ug/L        | 503.19 ppb         | 18:47:46      |
| 1     | P 214.914†         | 3478.1        | 3061.0              | 2363.0 ug/L        | 2363.0 ppb         | 18:48:06      |
| 1     | Pb 220.353†        | 3213.6        | 3023.7              | 497.37 ug/L        | 497.37 ppb         | 18:48:06      |
| 1     | S 181.975 Axial†   | 589.1         | 515.5               | 983.70 ug/L        | 983.70 ppb         | 18:48:06      |
| 1     | Sb 206.836†        | 1252.9        | 1139.1              | 507.00 ug/L        | 507.00 ppb         | 18:48:06      |
| 1     | Se 196.026†        | 604.8         | 581.5               | 513.67 ug/L        | 513.67 ppb         | 18:48:06      |
| 1     | Si 251.611†        | 67590.6       | 62201.9             | 2425.8 ug/L        | 2425.8 ppb         | 18:47:46      |
| 1     | Sn 189.927†        | 2229.6        | 2059.7              | 491.13 ug/L        | 491.13 ppb         | 18:48:06      |
| 1     | Ti 334.940†        | 287702.2      | 267719.9            | 480.07 ug/L        | 480.07 ppb         | 18:47:46      |
| 1     | Tl 190.801†        | 1273.8        | 1207.2              | 499.75 ug/L        | 499.75 ppb         | 18:48:06      |
| 1     | U 409.014†         | 15593.5       | 16432.2             | 497.45 ug/L        | 497.45 ppb         | 18:47:46      |
| 1     | V 292.402†         | 63086.1       | 59693.2             | 495.69 ug/L        | 495.69 ppb         | 18:47:46      |
| 1     | Zn 213.857†        | 42173.7       | 38597.0             | 489.11 ug/L        | 489.11 ppb         | 18:47:46      |
| 1     | SiO2†              | 68149.8       | 62721.5             | 5256.0 ug/L        | 5256.0 ppb         | 18:49:13      |
| 2     | Sc Radial          | 3343.3        | 3343.3              | 104 %              |                    | 18:47:09      |
| 2     | Y RADIAL           | 2709.2        | 2709.2              | 103.1 %            |                    | 18:47:09      |
| 2     | Al 396.153Radial†  | 2226.2        | 2195.8              | 4727.1 ug/L        | 4727.1 ppb         | 18:46:49      |
| 2     | Ca 317.933Radial†  | 1284.3        | 1218.5              | 5091.1 ug/L        | 5091.1 ppb         | 18:47:09      |
| 2     | Fe 238.204 Radial† | 190.7         | 173.3               | 5003.3 ug/L        | 5003.3 ppb         | 18:47:09      |
| 2     | K 766.490 Radial†  | 12795.9       | 10238.2             | 4995.9 ug/L        | 4995.9 ppb         | 18:46:49      |
| 2     | Mg 279.077 IEC†    | 56.5          | 52.4                | 5423.2 ug/L        | 5423.2 ppb         | 18:47:09      |
| 2     | Na 589.592 Radial† | 28914.7       | 28447.5             | 8999.3 ug/L        | 8999.3 ppb         | 18:46:49      |
| 2     | Sr 421.552†        | 50981.7       | 48831.6             | 470.22 ug/L        | 470.22 ppb         | 18:46:49      |
| 2     | Sc 361.383         | 852903.4      | 852903.4            | 107.69 %           |                    | 18:48:12      |
| 2     | Y 371.029          | 721415.0      | 721415.0            | 106.46 %           |                    | 18:48:12      |
| 2     | Ag 328.068†        | 102288.0      | 94848.4             | 505.99 ug/L        | 505.99 ppb         | 18:48:17      |
| 2     | As 188.979†        | 889.6         | 844.9               | 499.11 ug/L        | 499.11 ppb         | 18:48:37      |
| 2     | B 249.677†         | 18338.0       | 17405.0             | 504.23 ug/L        | 504.23 ppb         | 18:48:17      |
| 2     | Ba 233.527†        | 54732.1       | 50821.9             | 504.44 ug/L        | 504.44 ppb         | 18:48:17      |
| 2     | Be 313.107†        | 1186275.2     | 1105060.1           | 500.91 ug/L        | 500.91 ppb         | 18:48:12      |
| 2     | Cd 226.502†        | 35335.7       | 32967.3             | 502.80 ug/L        | 502.80 ppb         | 18:48:17      |
| 2     | Co 228.616†        | 19950.7       | 18571.2             | 512.46 ug/L        | 512.46 ppb         | 18:48:17      |
| 2     | Cr 267.716†        | 39406.0       | 36537.7             | 502.30 ug/L        | 502.30 ppb         | 18:48:17      |
| 2     | Cu 324.752†        | 165772.7      | 147716.6            | 498.87 ug/L        | 498.87 ppb         | 18:48:17      |
| 2     | Mn 257.610†        | 383782.1      | 355962.8            | 492.59 ug/L        | 492.59 ppb         | 18:48:17      |
| 2     | Mo 202.031†        | 5891.5        | 5457.5              | 498.87 ug/L        | 498.87 ppb         | 18:48:37      |
| 2     | Ni 231.604†        | 16639.7       | 15390.2             | 514.15 ug/L        | 514.15 ppb         | 18:48:17      |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 3513.0    | 3097.7    | 2389.4 ug/L | 2389.4 ppb | 18:48:37 |
| 2 | Pb 220.353†        | 3243.8    | 3055.7    | 502.60 ug/L | 502.60 ppb | 18:48:37 |
| 2 | S 181.975 Axial†   | 596.4     | 523.0     | 998.11 ug/L | 998.11 ppb | 18:48:37 |
| 2 | Sb 206.836†        | 1265.6    | 1152.5    | 512.94 ug/L | 512.94 ppb | 18:48:37 |
| 2 | Se 196.026†        | 608.1     | 585.3     | 516.91 ug/L | 516.91 ppb | 18:48:37 |
| 2 | Si 251.611†        | 69391.1   | 63957.2   | 2494.4 ug/L | 2494.4 ppb | 18:48:17 |
| 2 | Sn 189.927†        | 2256.2    | 2087.2    | 497.67 ug/L | 497.67 ppb | 18:48:37 |
| 2 | Ti 334.940†        | 294606.3  | 274485.7  | 492.18 ug/L | 492.18 ppb | 18:48:17 |
| 2 | Tl 190.801†        | 1285.1    | 1219.2    | 504.79 ug/L | 504.79 ppb | 18:48:37 |
| 2 | U 409.014†         | 16162.1   | 16979.4   | 514.05 ug/L | 514.05 ppb | 18:48:17 |
| 2 | V 292.402†         | 64620.5   | 61195.8   | 508.08 ug/L | 508.08 ppb | 18:48:17 |
| 2 | Zn 213.857†        | 42946.0   | 39366.2   | 498.86 ug/L | 498.86 ppb | 18:48:17 |
| 2 | SiO2†              | 68267.0   | 62914.4   | 5272.1 ug/L | 5272.1 ppb | 18:49:18 |
| 3 | Sc Radial          | 3319.3    | 3319.3    | 104 %       |            | 18:47:34 |
| 3 | Y RADIAL           | 2691.1    | 2691.1    | 102.4 %     |            | 18:47:34 |
| 3 | Al 396.153Radial†  | 2169.6    | 2156.6    | 4642.4 ug/L | 4642.4 ppb | 18:47:14 |
| 3 | Ca 317.933Radial†  | 1285.4    | 1228.5    | 5132.9 ug/L | 5132.9 ppb | 18:47:34 |
| 3 | Fe 238.204 Radial† | 190.5     | 174.4     | 5035.5 ug/L | 5035.5 ppb | 18:47:34 |
| 3 | K 766.490 Radial†  | 12764.1   | 10296.2   | 5024.3 ug/L | 5024.3 ppb | 18:47:14 |
| 3 | Mg 279.077 IEC†    | 51.9      | 48.4      | 5008.7 ug/L | 5008.7 ppb | 18:47:34 |
| 3 | Na 589.592 Radial† | 28264.3   | 28019.8   | 8864.0 ug/L | 8864.0 ppb | 18:47:14 |
| 3 | Sr 421.552†        | 49958.9   | 48197.2   | 464.11 ug/L | 464.11 ppb | 18:47:14 |
| 3 | Sc 361.383         | 861715.1  | 861715.1  | 108.81 %    |            | 18:48:43 |
| 3 | Y 371.029          | 728237.3  | 728237.3  | 107.47 %    |            | 18:48:43 |
| 3 | Ag 328.068†        | 101432.6  | 93091.0   | 496.65 ug/L | 496.65 ppb | 18:48:48 |
| 3 | As 188.979†        | 907.6     | 853.0     | 503.80 ug/L | 503.80 ppb | 18:49:08 |
| 3 | B 249.677†         | 18093.9   | 17006.6   | 492.65 ug/L | 492.65 ppb | 18:48:48 |
| 3 | Ba 233.527†        | 54561.8   | 50145.7   | 497.73 ug/L | 497.73 ppb | 18:48:48 |
| 3 | Be 313.107†        | 1198306.2 | 1104853.3 | 500.80 ug/L | 500.80 ppb | 18:48:43 |
| 3 | Cd 226.502†        | 35295.7   | 32595.0   | 497.11 ug/L | 497.11 ppb | 18:48:48 |
| 3 | Co 228.616†        | 19930.8   | 18363.4   | 506.74 ug/L | 506.74 ppb | 18:48:48 |
| 3 | Cr 267.716†        | 39249.2   | 36019.4   | 495.18 ug/L | 495.18 ppb | 18:48:48 |
| 3 | Cu 324.752†        | 163898.9  | 144420.4  | 487.75 ug/L | 487.75 ppb | 18:48:48 |
| 3 | Mn 257.610†        | 381838.1  | 350532.0  | 485.10 ug/L | 485.10 ppb | 18:48:48 |
| 3 | Mo 202.031†        | 5904.3    | 5413.4    | 494.84 ug/L | 494.84 ppb | 18:49:08 |
| 3 | Ni 231.604†        | 16569.0   | 15167.2   | 506.70 ug/L | 506.70 ppb | 18:48:48 |
| 3 | P 214.914†         | 3527.7    | 3077.8    | 2375.5 ug/L | 2375.5 ppb | 18:49:08 |
| 3 | Pb 220.353†        | 3259.9    | 3039.7    | 499.95 ug/L | 499.95 ppb | 18:49:08 |
| 3 | S 181.975 Axial†   | 600.5     | 521.0     | 994.38 ug/L | 994.38 ppb | 18:49:08 |
| 3 | Sb 206.836†        | 1260.6    | 1135.9    | 505.60 ug/L | 505.60 ppb | 18:49:08 |
| 3 | Se 196.026†        | 616.8     | 587.5     | 518.85 ug/L | 518.85 ppb | 18:49:08 |
| 3 | Si 251.611†        | 68815.0   | 62768.8   | 2448.0 ug/L | 2448.0 ppb | 18:48:48 |
| 3 | Sn 189.927†        | 2247.6    | 2057.9    | 490.70 ug/L | 490.70 ppb | 18:49:08 |
| 3 | Ti 334.940†        | 292041.6  | 269331.2  | 482.98 ug/L | 482.98 ppb | 18:48:48 |
| 3 | Tl 190.801†        | 1292.6    | 1214.0    | 502.56 ug/L | 502.56 ppb | 18:49:08 |
| 3 | U 409.014†         | 15881.9   | 16568.5   | 501.58 ug/L | 501.58 ppb | 18:48:48 |
| 3 | V 292.402†         | 64122.1   | 60124.1   | 499.21 ug/L | 499.21 ppb | 18:48:48 |
| 3 | Zn 213.857†        | 42813.6   | 38836.7   | 492.15 ug/L | 492.15 ppb | 18:48:48 |
| 3 | SiO2†              | 69010.9   | 62949.9   | 5275.2 ug/L | 5275.2 ppb | 18:49:23 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383  | 856218.9                 | 108.11 %    |        | 0.605    |                    |          | 0.56% |
| Sc Radial   | 3337.6                   | 104 %       |        | 0.5      |                    |          | 0.48% |
| Y 371.029   | 723680.9                 | 106.79 %    |        | 0.582    |                    |          | 0.55% |
| Y RADIAL  | 2706.4                   | 103.0 %     |        | 0.54     |                    |          | 0.52% |
| Ag 328.068†   | 93460.2                  | 498.61 ug/L |        | 6.620    | 498.61 ppb         | 6.620    | 1.33% |
| QC value within limits for Ag 328.068 Recovery = 99.72%       |                          |             |        |          |                    |          |       |
| Al 396.153Radial†   | 2200.8                   | 4737.9 ug/L |        | 101.30   | 4737.9 ppb         | 101.30   | 2.14% |
| QC value within limits for Al 396.153Radial Recovery = 94.76% |                          |             |        |          |                    |          |       |
| As 188.979†   | 847.5                    | 500.62 ug/L |        | 2.756    | 500.62 ppb         | 2.756    | 0.55% |
| QC value within limits for As 188.979 Recovery = 100.12%      |                          |             |        |          |                    |          |       |
| B 249.677†  | 17085.5                  | 494.94 ug/L |        | 8.380    | 494.94 ppb         | 8.380    | 1.69% |
| QC value within limits for B 249.677 Recovery = 98.99%        |                          |             |        |          |                    |          |       |
| Ba 233.527†   | 50264.6                  | 498.91 ug/L |        | 5.048    | 498.91 ppb         | 5.048    | 1.01% |
| QC value within limits for Ba 233.527 Recovery = 99.78%       |                          |             |        |          |                    |          |       |
| Be 313.107†   | 1104587.4                | 500.68 ug/L |        | 0.305    | 500.68 ppb         | 0.305    | 0.06% |
| QC value within limits for Be 313.107 Recovery = 100.14%      |                          |             |        |          |                    |          |       |
| Ca 317.933Radial†   | 1220.4                   | 5099.0 ug/L |        | 30.75    | 5099.0 ppb         | 30.75    | 0.60% |

|  |          |             |        |            |        |       |
|--|----------|-------------|--------|------------|--------|-------|
| QC value within limits for Ca 317.933 Radial Recovery = 101.98%            |          |             |        |            |        |       |
| Cd 226.502†  | 32678.8  | 498.40 ug/L | 3.928  | 498.40 ppb | 3.928  | 0.79% |
| QC value within limits for Cd 226.502 Recovery = 99.68%                    |          |             |        |            |        |       |
| Co 228.616†  | 18408.5  | 507.98 ug/L | 4.007  | 507.98 ppb | 4.007  | 0.79% |
| QC value within limits for Co 228.616 Recovery = 101.60%                   |          |             |        |            |        |       |
| Cr 267.716†  | 36147.1  | 496.93 ug/L | 4.740  | 496.93 ppb | 4.740  | 0.95% |
| QC value within limits for Cr 267.716 Recovery = 99.39%                    |          |             |        |            |        |       |
| Cu 324.752†  | 145063.6 | 489.92 ug/L | 8.091  | 489.92 ppb | 8.091  | 1.65% |
| QC value within limits for Cu 324.752 Recovery = 97.98%                    |          |             |        |            |        |       |
| Fe 238.204 Radial†   | 173.7    | 5014.5 ug/L | 18.25  | 5014.5 ppb | 18.25  | 0.36% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.29%            |          |             |        |            |        |       |
| K 766.490 Radial†  | 10267.4  | 5010.2 ug/L | 14.17  | 5010.2 ppb | 14.17  | 0.28% |
| QC value within limits for K 766.490 Radial Recovery = 100.20%             |          |             |        |            |        |       |
| Mg 279.077 IEC†  | 50.2     | 5193.8 ug/L | 210.77 | 5193.8 ppb | 210.77 | 4.06% |
| QC value within limits for Mg 279.077 IEC Recovery = 103.88%               |          |             |        |            |        |       |
| Mn 257.610†  | 351700.9 | 486.71 ug/L | 5.268  | 486.71 ppb | 5.268  | 1.08% |
| QC value within limits for Mn 257.610 Recovery = 97.34%                    |          |             |        |            |        |       |
| Mo 202.031†  | 5428.5   | 496.22 ug/L | 2.296  | 496.22 ppb | 2.296  | 0.46% |
| QC value within limits for Mo 202.031 Recovery = 99.24%                    |          |             |        |            |        |       |
| Na 589.592 Radial†   | 28340.6  | 8965.5 ug/L | 89.51  | 8965.5 ppb | 89.51  | 1.00% |
| QC value less than the lower limit for Na 589.592 Radial Recovery = 89.65% |          |             |        |            |        |       |
| Ni 231.604†  | 15206.6  | 508.01 ug/L | 5.594  | 508.01 ppb | 5.594  | 1.10% |
| QC value within limits for Ni 231.604 Recovery = 101.60%                   |          |             |        |            |        |       |
| P 214.914†   | 3078.8   | 2376.0 ug/L | 13.18  | 2376.0 ppb | 13.18  | 0.55% |
| QC value within limits for P 214.914 Recovery = 95.04%                     |          |             |        |            |        |       |
| Pb 220.353†  | 3039.7   | 499.98 ug/L | 2.616  | 499.98 ppb | 2.616  | 0.52% |
| QC value within limits for Pb 220.353 Recovery = 100.00%                   |          |             |        |            |        |       |
| S 181.975 Axial†   | 519.8    | 992.06 ug/L | 7.479  | 992.06 ppb | 7.479  | 0.75% |
| QC value within limits for S 181.975 Axial Recovery = 99.21%               |          |             |        |            |        |       |
| Sb 206.836†  | 1142.5   | 508.51 ug/L | 3.893  | 508.51 ppb | 3.893  | 0.77% |
| QC value within limits for Sb 206.836 Recovery = 101.70%                   |          |             |        |            |        |       |
| Se 196.026†  | 584.8    | 516.48 ug/L | 2.618  | 516.48 ppb | 2.618  | 0.51% |
| QC value within limits for Se 196.026 Recovery = 103.30%                   |          |             |        |            |        |       |
| Si 251.611†  | 62975.9  | 2456.1 ug/L | 35.00  | 2456.1 ppb | 35.00  | 1.42% |
| QC value within limits for Si 251.611 Recovery = 98.24%                    |          |             |        |            |        |       |
| Sn 189.927†  | 2068.3   | 493.17 ug/L | 3.909  | 493.17 ppb | 3.909  | 0.79% |
| QC value within limits for Sn 189.927 Recovery = 98.63%                    |          |             |        |            |        |       |
| Sr 421.552†  | 48836.2  | 470.26 ug/L | 6.177  | 470.26 ppb | 6.177  | 1.31% |
| QC value within limits for Sr 421.552 Recovery = 94.05%                    |          |             |        |            |        |       |
| Ti 334.940†  | 270512.3 | 485.08 ug/L | 6.319  | 485.08 ppb | 6.319  | 1.30% |
| QC value within limits for Ti 334.940 Recovery = 97.02%                    |          |             |        |            |        |       |
| Tl 190.801†  | 1213.5   | 502.37 ug/L | 2.529  | 502.37 ppb | 2.529  | 0.50% |
| QC value within limits for Tl 190.801 Recovery = 100.47%                   |          |             |        |            |        |       |
| U 409.014†   | 16660.0  | 504.36 ug/L | 8.642  | 504.36 ppb | 8.642  | 1.71% |
| QC value within limits for U 409.014 Recovery = 100.87%                    |          |             |        |            |        |       |
| V 292.402†   | 60337.7  | 500.99 ug/L | 6.382  | 500.99 ppb | 6.382  | 1.27% |
| QC value within limits for V 292.402 Recovery = 100.20%                    |          |             |        |            |        |       |
| Zn 213.857†  | 38933.3  | 493.37 ug/L | 4.988  | 493.37 ppb | 4.988  | 1.01% |
| QC value within limits for Zn 213.857 Recovery = 98.67%                    |          |             |        |            |        |       |
| SiO2†  | 62861.9  | 5267.8 ug/L | 10.30  | 5267.8 ppb | 10.30  | 0.20% |
| QC value within limits for SiO2 Recovery = 98.51%                          |          |             |        |            |        |       |
| QC Failed. Continue with analysis.   |          |             |        |            |        |       |



Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/10/2010 18:51:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3255.4           | 3255.4                 | 102 %                 |                       | 18:53:47         |
| 1     | Y RADIAL           | 2664.0           | 2664.0                 | 101.4 %               |                       | 18:53:47         |
| 1     | Al 396.153Radial†  | -70.6            | -7.5                   | -16.157 ug/L          | -16.157 ppb           | 18:53:47         |
| 1     | Ca 317.933Radial†  | 11.8             | -0.9                   | -3.6232 ug/L          | -3.6232 ppb           | 18:53:47         |
| 1     | Fe 238.204 Radial† | 10.4             | 0.7                    | 20.775 ug/L           | 20.775 ppb            | 18:53:47         |
| 1     | K 766.490 Radial†  | 2050.3           | -8.4                   | -4.1152 ug/L          | -4.1152 ppb           | 18:53:27         |
| 1     | Mg 279.077 IEC†    | 0.2              | -1.6                   | -161.39 ug/L          | -161.39 ppb           | 18:53:47         |
| 1     | Na 589.592 Radial† | -762.9           | -18.3                  | -5.8028 ug/L          | -5.8028 ppb           | 18:53:27         |
| 1     | Sr 421.552†        | 9.2              | -25.6                  | -0.2462 ug/L          | -0.2462 ppb           | 18:53:27         |
| 1     | Sc 361.383         | 804661.9         | 804661.9               | 101.60 %              |                       | 18:54:43         |
| 1     | Y 371.029          | 687615.5         | 687615.5               | 101.47 %              |                       | 18:54:43         |
| 1     | Ag 328.068†        | 122.8            | -10.4                  | -0.0512 ug/L          | -0.0512 ppb           | 18:54:43         |
| 1     | As 188.979†        | -12.7            | 6.3                    | 3.7041 ug/L           | 3.7041 ppb            | 18:55:03         |
| 1     | B 249.677†         | -28.8            | 348.9                  | 10.149 ug/L           | 10.149 ppb            | 18:55:03         |
| 1     | Ba 233.527†        | 88.2             | 87.1                   | 0.8624 ug/L           | 0.8624 ppb            | 18:55:03         |
| 1     | Be 313.107†        | -3481.2          | 115.6                  | 0.0525 ug/L           | 0.0525 ppb            | 18:54:43         |
| 1     | Cd 226.502†        | -141.1           | 17.3                   | 0.2627 ug/L           | 0.2627 ppb            | 18:55:03         |
| 1     | Co 228.616†        | -32.0            | 14.4                   | 0.3970 ug/L           | 0.3970 ppb            | 18:55:03         |
| 1     | Cr 267.716†        | 94.2             | 39.9                   | 0.5479 ug/L           | 0.5479 ppb            | 18:55:03         |
| 1     | Cu 324.752†        | 6202.3           | -107.6                 | -0.3628 ug/L          | -0.3628 ppb           | 18:54:43         |
| 1     | Mn 257.610†        | 399.1            | -6.1                   | 0.0003 ug/L           | 0.0003 ppb            | 18:55:03         |
| 1     | Mo 202.031†        | 16.0             | 2.7                    | 0.2477 ug/L           | 0.2477 ppb            | 18:55:03         |
| 1     | Ni 231.604†        | 63.3             | 1.7                    | 0.0578 ug/L           | 0.0578 ppb            | 18:55:03         |
| 1     | P 214.914†         | 168.1            | 1.2                    | 1.0037 ug/L           | 1.0037 ppb            | 18:55:03         |
| 1     | Pb 220.353†        | -32.3            | 11.9                   | 1.9432 ug/L           | 1.9432 ppb            | 18:55:03         |
| 1     | S 181.975 Axial†   | 34.3             | 3.0                    | 5.6515 ug/L           | 5.6515 ppb            | 18:55:03         |
| 1     | Sb 206.836†        | 30.1             | 6.9                    | 2.9872 ug/L           | 2.9872 ppb            | 18:55:03         |
| 1     | Se 196.026†        | -21.6            | -0.6                   | -0.4415 ug/L          | -0.4415 ppb           | 18:55:03         |
| 1     | Si 251.611†        | 542.1            | 57.4                   | 2.2414 ug/L           | 2.2414 ppb            | 18:55:03         |
| 1     | Sn 189.927†        | 18.4             | 10.3                   | 2.4536 ug/L           | 2.4536 ppb            | 18:55:03         |
| 1     | Ti 334.940†        | -889.7           | 52.8                   | 0.1066 ug/L           | 0.1066 ppb            | 18:54:43         |
| 1     | Tl 190.801†        | -26.1            | 0.2                    | 0.1002 ug/L           | 0.1002 ppb            | 18:55:03         |
| 1     | U 409.014†         | -1961.1          | 41.9                   | 1.2688 ug/L           | 1.2688 ppb            | 18:54:43         |
| 1     | V 292.402†         | -1252.8          | -40.7                  | -0.3343 ug/L          | -0.3343 ppb           | 18:54:43         |
| 1     | Zn 213.857†        | 537.6            | 17.7                   | 0.2232 ug/L           | 0.2232 ppb            | 18:55:03         |
| 1     | SiO2†              | 560.0            | 76.2                   | 6.3920 ug/L           | 6.3920 ppb            | 18:56:14         |
| 2     | Sc Radial          | 3243.2           | 3243.2                 | 101 %                 |                       | 18:54:12         |
| 2     | Y RADIAL           | 2642.9           | 2642.9                 | 100.6 %               |                       | 18:54:12         |
| 2     | Al 396.153Radial†  | -59.7            | 3.0                    | 6.5363 ug/L           | 6.5363 ppb            | 18:54:12         |
| 2     | Ca 317.933Radial†  | 10.7             | -2.0                   | -8.1781 ug/L          | -8.1781 ppb           | 18:54:12         |
| 2     | Fe 238.204 Radial† | 6.0              | -3.5                   | -100.88 ug/L          | -100.88 ppb           | 18:54:12         |
| 2     | K 766.490 Radial†  | 2115.3           | 63.4                   | 30.992 ug/L           | 30.992 ppb            | 18:53:52         |
| 2     | Mg 279.077 IEC†    | 0.8              | -0.9                   | -93.142 ug/L          | -93.142 ppb           | 18:54:12         |
| 2     | Na 589.592 Radial† | -752.9           | -11.3                  | -3.5678 ug/L          | -3.5678 ppb           | 18:53:52         |
| 2     | Sr 421.552†        | 30.6             | -4.4                   | -0.0423 ug/L          | -0.0423 ppb           | 18:53:52         |
| 2     | Sc 361.383         | 809783.5         | 809783.5               | 102.25 %              |                       | 18:55:09         |
| 2     | Y 371.029          | 693166.7         | 693166.7               | 102.29 %              |                       | 18:55:09         |
| 2     | Ag 328.068†        | 204.1            | 68.3                   | 0.3340 ug/L           | 0.3340 ppb            | 18:55:09         |
| 2     | As 188.979†        | -15.2            | 4.0                    | 2.3246 ug/L           | 2.3246 ppb            | 18:55:29         |
| 2     | B 249.677†         | -71.2            | 307.6                  | 8.9681 ug/L           | 8.9681 ppb            | 18:55:29         |
| 2     | Ba 233.527†        | 91.2             | 89.5                   | 0.8842 ug/L           | 0.8842 ppb            | 18:55:29         |
| 2     | Be 313.107†        | -3477.9          | 140.5                  | 0.0637 ug/L           | 0.0637 ppb            | 18:55:09         |
| 2     | Cd 226.502†        | -150.4           | 9.1                    | 0.1495 ug/L           | 0.1495 ppb            | 18:55:29         |
| 2     | Co 228.616†        | -38.4            | 8.3                    | 0.2285 ug/L           | 0.2285 ppb            | 18:55:29         |
| 2     | Cr 267.716†        | 103.9            | 48.8                   | 0.6669 ug/L           | 0.6669 ppb            | 18:55:29         |
| 2     | Cu 324.752†        | 6318.6           | -32.4                  | -0.1139 ug/L          | -0.1139 ppb           | 18:55:09         |
| 2     | Mn 257.610†        | 425.6            | 17.4                   | 0.0179 ug/L           | 0.0179 ppb            | 18:55:29         |
| 2     | Mo 202.031†        | 7.0              | -6.2                   | -0.5755 ug/L          | -0.5755 ppb           | 18:55:29         |
| 2     | Ni 231.604†        | 75.4             | 13.1                   | 0.4387 ug/L           | 0.4387 ppb            | 18:55:29         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 168.2    | 0.1      | 0.2254 ug/L  | 0.2254 ppb  | 18:55:29 |
| 2 | Pb 220.353†        | -30.2    | 14.1     | 2.3326 ug/L  | 2.3326 ppb  | 18:55:29 |
| 2 | S 181.975 Axial†   | 33.7     | 2.1      | 4.0931 ug/L  | 4.0931 ppb  | 18:55:29 |
| 2 | Sb 206.836†        | 36.8     | 13.2     | 5.6861 ug/L  | 5.6861 ppb  | 18:55:29 |
| 2 | Se 196.026†        | -17.7    | 3.4      | 2.6157 ug/L  | 2.6157 ppb  | 18:55:29 |
| 2 | Si 251.611†        | 554.2    | 65.9     | 2.5821 ug/L  | 2.5821 ppb  | 18:55:29 |
| 2 | Sn 189.927†        | 12.8     | 4.7      | 1.1283 ug/L  | 1.1283 ppb  | 18:55:29 |
| 2 | Ti 334.940†        | -900.0   | 48.2     | 0.0935 ug/L  | 0.0935 ppb  | 18:55:09 |
| 2 | Tl 190.801†        | -26.8    | -0.2     | -0.0847 ug/L | -0.0847 ppb | 18:55:29 |
| 2 | U 409.014†         | -2075.0  | -57.2    | -1.7285 ug/L | -1.7285 ppb | 18:55:09 |
| 2 | V 292.402†         | -1167.6  | 50.4     | 0.4142 ug/L  | 0.4142 ppb  | 18:55:09 |
| 2 | Zn 213.857†        | 534.7    | 11.6     | 0.1605 ug/L  | 0.1605 ppb  | 18:55:29 |
| 2 | SiO2†              | 551.0    | 63.8     | 5.3771 ug/L  | 5.3771 ppb  | 18:56:34 |
| 3 | Sc Radial          | 3223.1   | 3223.1   | 101 %        |             | 18:54:37 |
| 3 | Y RADIAL           | 2625.3   | 2625.3   | 99.92 %      |             | 18:54:37 |
| 3 | Al 396.153Radial†  | -56.9    | 5.5      | 11.851 ug/L  | 11.851 ppb  | 18:54:37 |
| 3 | Ca 317.933Radial†  | 10.6     | -1.9     | -7.9227 ug/L | -7.9227 ppb | 18:54:37 |
| 3 | Fe 238.204 Radial† | 8.5      | -1.0     | -29.482 ug/L | -29.482 ppb | 18:54:37 |
| 3 | K 766.490 Radial†  | 2110.1   | 71.4     | 34.854 ug/L  | 34.854 ppb  | 18:54:17 |
| 3 | Mg 279.077 IEC†    | 1.5      | -0.2     | -23.309 ug/L | -23.309 ppb | 18:54:37 |
| 3 | Na 589.592 Radial† | -683.3   | 53.3     | 16.856 ug/L  | 16.856 ppb  | 18:54:17 |
| 3 | Sr 421.552†        | 17.7     | -17.0    | -0.1640 ug/L | -0.1640 ppb | 18:54:17 |
| 3 | Sc 361.383         | 811201.1 | 811201.1 | 102.43 %     |             | 18:55:34 |
| 3 | Y 371.029          | 693644.8 | 693644.8 | 102.36 %     |             | 18:55:34 |
| 3 | Ag 328.068†        | 184.4    | 48.7     | 0.2473 ug/L  | 0.2473 ppb  | 18:55:34 |
| 3 | As 188.979†        | -12.5    | 6.7      | 3.9014 ug/L  | 3.9014 ppb  | 18:55:54 |
| 3 | B 249.677†         | -65.8    | 313.0    | 9.1109 ug/L  | 9.1109 ppb  | 18:55:54 |
| 3 | Ba 233.527†        | 97.6     | 95.5     | 0.9442 ug/L  | 0.9442 ppb  | 18:55:54 |
| 3 | Be 313.107†        | -3391.8  | 230.5    | 0.1046 ug/L  | 0.1046 ppb  | 18:55:34 |
| 3 | Cd 226.502†        | -118.9   | 40.2     | 0.6165 ug/L  | 0.6165 ppb  | 18:55:54 |
| 3 | Co 228.616†        | -22.2    | 24.2     | 0.6688 ug/L  | 0.6688 ppb  | 18:55:54 |
| 3 | Cr 267.716†        | 141.0    | 84.8     | 1.1627 ug/L  | 1.1627 ppb  | 18:55:54 |
| 3 | Cu 324.752†        | 6258.8   | -101.6   | -0.3451 ug/L | -0.3451 ppb | 18:55:34 |
| 3 | Mn 257.610†        | 729.0    | 312.8    | 0.4307 ug/L  | 0.4307 ppb  | 18:55:54 |
| 3 | Mo 202.031†        | 16.5     | 3.1      | 0.2775 ug/L  | 0.2775 ppb  | 18:55:54 |
| 3 | Ni 231.604†        | 60.7     | -1.3     | -0.0448 ug/L | -0.0448 ppb | 18:55:54 |
| 3 | P 214.914†         | 173.1    | 4.7      | 3.8571 ug/L  | 3.8571 ppb  | 18:55:54 |
| 3 | Pb 220.353†        | -36.1    | 8.4      | 1.3861 ug/L  | 1.3861 ppb  | 18:55:54 |
| 3 | S 181.975 Axial†   | 35.9     | 4.3      | 8.1296 ug/L  | 8.1296 ppb  | 18:55:54 |
| 3 | Sb 206.836†        | 29.8     | 6.3      | 2.7552 ug/L  | 2.7552 ppb  | 18:55:54 |
| 3 | Se 196.026†        | -15.7    | 5.3      | 4.4851 ug/L  | 4.4851 ppb  | 18:55:54 |
| 3 | Si 251.611†        | 608.7    | 118.2    | 4.6174 ug/L  | 4.6174 ppb  | 18:55:54 |
| 3 | Sn 189.927†        | 15.3     | 7.1      | 1.6972 ug/L  | 1.6972 ppb  | 18:55:54 |
| 3 | Ti 334.940†        | -853.7   | 94.9     | 0.1705 ug/L  | 0.1705 ppb  | 18:55:34 |
| 3 | Tl 190.801†        | -22.6    | 3.9      | 1.5911 ug/L  | 1.5911 ppb  | 18:55:54 |
| 3 | U 409.014†         | -2003.0  | 16.6     | 0.5051 ug/L  | 0.5051 ppb  | 18:55:34 |
| 3 | V 292.402†         | -1272.0  | -49.5    | -0.3976 ug/L | -0.3976 ppb | 18:55:34 |
| 3 | Zn 213.857†        | 584.3    | 59.0     | 0.7604 ug/L  | 0.7604 ppb  | 18:55:54 |
| 3 | SiO2†              | 553.0    | 64.8     | 5.4379 ug/L  | 5.4379 ppb  | 18:56:54 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383  | 808548.8                 | 102.09 %     |        | 0.434    |                    |          | 0.43%   |
| Sc Radial   | 3240.6                   | 101 %        |        | 0.5      |                    |          | 0.50%   |
| Y 371.029   | 691475.7                 | 102.04 %     |        | 0.495    |                    |          | 0.48%   |
| Y RADIAL  | 2644.0                   | 100.6 %      |        | 0.74     |                    |          | 0.73%   |
| Ag 328.068†   | 35.5                     | 0.1767 ug/L  |        | 0.20207  | 0.1767 ppb         | 0.20207  | 114.38% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Al 396.153Radial†   | 0.3                      | 0.7436 ug/L  |        | 14.87538 | 0.7436 ppb         | 14.87538 | >999.9% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |        |          |                    |          |         |
| As 188.979†   | 5.7                      | 3.3101 ug/L  |        | 0.85908  | 3.3101 ppb         | 0.85908  | 25.95%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| B 249.677†  | 323.2                    | 9.4093 ug/L  |        | 0.64451  | 9.4093 ppb         | 0.64451  | 6.85%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |        |          |                    |          |         |
| Ba 233.527†   | 90.7                     | 0.8970 ug/L  |        | 0.04237  | 0.8970 ppb         | 0.04237  | 4.72%   |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Be 313.107†   | 162.2                    | 0.0736 ug/L  |        | 0.02743  | 0.0736 ppb         | 0.02743  | 37.26%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Ca 317.933Radial†   | -1.6                     | -6.5747 ug/L |        | 2.55924  | -6.5747 ppb        | 2.55924  | 38.93%  |

|  |                 |       |              |          |             |          |         |
|--|-----------------|-------|--------------|----------|-------------|----------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| Cd   | 226.502†        | 22.2  | 0.3429 ug/L  | 0.24359  | 0.3429 ppb  | 0.24359  | 71.04%  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Co   | 228.616†        | 15.6  | 0.4314 ug/L  | 0.22215  | 0.4314 ppb  | 0.22215  | 51.49%  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Cr   | 267.716†        | 57.8  | 0.7925 ug/L  | 0.32611  | 0.7925 ppb  | 0.32611  | 41.15%  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Cu   | 324.752†        | -80.5 | -0.2739 ug/L | 0.13889  | -0.2739 ppb | 0.13889  | 50.70%  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Fe   | 238.204 Radial† | -1.3  | -36.529 ug/L | 61.1327  | -36.529 ppb | 61.1327  | 167.36% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| K  | 766.490 Radial† | 42.1  | 20.577 ug/L  | 21.4711  | 20.577 ppb  | 21.4711  | 104.35% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |          |             |          |         |
| Mg   | 279.077 IEC†    | -0.9  | -92.614 ug/L | 69.0420  | -92.614 ppb | 69.0420  | 74.55%  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |          |             |          |         |
| Mn   | 257.610†        | 108.1 | 0.1496 ug/L  | 0.24359  | 0.1496 ppb  | 0.24359  | 162.79% |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Mo   | 202.031†        | -0.2  | -0.0168 ug/L | 0.48411  | -0.0168 ppb | 0.48411  | >999.9% |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Na   | 589.592 Radial† | 7.9   | 2.4952 ug/L  | 12.48710 | 2.4952 ppb  | 12.48710 | 500.44% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |
| Ni   | 231.604†        | 4.5   | 0.1505 ug/L  | 0.25474  | 0.1505 ppb  | 0.25474  | 169.21% |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| P  | 214.914†        | 2.0   | 1.6954 ug/L  | 1.91210  | 1.6954 ppb  | 1.91210  | 112.78% |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Pb   | 220.353†        | 11.5  | 1.8873 ug/L  | 0.47570  | 1.8873 ppb  | 0.47570  | 25.21%  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| S  | 181.975 Axial†  | 3.1   | 5.9581 ug/L  | 2.03566  | 5.9581 ppb  | 2.03566  | 34.17%  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |          |             |          |         |
| Sb   | 206.836†        | 8.8   | 3.8095 ug/L  | 1.62933  | 3.8095 ppb  | 1.62933  | 42.77%  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Se   | 196.026†        | 2.7   | 2.2198 ug/L  | 2.48707  | 2.2198 ppb  | 2.48707  | 112.04% |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Si   | 251.611†        | 80.5  | 3.1470 ug/L  | 1.28481  | 3.1470 ppb  | 1.28481  | 40.83%  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sn   | 189.927†        | 7.4   | 1.7597 ug/L  | 0.66486  | 1.7597 ppb  | 0.66486  | 37.78%  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Sr   | 421.552†        | -15.7 | -0.1508 ug/L | 0.10259  | -0.1508 ppb | 0.10259  | 68.02%  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Ti   | 334.940†        | 65.3  | 0.1235 ug/L  | 0.04118  | 0.1235 ppb  | 0.04118  | 33.33%  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| Tl   | 190.801†        | 1.3   | 0.5355 ug/L  | 0.91879  | 0.5355 ppb  | 0.91879  | 171.56% |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| U  | 409.014†        | 0.4   | 0.0151 ug/L  | 1.55755  | 0.0151 ppb  | 1.55755  | >999.9% |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| V  | 292.402†        | -13.3 | -0.1059 ug/L | 0.45152  | -0.1059 ppb | 0.45152  | 426.31% |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |          |             |          |         |
| Zn   | 213.857†        | 29.4  | 0.3814 ug/L  | 0.32973  | 0.3814 ppb  | 0.32973  | 86.46%  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |          |             |          |         |
| SiO2†  |                 | 68.3  | 5.7357 ug/L  | 0.56922  | 5.7357 ppb  | 0.56922  | 9.92%   |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |          |             |          |         |

All analyte(s) passed QC.

=====  
Analysis Begun

Start Time: 3/10/2010 19:06:40

Plasma On Time: 3/8/2010 08:27:38

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif

Batch ID:

Results Data Set: 031010

Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 3/10/2010 19:06:42

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3379.3           | 3379.3                 | 105 %                 |                       | 19:08:54         |
| 1     | Y RADIAL           | 2765.9           | 2765.9                 | 105.3 %               |                       | 19:08:54         |
| 1     | Al 396.153Radial†  | 2288.4           | 2232.1                 | 4806.0 ug/L           | 4806.0 ppb            | 19:08:34         |
| 1     | Ca 317.933Radial†  | 1288.5           | 1209.4                 | 5053.3 ug/L           | 5053.3 ppb            | 19:08:54         |
| 1     | Fe 238.204 Radial† | 189.6            | 170.3                  | 4916.9 ug/L           | 4916.9 ppb            | 19:08:54         |
| 1     | K 766.490 Radial†  | 12550.7          | 9875.2                 | 4818.4 ug/L           | 4818.4 ppb            | 19:08:34         |
| 1     | Mg 279.077 IEC†    | 53.7             | 49.2                   | 5088.6 ug/L           | 5088.6 ppb            | 19:08:54         |
| 1     | Na 589.592 Radial† | 30275.8          | 29443.2                | 9314.3 ug/L           | 9314.3 ppb            | 19:08:34         |
| 1     | Sr 421.552†        | 52870.4          | 50102.4                | 482.46 ug/L           | 482.46 ppb            | 19:08:34         |
| 1     | Sc 361.383         | 855221.9         | 855221.9               | 107.99 %              |                       | 19:09:51         |
| 1     | Y 371.029          | 722794.6         | 722794.6               | 106.66 %              |                       | 19:09:51         |
| 1     | Ag 328.068†        | 100423.7         | 92864.5                | 495.41 ug/L           | 495.41 ppb            | 19:09:56         |
| 1     | As 188.979†        | 884.7            | 838.1                  | 495.07 ug/L           | 495.07 ppb            | 19:10:16         |
| 1     | B 249.677†         | 17826.3          | 16885.0                | 489.14 ug/L           | 489.14 ppb            | 19:09:56         |
| 1     | Ba 233.527†        | 53766.1          | 49789.6                | 494.20 ug/L           | 494.20 ppb            | 19:09:56         |
| 1     | Be 313.107†        | 1173886.2        | 1090601.2              | 494.35 ug/L           | 494.35 ppb            | 19:09:51         |
| 1     | Cd 226.502†        | 34847.7          | 32426.5                | 494.55 ug/L           | 494.55 ppb            | 19:09:56         |
| 1     | Co 228.616†        | 19691.7          | 18281.1                | 504.46 ug/L           | 504.46 ppb            | 19:09:56         |
| 1     | Cr 267.716†        | 38808.1          | 35884.8                | 493.32 ug/L           | 493.32 ppb            | 19:09:56         |
| 1     | Cu 324.752†        | 162420.8         | 144195.3               | 486.99 ug/L           | 486.99 ppb            | 19:09:56         |
| 1     | Mn 257.610†        | 384187.1         | 355371.7               | 491.78 ug/L           | 491.78 ppb            | 19:09:51         |
| 1     | Mo 202.031†        | 5817.0           | 5373.7                 | 491.20 ug/L           | 491.20 ppb            | 19:10:16         |
| 1     | Ni 231.604†        | 16371.0          | 15099.5                | 504.43 ug/L           | 504.43 ppb            | 19:09:56         |
| 1     | P 214.914†         | 3481.6           | 3059.8                 | 2361.3 ug/L           | 2361.3 ppb            | 19:10:16         |
| 1     | Pb 220.353†        | 3213.2           | 3019.2                 | 496.63 ug/L           | 496.63 ppb            | 19:10:16         |
| 1     | S 181.975 Axial†   | 578.7            | 505.1                  | 963.95 ug/L           | 963.95 ppb            | 19:10:16         |
| 1     | Sb 206.836†        | 1241.8           | 1127.2                 | 501.83 ug/L           | 501.83 ppb            | 19:10:16         |
| 1     | Se 196.026†        | 605.0            | 581.0                  | 512.96 ug/L           | 512.96 ppb            | 19:10:16         |
| 1     | Si 251.611†        | 67993.4          | 62488.1                | 2437.0 ug/L           | 2437.0 ppb            | 19:09:56         |
| 1     | Sn 189.927†        | 2232.7           | 2059.7                 | 491.13 ug/L           | 491.13 ppb            | 19:10:16         |
| 1     | Ti 334.940†        | 288850.4         | 268413.9               | 481.32 ug/L           | 481.32 ppb            | 19:09:56         |
| 1     | Tl 190.801†        | 1266.4           | 1198.7                 | 496.29 ug/L           | 496.29 ppb            | 19:10:16         |
| 1     | U 409.014†         | 15500.7          | 16326.2                | 494.24 ug/L           | 494.24 ppb            | 19:09:56         |
| 1     | V 292.402†         | 63314.0          | 59823.3                | 496.71 ug/L           | 496.71 ppb            | 19:09:56         |
| 1     | Zn 213.857†        | 42280.1          | 38641.5                | 489.68 ug/L           | 489.68 ppb            | 19:09:56         |
| 1     | SiO2†              | 68034.3          | 62527.1                | 5239.8 ug/L           | 5239.8 ppb            | 19:11:24         |
| 2     | Sc Radial          | 3391.2           | 3391.2                 | 106 %                 |                       | 19:09:19         |
| 2     | Y RADIAL           | 2759.2           | 2759.2                 | 105.0 %               |                       | 19:09:19         |
| 2     | Al 396.153Radial†  | 2297.3           | 2232.9                 | 4807.5 ug/L           | 4807.5 ppb            | 19:08:59         |
| 2     | Ca 317.933Radial†  | 1286.2           | 1203.0                 | 5026.2 ug/L           | 5026.2 ppb            | 19:09:19         |
| 2     | Fe 238.204 Radial† | 191.6            | 171.6                  | 4954.6 ug/L           | 4954.6 ppb            | 19:09:19         |
| 2     | K 766.490 Radial†  | 12849.3          | 10115.5                | 4935.8 ug/L           | 4935.8 ppb            | 19:08:59         |
| 2     | Mg 279.077 IEC†    | 54.9             | 50.2                   | 5194.2 ug/L           | 5194.2 ppb            | 19:09:19         |
| 2     | Na 589.592 Radial† | 30174.1          | 29246.1                | 9251.9 ug/L           | 9251.9 ppb            | 19:08:59         |
| 2     | Sr 421.552†        | 53134.7          | 50175.7                | 483.16 ug/L           | 483.16 ppb            | 19:08:59         |
| 2     | Sc 361.383         | 853153.5         | 853153.5               | 107.73 %              |                       | 19:10:22         |
| 2     | Y 371.029          | 721473.1         | 721473.1               | 106.47 %              |                       | 19:10:22         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | Ag 328.068†        | 100838.0  | 93474.5   | 498.66 ug/L | 498.66 ppb | 19:10:27 |
| 2 | As 188.979†        | 901.2     | 855.4     | 505.23 ug/L | 505.23 ppb | 19:10:47 |
| 2 | B 249.677†         | 17872.2   | 16967.7   | 491.53 ug/L | 491.53 ppb | 19:10:27 |
| 2 | Ba 233.527†        | 54000.3   | 50127.7   | 497.55 ug/L | 497.55 ppb | 19:10:27 |
| 2 | Be 313.107†        | 1171319.4 | 1090854.0 | 494.47 ug/L | 494.47 ppb | 19:10:22 |
| 2 | Cd 226.502†        | 34827.4   | 32485.9   | 495.46 ug/L | 495.46 ppb | 19:10:27 |
| 2 | Co 228.616†        | 19712.8   | 18344.8   | 506.22 ug/L | 506.22 ppb | 19:10:27 |
| 2 | Cr 267.716†        | 39002.6   | 36152.5   | 497.00 ug/L | 497.00 ppb | 19:10:27 |
| 2 | Cu 324.752†        | 163232.3  | 145313.3  | 490.76 ug/L | 490.76 ppb | 19:10:27 |
| 2 | Mn 257.610†        | 383195.2  | 355313.5  | 491.70 ug/L | 491.70 ppb | 19:10:22 |
| 2 | Mo 202.031†        | 5859.1    | 5425.9    | 495.97 ug/L | 495.97 ppb | 19:10:47 |
| 2 | Ni 231.604†        | 16360.0   | 15126.1   | 505.32 ug/L | 505.32 ppb | 19:10:27 |
| 2 | P 214.914†         | 3484.1    | 3069.9    | 2368.7 ug/L | 2368.7 ppb | 19:10:47 |
| 2 | Pb 220.353†        | 3197.0    | 3011.4    | 495.35 ug/L | 495.35 ppb | 19:10:47 |
| 2 | S 181.975 Axial†   | 584.6     | 511.9     | 976.82 ug/L | 976.82 ppb | 19:10:47 |
| 2 | Sb 206.836†        | 1244.1    | 1132.2    | 504.07 ug/L | 504.07 ppb | 19:10:47 |
| 2 | Se 196.026†        | 601.9     | 579.4     | 511.73 ug/L | 511.73 ppb | 19:10:47 |
| 2 | Si 251.611†        | 68230.8   | 62861.2   | 2451.6 ug/L | 2451.6 ppb | 19:10:27 |
| 2 | Sn 189.927†        | 2237.3    | 2069.0    | 493.34 ug/L | 493.34 ppb | 19:10:47 |
| 2 | Ti 334.940†        | 290547.7  | 270638.0  | 485.29 ug/L | 485.29 ppb | 19:10:27 |
| 2 | Tl 190.801†        | 1273.2    | 1207.8    | 500.08 ug/L | 500.08 ppb | 19:10:47 |
| 2 | U 409.014†         | 15972.8   | 16799.3   | 508.59 ug/L | 508.59 ppb | 19:10:27 |
| 2 | V 292.402†         | 63682.6   | 60307.5   | 500.76 ug/L | 500.76 ppb | 19:10:27 |
| 2 | Zn 213.857†        | 42349.6   | 38800.9   | 491.70 ug/L | 491.70 ppb | 19:10:27 |
| 2 | SiO2†              | 68042.4   | 62687.4   | 5253.1 ug/L | 5253.1 ppb | 19:11:29 |
| 3 | Sc Radial          | 3379.2    | 3379.2    | 105 %       |            | 19:09:44 |
| 3 | Y RADIAL           | 2766.0    | 2766.0    | 105.3 %     |            | 19:09:44 |
| 3 | Al 396.153Radial†  | 2311.9    | 2254.5    | 4854.3 ug/L | 4854.3 ppb | 19:09:24 |
| 3 | Ca 317.933Radial†  | 1294.5    | 1215.1    | 5076.9 ug/L | 5076.9 ppb | 19:09:44 |
| 3 | Fe 238.204 Radial† | 192.0     | 172.6     | 4982.9 ug/L | 4982.9 ppb | 19:09:44 |
| 3 | K 766.490 Radial†  | 12780.1   | 10093.1   | 4924.8 ug/L | 4924.8 ppb | 19:09:24 |
| 3 | Mg 279.077 IEC†    | 54.3      | 49.8      | 5149.4 ug/L | 5149.4 ppb | 19:09:44 |
| 3 | Na 589.592 Radial† | 30531.0   | 29686.0   | 9391.1 ug/L | 9391.1 ppb | 19:09:24 |
| 3 | Sr 421.552†        | 53491.0   | 50692.4   | 488.14 ug/L | 488.14 ppb | 19:09:24 |
| 3 | Sc 361.383         | 853984.2  | 853984.2  | 107.83 %    |            | 19:10:53 |
| 3 | Y 371.029          | 722305.1  | 722305.1  | 106.59 %    |            | 19:10:53 |
| 3 | Ag 328.068†        | 99304.8   | 91961.6   | 490.63 ug/L | 490.63 ppb | 19:10:58 |
| 3 | As 188.979†        | 887.8     | 842.1     | 497.38 ug/L | 497.38 ppb | 19:11:18 |
| 3 | B 249.677†         | 17580.0   | 16680.5   | 483.19 ug/L | 483.19 ppb | 19:10:58 |
| 3 | Ba 233.527†        | 53254.1   | 49386.9   | 490.20 ug/L | 490.20 ppb | 19:10:58 |
| 3 | Be 313.107†        | 1175232.4 | 1093425.2 | 495.62 ug/L | 495.62 ppb | 19:10:53 |
| 3 | Cd 226.502†        | 34453.4   | 32107.5   | 489.68 ug/L | 489.68 ppb | 19:10:58 |
| 3 | Co 228.616†        | 19485.1   | 18115.9   | 499.92 ug/L | 499.92 ppb | 19:10:58 |
| 3 | Cr 267.716†        | 38472.4   | 35625.5   | 489.76 ug/L | 489.76 ppb | 19:10:58 |
| 3 | Cu 324.752†        | 160103.3  | 142264.1  | 480.47 ug/L | 480.47 ppb | 19:10:58 |
| 3 | Mn 257.610†        | 383229.7  | 354999.5  | 491.27 ug/L | 491.27 ppb | 19:10:53 |
| 3 | Mo 202.031†        | 5836.2    | 5399.4    | 493.55 ug/L | 493.55 ppb | 19:11:18 |
| 3 | Ni 231.604†        | 16187.1   | 14950.9   | 499.47 ug/L | 499.47 ppb | 19:10:58 |
| 3 | P 214.914†         | 3467.3    | 3051.2    | 2355.7 ug/L | 2355.7 ppb | 19:11:18 |
| 3 | Pb 220.353†        | 3203.0    | 3014.0    | 495.79 ug/L | 495.79 ppb | 19:11:18 |
| 3 | S 181.975 Axial†   | 588.5     | 515.0     | 982.72 ug/L | 982.72 ppb | 19:11:18 |
| 3 | Sb 206.836†        | 1242.2    | 1129.3    | 502.73 ug/L | 502.73 ppb | 19:11:18 |
| 3 | Se 196.026†        | 608.2     | 584.7     | 516.36 ug/L | 516.36 ppb | 19:11:18 |
| 3 | Si 251.611†        | 67239.2   | 61880.0   | 2413.2 ug/L | 2413.2 ppb | 19:10:58 |
| 3 | Sn 189.927†        | 2223.3    | 2054.1    | 489.78 ug/L | 489.78 ppb | 19:11:18 |
| 3 | Ti 334.940†        | 285781.6  | 265955.6  | 476.91 ug/L | 476.91 ppb | 19:10:58 |
| 3 | Tl 190.801†        | 1265.4    | 1199.4    | 496.60 ug/L | 496.60 ppb | 19:11:18 |
| 3 | U 409.014†         | 15535.9   | 16379.7   | 495.86 ug/L | 495.86 ppb | 19:10:58 |
| 3 | V 292.402†         | 62642.2   | 59285.2   | 492.33 ug/L | 492.33 ppb | 19:10:58 |
| 3 | Zn 213.857†        | 41748.8   | 38205.5   | 484.14 ug/L | 484.14 ppb | 19:10:58 |
| 3 | SiO2†              | 68657.2   | 63196.1   | 5295.9 ug/L | 5295.9 ppb | 19:11:34 |

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Mean Data: CCV

| Analyte     | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|-------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383  | 854119.9                 | 107.85 %           | 0.131    |                    |          | 0.12% |
| Sc Radial   | 3383.2                   | 106 %              | 0.2      |                    |          | 0.20% |
| Y 371.029   | 722190.9                 | 106.57 %           | 0.099    |                    |          | 0.09% |
| Y RADIAL    | 2763.7                   | 105.2 %            | 0.15     |                    |          | 0.14% |
| Ag 328.068† | 92766.9                  | 494.90 ug/L        | 4.043    | 494.90 ppb         | 4.043    | 0.82% |

QC value within limits for Ag 328.068 Recovery = 98.98%

Al 396.153Radial† 2239.8 4822.6 ug/L 27.46 4822.6 ppb 27.46 0.57%

QC value within limits for Al 396.153Radial Recovery = 96.45%

As 188.979† 845.2 499.23 ug/L 5.325 499.23 ppb 5.325 1.07%

QC value within limits for As 188.979 Recovery = 99.85%

B 249.677† 16844.4 487.95 ug/L 4.295 487.95 ppb 4.295 0.88%

QC value within limits for B 249.677 Recovery = 97.59%

Ba 233.527† 49768.0 493.98 ug/L 3.681 493.98 ppb 3.681 0.75%

QC value within limits for Ba 233.527 Recovery = 98.80%

Be 313.107† 1091626.8 494.81 ug/L 0.699 494.81 ppb 0.699 0.14%

QC value within limits for Be 313.107 Recovery = 98.96%

Ca 317.933Radial† 1209.2 5052.1 ug/L 25.35 5052.1 ppb 25.35 0.50%

QC value within limits for Ca 317.933Radial Recovery = 101.04%

Cd 226.502† 32339.9 493.23 ug/L 3.109 493.23 ppb 3.109 0.63%

QC value within limits for Cd 226.502 Recovery = 98.65%

Co 228.616† 18247.3 503.53 ug/L 3.254 503.53 ppb 3.254 0.65%

QC value within limits for Co 228.616 Recovery = 100.71%

Cr 267.716† 35887.6 493.36 ug/L 3.620 493.36 ppb 3.620 0.73%

QC value within limits for Cr 267.716 Recovery = 98.67%

Cu 324.752† 143924.2 486.07 ug/L 5.206 486.07 ppb 5.206 1.07%

QC value within limits for Cu 324.752 Recovery = 97.21%

Fe 238.204 Radial† 171.5 4951.5 ug/L 33.11 4951.5 ppb 33.11 0.67%

QC value within limits for Fe 238.204 Radial Recovery = 99.03%

K 766.490 Radial† 10027.9 4893.0 ug/L 64.85 4893.0 ppb 64.85 1.33%

QC value within limits for K 766.490 Radial Recovery = 97.86%

Mg 279.077 IEC† 49.7 5144.1 ug/L 53.01 5144.1 ppb 53.01 1.03%

QC value within limits for Mg 279.077 IEC Recovery = 102.88%

Mn 257.610† 355228.2 491.58 ug/L 0.274 491.58 ppb 0.274 0.06%

QC value within limits for Mn 257.610 Recovery = 98.32%

Mo 202.031† 5399.6 493.58 ug/L 2.384 493.58 ppb 2.384 0.48%

QC value within limits for Mo 202.031 Recovery = 98.72%

Na 589.592 Radial† 29458.4 9319.1 ug/L 69.71 9319.1 ppb 69.71 0.75%

QC value within limits for Na 589.592 Radial Recovery = 93.19%

Ni 231.604† 15058.8 503.08 ug/L 3.154 503.08 ppb 3.154 0.63%

QC value within limits for Ni 231.604 Recovery = 100.62%

P 214.914† 3060.3 2361.9 ug/L 6.52 2361.9 ppb 6.52 0.28%

QC value within limits for P 214.914 Recovery = 94.48%

Pb 220.353† 3014.9 495.93 ug/L 0.649 495.93 ppb 0.649 0.13%

QC value within limits for Pb 220.353 Recovery = 99.19%

S 181.975 Axial† 510.7 974.50 ug/L 9.597 974.50 ppb 9.597 0.98%

QC value within limits for S 181.975 Axial Recovery = 97.45%

Sb 206.836† 1129.6 502.88 ug/L 1.127 502.88 ppb 1.127 0.22%

QC value within limits for Sb 206.836 Recovery = 100.58%

Se 196.026† 581.7 513.69 ug/L 2.395 513.69 ppb 2.395 0.47%

QC value within limits for Se 196.026 Recovery = 102.74%

Si 251.611† 62409.8 2434.0 ug/L 19.35 2434.0 ppb 19.35 0.80%

QC value within limits for Si 251.611 Recovery = 97.36%

Sn 189.927† 2060.9 491.42 ug/L 1.794 491.42 ppb 1.794 0.37%

QC value within limits for Sn 189.927 Recovery = 98.28%

Sr 421.552† 50323.5 484.58 ug/L 3.096 484.58 ppb 3.096 0.64%

QC value within limits for Sr 421.552 Recovery = 96.92%

Ti 334.940† 268335.8 481.18 ug/L 4.192 481.18 ppb 4.192 0.87%

QC value within limits for Ti 334.940 Recovery = 96.24%

Tl 190.801† 1202.0 497.66 ug/L 2.103 497.66 ppb 2.103 0.42%

QC value within limits for Tl 190.801 Recovery = 99.53%

U 409.014† 16501.7 499.57 ug/L 7.861 499.57 ppb 7.861 1.57%

QC value within limits for U 409.014 Recovery = 99.91%

V 292.402† 59805.3 496.60 ug/L 4.215 496.60 ppb 4.215 0.85%

QC value within limits for V 292.402 Recovery = 99.32%

Zn 213.857† 38549.3 488.51 ug/L 3.919 488.51 ppb 3.919 0.80%

QC value within limits for Zn 213.857 Recovery = 97.70%

SiO2† 62803.5 5262.9 ug/L 29.33 5262.9 ppb 29.33 0.56%

QC value within limits for SiO2 Recovery = 98.42%

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/10/2010 19:13:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3280.2           | 3280.2                 | 102 %                 |                       | 19:15:56         |
| 1     | Y RADIAL           | 2683.2           | 2683.2                 | 102.1 %               |                       | 19:15:56         |
| 1     | Al 396.153Radial†  | -63.8            | -0.3                   | -0.7001 ug/L          | -0.7001 ppb           | 19:15:56         |
| 1     | Ca 317.933Radial†  | 11.3             | -1.5                   | -6.1998 ug/L          | -6.1998 ppb           | 19:15:56         |
| 1     | Fe 238.204 Radial† | 8.2              | -1.5                   | -42.221 ug/L          | -42.221 ppb           | 19:15:56         |
| 1     | K 766.490 Radial†  | 2066.9           | -7.4                   | -3.6231 ug/L          | -3.6231 ppb           | 19:15:36         |
| 1     | Mg 279.077 IEC†    | -0.3             | -2.0                   | -209.17 ug/L          | -209.17 ppb           | 19:15:56         |
| 1     | Na 589.592 Radial† | -715.1           | 34.0                   | 10.752 ug/L           | 10.752 ppb            | 19:15:36         |
| 1     | Sr 421.552†        | 30.2             | -5.2                   | -0.0498 ug/L          | -0.0498 ppb           | 19:15:36         |
| 1     | Sc 361.383         | 821830.6         | 821830.6               | 103.77 %              |                       | 19:16:53         |
| 1     | Y 371.029          | 702015.8         | 702015.8               | 103.60 %              |                       | 19:16:53         |
| 1     | Ag 328.068†        | 231.5            | 91.8                   | 0.4734 ug/L           | 0.4734 ppb            | 19:16:58         |
| 1     | As 188.979†        | -26.1            | -6.3                   | -3.6907 ug/L          | -3.6907 ppb           | 19:17:18         |
| 1     | B 249.677†         | -141.1           | 241.3                  | 7.0276 ug/L           | 7.0276 ppb            | 19:16:58         |
| 1     | Ba 233.527†        | 66.7             | 64.6                   | 0.6392 ug/L           | 0.6392 ppb            | 19:17:18         |
| 1     | Be 313.107†        | -3548.1          | 122.7                  | 0.0557 ug/L           | 0.0557 ppb            | 19:16:58         |
| 1     | Cd 226.502†        | -132.1           | 29.0                   | 0.4467 ug/L           | 0.4467 ppb            | 19:17:18         |
| 1     | Co 228.616†        | -44.4            | 3.1                    | 0.0844 ug/L           | 0.0844 ppb            | 19:17:18         |
| 1     | Cr 267.716†        | 80.0             | 24.2                   | 0.3304 ug/L           | 0.3304 ppb            | 19:16:58         |
| 1     | Cu 324.752†        | 6342.2           | -100.2                 | -0.3419 ug/L          | -0.3419 ppb           | 19:16:58         |
| 1     | Mn 257.610†        | 423.8            | 9.5                    | 0.0175 ug/L           | 0.0175 ppb            | 19:16:58         |
| 1     | Mo 202.031†        | 11.9             | -1.5                   | -0.1430 ug/L          | -0.1430 ppb           | 19:17:18         |
| 1     | Ni 231.604†        | 69.3             | 6.2                    | 0.2076 ug/L           | 0.2076 ppb            | 19:17:18         |
| 1     | P 214.914†         | 167.7            | -2.7                   | -2.0685 ug/L          | -2.0685 ppb           | 19:17:18         |
| 1     | Pb 220.353†        | -28.0            | 16.7                   | 2.7437 ug/L           | 2.7437 ppb            | 19:17:18         |
| 1     | S 181.975 Axial†   | 27.1             | -4.7                   | -8.8984 ug/L          | -8.8984 ppb           | 19:17:18         |
| 1     | Sb 206.836†        | 23.2             | -0.4                   | -0.1674 ug/L          | -0.1674 ppb           | 19:17:18         |
| 1     | Se 196.026†        | -19.0            | 2.4                    | 1.9033 ug/L           | 1.9033 ppb            | 19:17:18         |
| 1     | Si 251.611†        | 479.6            | -13.9                  | -0.5411 ug/L          | -0.5411 ppb           | 19:17:18         |
| 1     | Sn 189.927†        | 12.3             | 4.1                    | 0.9704 ug/L           | 0.9704 ppb            | 19:17:18         |
| 1     | Ti 334.940†        | -906.7           | 54.7                   | 0.1133 ug/L           | 0.1133 ppb            | 19:16:58         |
| 1     | Tl 190.801†        | -27.1            | -0.2                   | -0.0658 ug/L          | -0.0658 ppb           | 19:17:18         |
| 1     | U 409.014†         | -1970.5          | 73.2                   | 2.2272 ug/L           | 2.2272 ppb            | 19:16:53         |
| 1     | V 292.402†         | -1186.8          | 48.6                   | 0.4025 ug/L           | 0.4025 ppb            | 19:16:58         |
| 1     | Zn 213.857†        | 605.8            | 72.3                   | 0.9309 ug/L           | 0.9309 ppb            | 19:17:18         |
| 1     | SiO2†              | 498.0            | 4.9                    | 0.4150 ug/L           | 0.4150 ppb            | 19:18:38         |
| 2     | Sc Radial          | 3261.4           | 3261.4                 | 102 %                 |                       | 19:16:21         |
| 2     | Y RADIAL           | 2677.5           | 2677.5                 | 101.9 %               |                       | 19:16:21         |
| 2     | Al 396.153Radial†  | -54.5            | 8.5                    | 18.322 ug/L           | 18.322 ppb            | 19:16:21         |
| 2     | Ca 317.933Radial†  | 14.9             | 2.1                    | 8.8864 ug/L           | 8.8864 ppb            | 19:16:21         |
| 2     | Fe 238.204 Radial† | 9.2              | -0.5                   | -13.802 ug/L          | -13.802 ppb           | 19:16:21         |
| 2     | K 766.490 Radial†  | 2113.9           | 50.4                   | 24.615 ug/L           | 24.615 ppb            | 19:16:01         |
| 2     | Mg 279.077 IEC†    | 2.6              | 0.9                    | 92.726 ug/L           | 92.726 ppb            | 19:16:21         |
| 2     | Na 589.592 Radial† | -757.2           | -11.4                  | -3.6063 ug/L          | -3.6063 ppb           | 19:16:01         |
| 2     | Sr 421.552†        | 19.0             | -15.9                  | -0.1537 ug/L          | -0.1537 ppb           | 19:16:01         |
| 2     | Sc 361.383         | 814780.0         | 814780.0               | 102.88 %              |                       | 19:17:23         |
| 2     | Y 371.029          | 697370.5         | 697370.5               | 102.91 %              |                       | 19:17:23         |
| 2     | Ag 328.068†        | 105.3            | -28.9                  | -0.1609 ug/L          | -0.1609 ppb           | 19:17:28         |
| 2     | As 188.979†        | -14.3            | 5.0                    | 2.8995 ug/L           | 2.8995 ppb            | 19:17:48         |
| 2     | B 249.677†         | -160.7           | 221.0                  | 6.4338 ug/L           | 6.4338 ppb            | 19:17:28         |
| 2     | Ba 233.527†        | 43.5             | 42.6                   | 0.4206 ug/L           | 0.4206 ppb            | 19:17:48         |
| 2     | Be 313.107†        | -3551.0          | 90.3                   | 0.0411 ug/L           | 0.0411 ppb            | 19:17:28         |
| 2     | Cd 226.502†        | -137.9           | 22.2                   | 0.3415 ug/L           | 0.3415 ppb            | 19:17:48         |
| 2     | Co 228.616†        | -42.9            | 4.2                    | 0.1155 ug/L           | 0.1155 ppb            | 19:17:48         |
| 2     | Cr 267.716†        | 95.1             | 39.6                   | 0.5418 ug/L           | 0.5418 ppb            | 19:17:28         |
| 2     | Cu 324.752†        | 6315.4           | -73.4                  | -0.2499 ug/L          | -0.2499 ppb           | 19:17:28         |
| 2     | Mn 257.610†        | 411.6            | 1.2                    | -0.0035 ug/L          | -0.0035 ppb           | 19:17:28         |
| 2     | Mo 202.031†        | 12.5             | -0.9                   | -0.0823 ug/L          | -0.0823 ppb           | 19:17:48         |
| 2     | Ni 231.604†        | 73.9             | 11.2                   | 0.3735 ug/L           | 0.3735 ppb            | 19:17:48         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 166.8    | -2.2     | -1.6926 ug/L | -1.6926 ppb | 19:17:48 |
| 2 | Pb 220.353†        | -43.3    | 1.6      | 0.2700 ug/L  | 0.2700 ppb  | 19:17:48 |
| 2 | S 181.975 Axial†   | 22.4     | -9.0     | -17.259 ug/L | -17.259 ppb | 19:17:48 |
| 2 | Sb 206.836†        | 29.0     | 5.4      | 2.3558 ug/L  | 2.3558 ppb  | 19:17:48 |
| 2 | Se 196.026†        | -6.5     | 14.4     | 12.277 ug/L  | 12.277 ppb  | 19:17:48 |
| 2 | Si 251.611†        | 488.7    | -1.1     | -0.0432 ug/L | -0.0432 ppb | 19:17:48 |
| 2 | Sn 189.927†        | 13.1     | 4.9      | 1.1683 ug/L  | 1.1683 ppb  | 19:17:48 |
| 2 | Ti 334.940†        | -895.6   | 57.9     | 0.0964 ug/L  | 0.0964 ppb  | 19:17:28 |
| 2 | Tl 190.801†        | -23.8    | 2.8      | 1.1701 ug/L  | 1.1701 ppb  | 19:17:48 |
| 2 | U 409.014†         | -1954.4  | 72.3     | 2.1977 ug/L  | 2.1977 ppb  | 19:17:23 |
| 2 | V 292.402†         | -1264.7  | -37.1    | -0.2970 ug/L | -0.2970 ppb | 19:17:28 |
| 2 | Zn 213.857†        | 611.0    | 82.5     | 1.0549 ug/L  | 1.0549 ppb  | 19:17:48 |
| 2 | SiO2†              | 508.6    | 19.3     | 1.6217 ug/L  | 1.6217 ppb  | 19:18:58 |
| 3 | Sc Radial          | 3264.7   | 3264.7   | 102 %        |             | 19:16:46 |
| 3 | Y RADIAL           | 2659.8   | 2659.8   | 101.2 %      |             | 19:16:46 |
| 3 | Al 396.153Radial†  | -63.6    | -0.4     | -0.9011 ug/L | -0.9011 ppb | 19:16:46 |
| 3 | Ca 317.933Radial†  | 15.1     | 2.3      | 9.6209 ug/L  | 9.6209 ppb  | 19:16:46 |
| 3 | Fe 238.204 Radial† | 7.5      | -2.1     | -60.503 ug/L | -60.503 ppb | 19:16:46 |
| 3 | K 766.490 Radial†  | 2045.3   | -19.1    | -9.3151 ug/L | -9.3151 ppb | 19:16:26 |
| 3 | Mg 279.077 IEC†    | 1.0      | -0.7     | -74.089 ug/L | -74.089 ppb | 19:16:46 |
| 3 | Na 589.592 Radial† | -733.7   | 12.5     | 3.9456 ug/L  | 3.9456 ppb  | 19:16:26 |
| 3 | Sr 421.552†        | 30.5     | -4.7     | -0.0454 ug/L | -0.0454 ppb | 19:16:26 |
| 3 | Sc 361.383         | 812683.0 | 812683.0 | 102.62 %     |             | 19:17:53 |
| 3 | Y 371.029          | 695196.8 | 695196.8 | 102.59 %     |             | 19:17:53 |
| 3 | Ag 328.068†        | 189.1    | 53.0     | 0.2596 ug/L  | 0.2596 ppb  | 19:17:58 |
| 3 | As 188.979†        | -19.9    | -0.6     | -0.3366 ug/L | -0.3366 ppb | 19:18:18 |
| 3 | B 249.677†         | -157.6   | 223.7    | 6.5184 ug/L  | 6.5184 ppb  | 19:17:58 |
| 3 | Ba 233.527†        | 61.5     | 60.2     | 0.5928 ug/L  | 0.5928 ppb  | 19:18:18 |
| 3 | Be 313.107†        | -3612.9  | 21.1     | 0.0099 ug/L  | 0.0099 ppb  | 19:17:58 |
| 3 | Cd 226.502†        | -139.2   | 20.6     | 0.3203 ug/L  | 0.3203 ppb  | 19:18:18 |
| 3 | Co 228.616†        | -41.3    | 5.6      | 0.1562 ug/L  | 0.1562 ppb  | 19:18:18 |
| 3 | Cr 267.716†        | 106.3    | 50.8     | 0.6935 ug/L  | 0.6935 ppb  | 19:17:58 |
| 3 | Cu 324.752†        | 6396.6   | 21.6     | 0.0693 ug/L  | 0.0693 ppb  | 19:17:58 |
| 3 | Mn 257.610†        | 412.1    | 2.7      | 0.0008 ug/L  | 0.0008 ppb  | 19:17:58 |
| 3 | Mo 202.031†        | 16.5     | 3.0      | 0.2717 ug/L  | 0.2717 ppb  | 19:18:18 |
| 3 | Ni 231.604†        | 70.7     | 8.3      | 0.2759 ug/L  | 0.2759 ppb  | 19:18:18 |
| 3 | P 214.914†         | 170.2    | 1.6      | 1.3042 ug/L  | 1.3042 ppb  | 19:18:18 |
| 3 | Pb 220.353†        | -42.8    | 2.0      | 0.3317 ug/L  | 0.3317 ppb  | 19:18:18 |
| 3 | S 181.975 Axial†   | 36.5     | 4.7      | 9.0457 ug/L  | 9.0457 ppb  | 19:18:18 |
| 3 | Sb 206.836†        | 31.4     | 7.9      | 3.3919 ug/L  | 3.3919 ppb  | 19:18:18 |
| 3 | Se 196.026†        | -19.2    | 2.0      | 1.5173 ug/L  | 1.5173 ppb  | 19:18:18 |
| 3 | Si 251.611†        | 481.5    | -6.9     | -0.2734 ug/L | -0.2734 ppb | 19:18:18 |
| 3 | Sn 189.927†        | 12.3     | 4.2      | 1.0121 ug/L  | 1.0121 ppb  | 19:18:18 |
| 3 | Ti 334.940†        | -857.1   | 93.2     | 0.1740 ug/L  | 0.1740 ppb  | 19:17:58 |
| 3 | Tl 190.801†        | -25.3    | 1.3      | 0.5448 ug/L  | 0.5448 ppb  | 19:18:18 |
| 3 | U 409.014†         | -2007.9  | 15.4     | 0.4719 ug/L  | 0.4719 ppb  | 19:17:53 |
| 3 | V 292.402†         | -1293.0  | -67.7    | -0.5433 ug/L | -0.5433 ppb | 19:17:58 |
| 3 | Zn 213.857†        | 608.5    | 81.6     | 1.0506 ug/L  | 1.0506 ppb  | 19:18:18 |
| 3 | SiO2†              | 481.5    | -5.8     | -0.4948 ug/L | -0.4948 ppb | 19:19:18 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383  | 816431.2                 | 103.09 %     |        | 0.605    |                    |          | 0.59%   |
| Sc Radial   | 3268.8                   | 102 %        |        | 0.3      |                    |          | 0.31%   |
| Y 371.029   | 698194.3                 | 103.03 %     |        | 0.514    |                    |          | 0.50%   |
| Y RADIAL  | 2673.5                   | 101.8 %      |        | 0.46     |                    |          | 0.46%   |
| Ag 328.068†   | 38.6                     | 0.1907 ug/L  |        | 0.32270  | 0.1907 ppb         | 0.32270  | 169.21% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Al 396.153Radial†   | 2.6                      | 5.5736 ug/L  |        | 11.04094 | 5.5736 ppb         | 11.04094 | 198.09% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |        |          |                    |          |         |
| As 188.979†   | -0.6                     | -0.3760 ug/L |        | 3.29530  | -0.3760 ppb        | 3.29530  | 876.51% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| B 249.677†  | 228.6                    | 6.6599 ug/L  |        | 0.32117  | 6.6599 ppb         | 0.32117  | 4.82%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |        |          |                    |          |         |
| Ba 233.527†   | 55.8                     | 0.5509 ug/L  |        | 0.11515  | 0.5509 ppb         | 0.11515  | 20.90%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Be 313.107†   | 78.0                     | 0.0356 ug/L  |        | 0.02339  | 0.0356 ppb         | 0.02339  | 65.75%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Ca 317.933Radial†   | 1.0                      | 4.1025 ug/L  |        | 8.92962  | 4.1025 ppb         | 8.92962  | 217.66% |



|  |                 |       |              |          |             |          |         |  |  |
|--|-----------------|-------|--------------|----------|-------------|----------|---------|--|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| Cd   | 226.502†        | 23.9  | 0.3695 ug/L  | 0.06772  | 0.3695 ppb  | 0.06772  | 18.33%  |  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Co   | 228.616†        | 4.3   | 0.1187 ug/L  | 0.03604  | 0.1187 ppb  | 0.03604  | 30.36%  |  |  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Cr   | 267.716†        | 38.2  | 0.5219 ug/L  | 0.18233  | 0.5219 ppb  | 0.18233  | 34.94%  |  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Cu   | 324.752†        | -50.7 | -0.1742 ug/L | 0.21586  | -0.1742 ppb | 0.21586  | 123.93% |  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Fe   | 238.204 Radial† | -1.3  | -38.842 ug/L | 23.5331  | -38.842 ppb | 23.5331  | 60.59%  |  |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| K  | 766.490 Radial† | 8.0   | 3.8923 ug/L  | 18.17073 | 3.8923 ppb  | 18.17073 | 466.84% |  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |          |             |          |         |  |  |
| Mg   | 279.077 IEC†    | -0.6  | -63.511 ug/L | 151.2254 | -63.511 ppb | 151.2254 | 238.11% |  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |          |             |          |         |  |  |
| Mn   | 257.610†        | 4.5   | 0.0049 ug/L  | 0.01111  | 0.0049 ppb  | 0.01111  | 224.64% |  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Mo   | 202.031†        | 0.2   | 0.0155 ug/L  | 0.22396  | 0.0155 ppb  | 0.22396  | >999.9% |  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Na   | 589.592 Radial† | 11.7  | 3.6971 ug/L  | 7.18242  | 3.6971 ppb  | 7.18242  | 194.27% |  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |          |             |          |         |  |  |
| Ni   | 231.604†        | 8.5   | 0.2857 ug/L  | 0.08341  | 0.2857 ppb  | 0.08341  | 29.20%  |  |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| P  | 214.914†        | -1.1  | -0.8190 ug/L | 1.84830  | -0.8190 ppb | 1.84830  | 225.69% |  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| Pb   | 220.353†        | 6.8   | 1.1151 ug/L  | 1.41072  | 1.1151 ppb  | 1.41072  | 126.51% |  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| S  | 181.975 Axial†  | -3.0  | -5.7040 ug/L | 13.44017 | -5.7040 ppb | 13.44017 | 235.63% |  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |          |             |          |         |  |  |
| Sb   | 206.836†        | 4.3   | 1.8601 ug/L  | 1.83073  | 1.8601 ppb  | 1.83073  | 98.42%  |  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Se   | 196.026†        | 6.2   | 5.2324 ug/L  | 6.10359  | 5.2324 ppb  | 6.10359  | 116.65% |  |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Si   | 251.611†        | -7.3  | -0.2859 ug/L | 0.24920  | -0.2859 ppb | 0.24920  | 87.16%  |  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Sn   | 189.927†        | 4.4   | 1.0503 ug/L  | 0.10434  | 1.0503 ppb  | 0.10434  | 9.93%   |  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Sr   | 421.552†        | -8.6  | -0.0830 ug/L | 0.06125  | -0.0830 ppb | 0.06125  | 73.81%  |  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Ti   | 334.940†        | 68.6  | 0.1279 ug/L  | 0.04082  | 0.1279 ppb  | 0.04082  | 31.92%  |  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| Tl   | 190.801†        | 1.3   | 0.5497 ug/L  | 0.61793  | 0.5497 ppb  | 0.61793  | 112.41% |  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| U  | 409.014†        | 53.6  | 1.6323 ug/L  | 1.00501  | 1.6323 ppb  | 1.00501  | 61.57%  |  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| V  | 292.402†        | -18.7 | -0.1459 ug/L | 0.49068  | -0.1459 ppb | 0.49068  | 336.25% |  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |          |             |          |         |  |  |
| Zn   | 213.857†        | 78.8  | 1.0121 ug/L  | 0.07042  | 1.0121 ppb  | 0.07042  | 6.96%   |  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |          |             |          |         |  |  |
| SiO2†  |                 | 6.1   | 0.5140 ug/L  | 1.06167  | 0.5140 ppb  | 1.06167  | 206.57% |  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |          |             |          |         |  |  |

All analyte(s) passed QC.

Sequence No.: 3  
 Sample ID: 1202046565|954668|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 38  
 Date Collected: 3/10/2010 19:21:28  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202046565|954668|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3345.7           | 3345.7                 | 104 %                 |                       | 19:23:41         |
| 1     | Y RADIAL           | 2751.4           | 2751.4                 | 104.7 %               |                       | 19:23:41         |
| 1     | Al 396.153Radial†  | -61.4            | 3.2                    | 6.9919 ug/L           | 6.9919 ppb            | 19:23:41         |
| 1     | Ca 317.933Radial†  | 12.8             | -0.2                   | -1.0226 ug/L          | -1.0226 ppb           | 19:23:41         |
| 1     | Fe 238.204 Radial† | 7.4              | -2.4                   | -68.170 ug/L          | -68.170 ppb           | 19:23:41         |
| 1     | K 766.490 Radial†  | 1927.5           | -180.5                 | -88.190 ug/L          | -88.190 ppb           | 19:23:21         |
| 1     | Mg 279.077 IEC†    | -0.8             | -2.5                   | -260.23 ug/L          | -260.23 ppb           | 19:23:41         |
| 1     | Na 589.592 Radial† | -695.4           | 66.5                   | 21.043 ug/L           | 21.043 ppb            | 19:23:21         |
| 1     | Sr 421.552†        | 14.5             | -20.8                  | -0.2001 ug/L          | -0.2001 ppb           | 19:23:21         |
| 1     | Sc 361.383         | 826777.3         | 826777.3               | 104.40 %              |                       | 19:24:38         |
| 1     | Y 371.029          | 705847.3         | 705847.3               | 104.16 %              |                       | 19:24:38         |
| 1     | Ag 328.068†        | 92.8             | -42.4                  | -0.2483 ug/L          | -0.2483 ppb           | 19:24:43         |
| 1     | As 188.979†        | -30.2            | -10.1                  | -5.9304 ug/L          | -5.9304 ppb           | 19:25:03         |
| 1     | B 249.677†         | -261.9           | 126.3                  | 3.6874 ug/L           | 3.6874 ppb            | 19:24:43         |
| 1     | Ba 233.527†        | 38.3             | 37.0                   | 0.3661 ug/L           | 0.3661 ppb            | 19:25:03         |
| 1     | Be 313.107†        | -3542.9          | 148.2                  | 0.0675 ug/L           | 0.0675 ppb            | 19:24:43         |
| 1     | Cd 226.502†        | -138.0           | 24.0                   | 0.3752 ug/L           | 0.3752 ppb            | 19:25:03         |
| 1     | Co 228.616†        | -45.1            | 2.7                    | 0.0744 ug/L           | 0.0744 ppb            | 19:25:03         |
| 1     | Cr 267.716†        | 87.5             | 31.0                   | 0.4215 ug/L           | 0.4215 ppb            | 19:24:43         |
| 1     | Cu 324.752†        | 6200.1           | -272.9                 | -0.9295 ug/L          | -0.9295 ppb           | 19:24:43         |
| 1     | Mn 257.610†        | 532.3            | 111.0                  | 0.1574 ug/L           | 0.1574 ppb            | 19:24:43         |
| 1     | Mo 202.031†        | 13.8             | 0.2                    | 0.0122 ug/L           | 0.0122 ppb            | 19:25:03         |
| 1     | Ni 231.604†        | 72.3             | 8.6                    | 0.2889 ug/L           | 0.2889 ppb            | 19:25:03         |
| 1     | P 214.914†         | 173.7            | 2.1                    | 1.9364 ug/L           | 1.9364 ppb            | 19:25:03         |
| 1     | Pb 220.353†        | -39.8            | 5.5                    | 0.9182 ug/L           | 0.9182 ppb            | 19:25:03         |
| 1     | S 181.975 Axial†   | 34.0             | 1.8                    | 3.3864 ug/L           | 3.3864 ppb            | 19:25:03         |
| 1     | Sb 206.836†        | 42.4             | 17.9                   | 7.6929 ug/L           | 7.6929 ppb            | 19:25:03         |
| 1     | Se 196.026†        | -22.4            | -0.8                   | -0.8753 ug/L          | -0.8753 ppb           | 19:25:03         |
| 1     | Si 251.611†        | 729.3            | 222.4                  | 8.6966 ug/L           | 8.6966 ppb            | 19:25:03         |
| 1     | Sn 189.927†        | 10.1             | 1.9                    | 0.4492 ug/L           | 0.4492 ppb            | 19:25:03         |
| 1     | Ti 334.940†        | -838.5           | 125.2                  | 0.2424 ug/L           | 0.2424 ppb            | 19:24:43         |
| 1     | Tl 190.801†        | -25.8            | 1.3                    | 0.5178 ug/L           | 0.5178 ppb            | 19:25:03         |
| 1     | U 409.014†         | -1805.0          | 243.1                  | 7.3898 ug/L           | 7.3898 ppb            | 19:24:38         |
| 1     | V 292.402†         | -1124.4          | 115.2                  | 0.9630 ug/L           | 0.9630 ppb            | 19:24:43         |
| 1     | Zn 213.857†        | 677.9            | 137.9                  | 1.7740 ug/L           | 1.7740 ppb            | 19:25:03         |
| 1     | SiO2†              | 750.0            | 243.4                  | 20.445 ug/L           | 20.445 ppb            | 19:26:23         |
| 2     | Sc Radial          | 3336.1           | 3336.1                 | 104 %                 |                       | 19:24:06         |
| 2     | Y RADIAL           | 2722.7           | 2722.7                 | 103.6 %               |                       | 19:24:06         |
| 2     | Al 396.153Radial†  | -58.0            | 6.3                    | 13.633 ug/L           | 13.633 ppb            | 19:24:06         |
| 2     | Ca 317.933Radial†  | 10.6             | -2.3                   | -9.5178 ug/L          | -9.5178 ppb           | 19:24:06         |
| 2     | Fe 238.204 Radial† | 7.7              | -2.0                   | -58.906 ug/L          | -58.906 ppb           | 19:24:06         |
| 2     | K 766.490 Radial†  | 2155.0           | 43.4                   | 21.202 ug/L           | 21.202 ppb            | 19:23:46         |
| 2     | Mg 279.077 IEC†    | -0.1             | -1.8                   | -190.09 ug/L          | -190.09 ppb           | 19:24:06         |
| 2     | Na 589.592 Radial† | -767.2           | -4.4                   | -1.3838 ug/L          | -1.3838 ppb           | 19:23:46         |
| 2     | Sr 421.552†        | 11.4             | -23.7                  | -0.2283 ug/L          | -0.2283 ppb           | 19:23:46         |
| 2     | Sc 361.383         | 823638.3         | 823638.3               | 104.00 %              |                       | 19:25:08         |
| 2     | Y 371.029          | 703546.0         | 703546.0               | 103.82 %              |                       | 19:25:08         |
| 2     | Ag 328.068†        | 221.4            | 81.6                   | 0.4107 ug/L           | 0.4107 ppb            | 19:25:13         |
| 2     | As 188.979†        | -26.7            | -6.8                   | -3.9958 ug/L          | -3.9958 ppb           | 19:25:33         |
| 2     | B 249.677†         | -223.4           | 162.5                  | 4.7378 ug/L           | 4.7378 ppb            | 19:25:13         |
| 2     | Ba 233.527†        | 44.1             | 42.7                   | 0.4211 ug/L           | 0.4211 ppb            | 19:25:33         |
| 2     | Be 313.107†        | -3615.0          | 65.9                   | 0.0301 ug/L           | 0.0301 ppb            | 19:25:13         |
| 2     | Cd 226.502†        | -139.1           | 22.5                   | 0.3514 ug/L           | 0.3514 ppb            | 19:25:33         |
| 2     | Co 228.616†        | -43.9            | 3.7                    | 0.1042 ug/L           | 0.1042 ppb            | 19:25:33         |
| 2     | Cr 267.716†        | 35.8             | -18.4                  | -0.2569 ug/L          | -0.2569 ppb           | 19:25:13         |
| 2     | Cu 324.752†        | 6272.1           | -181.1                 | -0.6172 ug/L          | -0.6172 ppb           | 19:25:13         |
| 2     | Mn 257.610†        | 490.8            | 73.1                   | 0.1031 ug/L           | 0.1031 ppb            | 19:25:13         |
| 2     | Mo 202.031†        | 19.8             | 6.0                    | 0.5404 ug/L           | 0.5404 ppb            | 19:25:33         |
| 2     | Ni 231.604†        | 104.1            | 39.5                   | 1.3193 ug/L           | 1.3193 ppb            | 19:25:33         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 177.9    | 6.8      | 5.5892 ug/L  | 5.5892 ppb  | 19:25:33 |
| 2 | Pb 220.353†        | -36.4    | 8.7      | 1.4409 ug/L  | 1.4409 ppb  | 19:25:33 |
| 2 | S 181.975 Axial†   | 31.8     | -0.3     | -0.5265 ug/L | -0.5265 ppb | 19:25:33 |
| 2 | Sb 206.836†        | 37.8     | 13.6     | 5.8570 ug/L  | 5.8570 ppb  | 19:25:33 |
| 2 | Se 196.026†        | -14.9    | 6.3      | 5.2473 ug/L  | 5.2473 ppb  | 19:25:33 |
| 2 | Si 251.611†        | 727.1    | 223.1    | 8.7141 ug/L  | 8.7141 ppb  | 19:25:33 |
| 2 | Sn 189.927†        | 3.2      | -4.7     | -1.1184 ug/L | -1.1184 ppb | 19:25:33 |
| 2 | Ti 334.940†        | -892.0   | 70.7     | 0.1392 ug/L  | 0.1392 ppb  | 19:25:13 |
| 2 | Tl 190.801†        | -27.6    | -0.6     | -0.2364 ug/L | -0.2364 ppb | 19:25:33 |
| 2 | U 409.014†         | -1897.2  | 147.9    | 4.4985 ug/L  | 4.4985 ppb  | 19:25:08 |
| 2 | V 292.402†         | -1245.9  | -5.7     | -0.0259 ug/L | -0.0259 ppb | 19:25:13 |
| 2 | Zn 213.857†        | 691.6    | 153.6    | 1.9663 ug/L  | 1.9663 ppb  | 19:25:33 |
| 2 | SiO2†              | 771.6    | 266.9    | 22.406 ug/L  | 22.406 ppb  | 19:26:44 |
| 3 | Sc Radial          | 3336.1   | 3336.1   | 104 %        |             | 19:24:31 |
| 3 | Y RADIAL           | 2752.4   | 2752.4   | 104.8 %      |             | 19:24:31 |
| 3 | Al 396.153Radial†  | -54.5    | 9.7      | 20.980 ug/L  | 20.980 ppb  | 19:24:31 |
| 3 | Ca 317.933Radial†  | 16.1     | 3.0      | 12.524 ug/L  | 12.524 ppb  | 19:24:31 |
| 3 | Fe 238.204 Radial† | 9.7      | -0.1     | -4.0646 ug/L | -4.0646 ppb | 19:24:31 |
| 3 | K 766.490 Radial†  | 2029.6   | -77.1    | -37.673 ug/L | -37.673 ppb | 19:24:11 |
| 3 | Mg 279.077 IEC†    | 1.8      | -0.0     | -1.4271 ug/L | -1.4271 ppb | 19:24:31 |
| 3 | Na 589.592 Radial† | -758.9   | 3.7      | 1.1564 ug/L  | 1.1564 ppb  | 19:24:11 |
| 3 | Sr 421.552†        | 16.1     | -19.1    | -0.1844 ug/L | -0.1844 ppb | 19:24:11 |
| 3 | Sc 361.383         | 826810.8 | 826810.8 | 104.40 %     |             | 19:25:38 |
| 3 | Y 371.029          | 706053.3 | 706053.3 | 104.19 %     |             | 19:25:38 |
| 3 | Ag 328.068†        | 238.6    | 97.2     | 0.5134 ug/L  | 0.5134 ppb  | 19:25:43 |
| 3 | As 188.979†        | -14.9    | 4.6      | 2.6658 ug/L  | 2.6658 ppb  | 19:26:03 |
| 3 | B 249.677†         | -218.2   | 168.2    | 4.8962 ug/L  | 4.8962 ppb  | 19:25:43 |
| 3 | Ba 233.527†        | 42.5     | 41.0     | 0.4069 ug/L  | 0.4069 ppb  | 19:26:03 |
| 3 | Be 313.107†        | -3688.5  | 8.8      | 0.0043 ug/L  | 0.0043 ppb  | 19:25:43 |
| 3 | Cd 226.502†        | -155.5   | 7.3      | 0.1129 ug/L  | 0.1129 ppb  | 19:26:03 |
| 3 | Co 228.616†        | -48.7    | -0.8     | -0.0215 ug/L | -0.0215 ppb | 19:26:03 |
| 3 | Cr 267.716†        | 129.6    | 71.3     | 0.9776 ug/L  | 0.9776 ppb  | 19:25:43 |
| 3 | Cu 324.752†        | 6367.7   | -112.7   | -0.3824 ug/L | -0.3824 ppb | 19:25:43 |
| 3 | Mn 257.610†        | 550.6    | 128.6    | 0.1775 ug/L  | 0.1775 ppb  | 19:25:43 |
| 3 | Mo 202.031†        | 12.4     | -1.1     | -0.1022 ug/L | -0.1022 ppb | 19:26:03 |
| 3 | Ni 231.604†        | 78.4     | 14.5     | 0.4851 ug/L  | 0.4851 ppb  | 19:26:03 |
| 3 | P 214.914†         | 172.5    | 0.9      | 0.8236 ug/L  | 0.8236 ppb  | 19:26:03 |
| 3 | Pb 220.353†        | -30.1    | 14.9     | 2.4452 ug/L  | 2.4452 ppb  | 19:26:03 |
| 3 | S 181.975 Axial†   | 32.5     | 0.3      | 0.6486 ug/L  | 0.6486 ppb  | 19:26:03 |
| 3 | Sb 206.836†        | 30.5     | 6.5      | 2.7938 ug/L  | 2.7938 ppb  | 19:26:03 |
| 3 | Se 196.026†        | -16.7    | 4.7      | 4.0068 ug/L  | 4.0068 ppb  | 19:26:03 |
| 3 | Si 251.611†        | 730.0    | 223.1    | 8.7240 ug/L  | 8.7240 ppb  | 19:26:03 |
| 3 | Sn 189.927†        | 8.0      | -0.1     | -0.0289 ug/L | -0.0289 ppb | 19:26:03 |
| 3 | Ti 334.940†        | -902.3   | 64.1     | 0.1152 ug/L  | 0.1152 ppb  | 19:25:43 |
| 3 | Tl 190.801†        | -27.0    | 0.1      | 0.0510 ug/L  | 0.0510 ppb  | 19:26:03 |
| 3 | U 409.014†         | -1960.9  | 93.8     | 2.8479 ug/L  | 2.8479 ppb  | 19:25:38 |
| 3 | V 292.402†         | -1187.5  | 54.9     | 0.4535 ug/L  | 0.4535 ppb  | 19:25:43 |
| 3 | Zn 213.857†        | 689.2    | 148.7    | 1.9008 ug/L  | 1.9008 ppb  | 19:26:03 |
| 3 | SiO2†              | 781.3    | 273.3    | 22.964 ug/L  | 22.964 ppb  | 19:27:04 |

Mean Data: 1202046565|954668|1

| Analyte            | Mean Corrected | Conc.   | Calib. | Std.Dev. | Conc.   | Sample | Std.Dev. | RSD     |
|--------------------|----------------|---------|--------|----------|---------|--------|----------|---------|
| Sc 361.383         | 825742.1       | 104.26  | %      | 0.230    |         |        |          | 0.22%   |
| Sc Radial          | 3339.3         | 104     | %      | 0.2      |         |        |          | 0.17%   |
| Y 371.029          | 705148.9       | 104.06  | %      | 0.205    |         |        |          | 0.20%   |
| Y RADIAL           | 2742.2         | 104.4   | %      | 0.64     |         |        |          | 0.61%   |
| Ag 328.068†        | 45.5           | 0.2253  | ug/L   | 0.41332  | 0.2253  | ppb    | 0.41332  | 183.47% |
| Al 396.153Radial†  | 6.4            | 13.868  | ug/L   | 6.9971   | 13.868  | ppb    | 6.9971   | 50.45%  |
| As 188.979†        | -4.1           | -2.4201 | ug/L   | 4.50953  | -2.4201 | ppb    | 4.50953  | 186.33% |
| B 249.677†         | 152.3          | 4.4405  | ug/L   | 0.65695  | 4.4405  | ppb    | 0.65695  | 14.79%  |
| Ba 233.527†        | 40.2           | 0.3980  | ug/L   | 0.02851  | 0.3980  | ppb    | 0.02851  | 7.16%   |
| Be 313.107†        | 74.3           | 0.0340  | ug/L   | 0.03182  | 0.0340  | ppb    | 0.03182  | 93.69%  |
| Ca 317.933Radial†  | 0.2            | 0.6610  | ug/L   | 11.11669 | 0.6610  | ppb    | 11.11669 | >999.9% |
| Cd 226.502†        | 18.0           | 0.2798  | ug/L   | 0.14507  | 0.2798  | ppb    | 0.14507  | 51.84%  |
| Co 228.616†        | 1.9            | 0.0524  | ug/L   | 0.06566  | 0.0524  | ppb    | 0.06566  | 125.35% |
| Cr 267.716†        | 28.0           | 0.3808  | ug/L   | 0.61826  | 0.3808  | ppb    | 0.61826  | 162.38% |
| Cu 324.752†        | -188.9         | -0.6430 | ug/L   | 0.27448  | -0.6430 | ppb    | 0.27448  | 42.68%  |
| Fe 238.204 Radial† | -1.5           | -43.713 | ug/L   | 34.6480  | -43.713 | ppb    | 34.6480  | 79.26%  |
| K 766.490 Radial†  | -71.4          | -34.887 | ug/L   | 54.7492  | -34.887 | ppb    | 54.7492  | 156.93% |

|                    |       |              |          |             |          |         |
|--------------------|-------|--------------|----------|-------------|----------|---------|
| Mg 279.077 IEC†    | -1.5  | -150.58 ug/L | 133.847  | -150.58 ppb | 133.847  | 88.89%  |
| Mn 257.610†        | 104.2 | 0.1460 ug/L  | 0.03849  | 0.1460 ppb  | 0.03849  | 26.37%  |
| Mo 202.031†        | 1.7   | 0.1501 ug/L  | 0.34277  | 0.1501 ppb  | 0.34277  | 228.31% |
| Na 589.592 Radial† | 21.9  | 6.9386 ug/L  | 12.28085 | 6.9386 ppb  | 12.28085 | 176.99% |
| Ni 231.604†        | 20.9  | 0.6978 ug/L  | 0.54711  | 0.6978 ppb  | 0.54711  | 78.41%  |
| P 214.914†         | 3.3   | 2.7831 ug/L  | 2.49305  | 2.7831 ppb  | 2.49305  | 89.58%  |
| Pb 220.353†        | 9.7   | 1.6014 ug/L  | 0.77606  | 1.6014 ppb  | 0.77606  | 48.46%  |
| S 181.975 Axial†   | 0.6   | 1.1695 ug/L  | 2.00780  | 1.1695 ppb  | 2.00780  | 171.68% |
| Sb 206.836†        | 12.7  | 5.4479 ug/L  | 2.47503  | 5.4479 ppb  | 2.47503  | 45.43%  |
| Se 196.026†        | 3.4   | 2.7929 ug/L  | 3.23677  | 2.7929 ppb  | 3.23677  | 115.89% |
| Si 251.611†        | 222.9 | 8.7116 ug/L  | 0.01388  | 8.7116 ppb  | 0.01388  | 0.16%   |
| Sn 189.927†        | -1.0  | -0.2327 ug/L | 0.80341  | -0.2327 ppb | 0.80341  | 345.25% |
| Sr 421.552†        | -21.2 | -0.2043 ug/L | 0.02228  | -0.2043 ppb | 0.02228  | 10.91%  |
| Ti 334.940†        | 86.7  | 0.1656 ug/L  | 0.06758  | 0.1656 ppb  | 0.06758  | 40.82%  |
| Tl 190.801†        | 0.3   | 0.1108 ug/L  | 0.38062  | 0.1108 ppb  | 0.38062  | 343.52% |
| U 409.014†         | 161.6 | 4.9121 ug/L  | 2.29899  | 4.9121 ppb  | 2.29899  | 46.80%  |
| V 292.402†         | 54.8  | 0.4636 ug/L  | 0.49452  | 0.4636 ppb  | 0.49452  | 106.68% |
| Zn 213.857†        | 146.8 | 1.8804 ug/L  | 0.09776  | 1.8804 ppb  | 0.09776  | 5.20%   |
| SiO2†              | 261.2 | 21.938 ug/L  | 1.3232   | 21.938 ppb  | 1.3232   | 6.03%   |

Sequence No.: 4

Sample ID: 1202046566|954668|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 3/10/2010 19:29:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046566|954668|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3440.3           | 3440.3                 | 107 %                 |                       | 19:31:27         |
| 1     | Y RADIAL           | 2792.4           | 2792.4                 | 106.3 %               |                       | 19:31:27         |
| 1     | Al 396.153Radial†  | 2267.6           | 2174.3                 | 4681.4 ug/L           | 4681.4 ppb            | 19:31:07         |
| 1     | Ca 317.933Radial†  | 1249.3           | 1151.2                 | 4810.1 ug/L           | 4810.1 ppb            | 19:31:27         |
| 1     | Fe 238.204 Radial† | 185.0            | 162.8                  | 4701.4 ug/L           | 4701.4 ppb            | 19:31:27         |
| 1     | K 766.490 Radial†  | 12451.1          | 9571.4                 | 4672.0 ug/L           | 4672.0 ppb            | 19:31:07         |
| 1     | Mg 279.077 IEC†    | 52.3             | 47.0                   | 4862.7 ug/L           | 4862.7 ppb            | 19:31:27         |
| 1     | Na 589.592 Radial† | 14556.4          | 14291.7                | 4521.1 ug/L           | 4521.1 ppb            | 19:31:07         |
| 1     | Sr 421.552†        | 52233.6          | 48620.4                | 468.18 ug/L           | 468.18 ppb            | 19:31:07         |
| 1     | Sc 361.383         | 868482.3         | 868482.3               | 109.66 %              |                       | 19:32:24         |
| 1     | Y 371.029          | 734690.4         | 734690.4               | 108.42 %              |                       | 19:32:24         |
| 1     | Ag 328.068†        | 96551.2          | 87913.3                | 469.06 ug/L           | 469.06 ppb            | 19:32:29         |
| 1     | As 188.979†        | 877.6            | 819.1                  | 483.86 ug/L           | 483.86 ppb            | 19:32:49         |
| 1     | B 249.677†         | 17450.9          | 16290.7                | 471.95 ug/L           | 471.95 ppb            | 19:32:29         |
| 1     | Ba 233.527†        | 53352.1          | 48651.8                | 482.91 ug/L           | 482.91 ppb            | 19:32:29         |
| 1     | Be 313.107†        | 1154346.4        | 1056185.2              | 478.76 ug/L           | 478.76 ppb            | 19:32:24         |
| 1     | Cd 226.502†        | 33762.4          | 30944.1                | 471.96 ug/L           | 471.96 ppb            | 19:32:29         |
| 1     | Co 228.616†        | 18947.4          | 17323.9                | 478.04 ug/L           | 478.04 ppb            | 19:32:29         |
| 1     | Cr 267.716†        | 38524.6          | 35077.6                | 482.22 ug/L           | 482.22 ppb            | 19:32:29         |
| 1     | Cu 324.752†        | 164485.8         | 143781.9               | 485.57 ug/L           | 485.57 ppb            | 19:32:29         |
| 1     | Mn 257.610†        | 382750.6         | 348629.7               | 482.44 ug/L           | 482.44 ppb            | 19:32:24         |
| 1     | Mo 202.031†        | 5750.8           | 5231.1                 | 478.16 ug/L           | 478.16 ppb            | 19:32:49         |
| 1     | Ni 231.604†        | 16332.4          | 14832.8                | 495.54 ug/L           | 495.54 ppb            | 19:32:29         |
| 1     | P 214.914†         | 924.9            | 679.1                  | 450.60 ug/L           | 450.60 ppb            | 19:32:49         |
| 1     | Pb 220.353†        | 3125.0           | 2893.3                 | 475.95 ug/L           | 475.95 ppb            | 19:32:49         |
| 1     | S 181.975 Axial†   | 2840.4           | 2559.3                 | 4887.7 ug/L           | 4887.7 ppb            | 19:32:49         |
| 1     | Sb 206.836†        | 1294.6           | 1157.8                 | 514.62 ug/L           | 514.62 ppb            | 19:32:49         |
| 1     | Se 196.026†        | 613.4            | 580.1                  | 511.53 ug/L           | 511.53 ppb            | 19:32:49         |
| 1     | Si 251.611†        | 133444.9         | 121211.7               | 4733.1 ug/L           | 4733.1 ppb            | 19:32:29         |
| 1     | Sn 189.927†        | 2240.1           | 2034.9                 | 485.19 ug/L           | 485.19 ppb            | 19:32:49         |
| 1     | Ti 334.940†        | 288116.4         | 263660.4               | 472.78 ug/L           | 472.78 ppb            | 19:32:29         |
| 1     | Tl 190.801†        | 1273.4           | 1187.1                 | 491.56 ug/L           | 491.56 ppb            | 19:32:49         |
| 1     | U 409.014†         | 16449.6          | 16972.3                | 513.91 ug/L           | 513.91 ppb            | 19:32:29         |
| 1     | V 292.402†         | 63587.6          | 59177.5                | 491.31 ug/L           | 491.31 ppb            | 19:32:29         |
| 1     | Zn 213.857†        | 42122.2          | 37899.7                | 480.28 ug/L           | 480.28 ppb            | 19:32:29         |
| 1     | SiO2†              | 134520.5         | 122193.6               | 10253 ug/L            | 10253 ppb             | 19:33:57         |
| 2     | Sc Radial          | 3404.3           | 3404.3                 | 106 %                 |                       | 19:31:52         |
| 2     | Y RADIAL           | 2767.0           | 2767.0                 | 105.3 %               |                       | 19:31:52         |
| 2     | Al 396.153Radial†  | 2234.3           | 2165.2                 | 4661.8 ug/L           | 4661.8 ppb            | 19:31:32         |
| 2     | Ca 317.933Radial†  | 1241.2           | 1155.9                 | 4829.5 ug/L           | 4829.5 ppb            | 19:31:52         |
| 2     | Fe 238.204 Radial† | 184.4            | 164.1                  | 4737.2 ug/L           | 4737.2 ppb            | 19:31:52         |
| 2     | K 766.490 Radial†  | 12425.5          | 9669.7                 | 4720.0 ug/L           | 4720.0 ppb            | 19:31:32         |
| 2     | Mg 279.077 IEC†    | 52.8             | 48.0                   | 4962.5 ug/L           | 4962.5 ppb            | 19:31:52         |
| 2     | Na 589.592 Radial† | 14241.5          | 14138.5                | 4472.7 ug/L           | 4472.7 ppb            | 19:31:32         |
| 2     | Sr 421.552†        | 51323.8          | 48277.7                | 464.88 ug/L           | 464.88 ppb            | 19:31:32         |
| 2     | Sc 361.383         | 870816.2         | 870816.2               | 109.96 %              |                       | 19:32:55         |
| 2     | Y 371.029          | 737679.8         | 737679.8               | 108.86 %              |                       | 19:32:55         |
| 2     | Ag 328.068†        | 96102.8          | 87269.5                | 465.65 ug/L           | 465.65 ppb            | 19:33:00         |
| 2     | As 188.979†        | 873.9            | 813.6                  | 480.60 ug/L           | 480.60 ppb            | 19:33:20         |
| 2     | B 249.677†         | 17365.0          | 16169.9                | 468.45 ug/L           | 468.45 ppb            | 19:33:00         |
| 2     | Ba 233.527†        | 53053.0          | 48249.4                | 478.92 ug/L           | 478.92 ppb            | 19:33:00         |
| 2     | Be 313.107†        | 1154984.1        | 1053944.0              | 477.74 ug/L           | 477.74 ppb            | 19:32:55         |
| 2     | Cd 226.502†        | 33530.0          | 30650.2                | 467.47 ug/L           | 467.47 ppb            | 19:33:00         |
| 2     | Co 228.616†        | 18771.5          | 17117.6                | 472.35 ug/L           | 472.35 ppb            | 19:33:00         |
| 2     | Cr 267.716†        | 38408.1          | 34877.4                | 479.47 ug/L           | 479.47 ppb            | 19:33:00         |
| 2     | Cu 324.752†        | 163590.8         | 142565.9               | 481.47 ug/L           | 481.47 ppb            | 19:33:00         |
| 2     | Mn 257.610†        | 382071.3         | 347076.5               | 480.30 ug/L           | 480.30 ppb            | 19:32:55         |
| 2     | Mo 202.031†        | 5745.7           | 5212.4                 | 476.46 ug/L           | 476.46 ppb            | 19:33:20         |
| 2     | Ni 231.604†        | 16279.9          | 14745.1                | 492.61 ug/L           | 492.61 ppb            | 19:33:00         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 915.1     | 667.9     | 442.39 ug/L | 442.39 ppb | 19:33:20 |
| 2 | Pb 220.353†        | 3123.5    | 2884.3    | 474.46 ug/L | 474.46 ppb | 19:33:20 |
| 2 | S 181.975 Axial†   | 2848.3    | 2559.6    | 4888.3 ug/L | 4888.3 ppb | 19:33:20 |
| 2 | Sb 206.836†        | 1294.0    | 1154.1    | 512.95 ug/L | 512.95 ppb | 19:33:20 |
| 2 | Se 196.026†        | 598.9     | 565.3     | 499.01 ug/L | 499.01 ppb | 19:33:20 |
| 2 | Si 251.611†        | 132503.8  | 120029.7  | 4686.9 ug/L | 4686.9 ppb | 19:33:00 |
| 2 | Sn 189.927†        | 2235.0    | 2024.8    | 482.79 ug/L | 482.79 ppb | 19:33:20 |
| 2 | Ti 334.940†        | 286584.4  | 261563.0  | 469.01 ug/L | 469.01 ppb | 19:33:00 |
| 2 | Tl 190.801†        | 1271.5    | 1182.4    | 489.58 ug/L | 489.58 ppb | 19:33:20 |
| 2 | U 409.014†         | 16187.6   | 16693.9   | 505.46 ug/L | 505.46 ppb | 19:33:00 |
| 2 | V 292.402†         | 63329.6   | 58787.5   | 488.07 ug/L | 488.07 ppb | 19:33:00 |
| 2 | Zn 213.857†        | 41929.0   | 37620.9   | 476.74 ug/L | 476.74 ppb | 19:33:00 |
| 2 | SiO2†              | 132661.8  | 120174.4  | 10083 ug/L  | 10083 ppb  | 19:34:02 |
| 3 | Sc Radial          | 3431.6    | 3431.6    | 107 %       |            | 19:32:17 |
| 3 | Y RADIAL           | 2795.0    | 2795.0    | 106.4 %     |            | 19:32:17 |
| 3 | Al 396.153Radial†  | 2263.1    | 2175.4    | 4683.8 ug/L | 4683.8 ppb | 19:31:57 |
| 3 | Ca 317.933Radial†  | 1257.4    | 1161.7    | 4853.9 ug/L | 4853.9 ppb | 19:32:17 |
| 3 | Fe 238.204 Radial† | 187.3     | 165.4     | 4775.9 ug/L | 4775.9 ppb | 19:32:17 |
| 3 | K 766.490 Radial†  | 12257.9   | 9420.3    | 4598.2 ug/L | 4598.2 ppb | 19:31:57 |
| 3 | Mg 279.077 IEC†    | 51.9      | 46.7      | 4834.9 ug/L | 4834.9 ppb | 19:32:17 |
| 3 | Na 589.592 Radial† | 14374.5   | 14156.1   | 4478.2 ug/L | 4478.2 ppb | 19:31:57 |
| 3 | Sr 421.552†        | 51865.9   | 48400.0   | 466.06 ug/L | 466.06 ppb | 19:31:57 |
| 3 | Sc 361.383         | 867565.3  | 867565.3  | 109.55 %    |            | 19:33:26 |
| 3 | Y 371.029          | 734513.4  | 734513.4  | 108.39 %    |            | 19:33:26 |
| 3 | Ag 328.068†        | 96489.6   | 87950.1   | 469.27 ug/L | 469.27 ppb | 19:33:31 |
| 3 | As 188.979†        | 871.1     | 814.0     | 480.85 ug/L | 480.85 ppb | 19:33:52 |
| 3 | B 249.677†         | 17381.2   | 16243.8   | 470.59 ug/L | 470.59 ppb | 19:33:31 |
| 3 | Ba 233.527†        | 53064.2   | 48440.4   | 480.82 ug/L | 480.82 ppb | 19:33:31 |
| 3 | Be 313.107†        | 1152877.7 | 1055957.1 | 478.66 ug/L | 478.66 ppb | 19:33:26 |
| 3 | Cd 226.502†        | 33614.6   | 30841.6   | 470.39 ug/L | 470.39 ppb | 19:33:31 |
| 3 | Co 228.616†        | 18788.5   | 17197.2   | 474.55 ug/L | 474.55 ppb | 19:33:31 |
| 3 | Cr 267.716†        | 38328.8   | 34936.0   | 480.28 ug/L | 480.28 ppb | 19:33:31 |
| 3 | Cu 324.752†        | 164323.4  | 143792.2  | 485.61 ug/L | 485.61 ppb | 19:33:31 |
| 3 | Mn 257.610†        | 382199.2  | 348495.2  | 482.27 ug/L | 482.27 ppb | 19:33:26 |
| 3 | Mo 202.031†        | 5736.1    | 5223.2    | 477.45 ug/L | 477.45 ppb | 19:33:52 |
| 3 | Ni 231.604†        | 16267.6   | 14789.4   | 494.09 ug/L | 494.09 ppb | 19:33:31 |
| 3 | P 214.914†         | 929.3     | 684.0     | 454.52 ug/L | 454.52 ppb | 19:33:52 |
| 3 | Pb 220.353†        | 3119.4    | 2891.2    | 475.59 ug/L | 475.59 ppb | 19:33:52 |
| 3 | S 181.975 Axial†   | 2837.8    | 2559.7    | 4888.4 ug/L | 4888.4 ppb | 19:33:52 |
| 3 | Sb 206.836†        | 1292.9    | 1157.5    | 514.45 ug/L | 514.45 ppb | 19:33:52 |
| 3 | Se 196.026†        | 605.8     | 573.7     | 506.28 ug/L | 506.28 ppb | 19:33:52 |
| 3 | Si 251.611†        | 133015.7  | 120948.5  | 4722.8 ug/L | 4722.8 ppb | 19:33:31 |
| 3 | Sn 189.927†        | 2238.4    | 2035.6    | 485.35 ug/L | 485.35 ppb | 19:33:52 |
| 3 | Ti 334.940†        | 286885.0  | 262814.0  | 471.27 ug/L | 471.27 ppb | 19:33:31 |
| 3 | Tl 190.801†        | 1270.8    | 1186.1    | 491.13 ug/L | 491.13 ppb | 19:33:52 |
| 3 | U 409.014†         | 16223.2   | 16781.6   | 508.11 ug/L | 508.11 ppb | 19:33:31 |
| 3 | V 292.402†         | 63236.3   | 58918.1   | 489.15 ug/L | 489.15 ppb | 19:33:31 |
| 3 | Zn 213.857†        | 41957.1   | 37789.5   | 478.87 ug/L | 478.87 ppb | 19:33:31 |
| 3 | SiO2†              | 132889.7  | 120834.5  | 10139 ug/L  | 10139 ppb  | 19:34:07 |

Mean Data: 1202046566|954668|1

| Analyte            | Mean Corrected | Conc.       | Calib. | Std.Dev. | Sample      | Std.Dev. | RSD   |
|--------------------|----------------|-------------|--------|----------|-------------|----------|-------|
|                    | Intensity      | Units       |        |          | Conc. Units |          |       |
| Sc 361.383         | 868954.6       | 109.72 %    |        | 0.212    |             |          | 0.19% |
| Sc Radial          | 3425.4         | 107 %       |        | 0.6      |             |          | 0.55% |
| Y 371.029          | 735627.9       | 108.56 %    |        | 0.263    |             |          | 0.24% |
| Y RADIAL           | 2784.8         | 106.0 %     |        | 0.59     |             |          | 0.55% |
| Ag 328.068†        | 87710.9        | 467.99 ug/L |        | 2.032    | 467.99 ppb  | 2.032    | 0.43% |
| Al 396.153Radial†  | 2171.6         | 4675.7 ug/L |        | 12.07    | 4675.7 ppb  | 12.07    | 0.26% |
| As 188.979†        | 815.6          | 481.77 ug/L |        | 1.812    | 481.77 ppb  | 1.812    | 0.38% |
| B 249.677†         | 16234.8        | 470.33 ug/L |        | 1.767    | 470.33 ppb  | 1.767    | 0.38% |
| Ba 233.527†        | 48447.2        | 480.88 ug/L |        | 1.996    | 480.88 ppb  | 1.996    | 0.42% |
| Be 313.107†        | 1055362.1      | 478.39 ug/L |        | 0.562    | 478.39 ppb  | 0.562    | 0.12% |
| Ca 317.933Radial†  | 1156.3         | 4831.2 ug/L |        | 21.99    | 4831.2 ppb  | 21.99    | 0.46% |
| Cd 226.502†        | 30812.0        | 469.94 ug/L |        | 2.278    | 469.94 ppb  | 2.278    | 0.48% |
| Co 228.616†        | 17212.9        | 474.98 ug/L |        | 2.870    | 474.98 ppb  | 2.870    | 0.60% |
| Cr 267.716†        | 34963.7        | 480.66 ug/L |        | 1.412    | 480.66 ppb  | 1.412    | 0.29% |
| Cu 324.752†        | 143380.0       | 484.22 ug/L |        | 2.380    | 484.22 ppb  | 2.380    | 0.49% |
| Fe 238.204 Radial† | 164.1          | 4738.2 ug/L |        | 37.26    | 4738.2 ppb  | 37.26    | 0.79% |
| K 766.490 Radial†  | 9553.8         | 4663.4 ug/L |        | 61.39    | 4663.4 ppb  | 61.39    | 1.32% |

|                    |          |             |       |            |       |       |
|--------------------|----------|-------------|-------|------------|-------|-------|
| Mg 279.077 IEC†    | 47.2     | 4886.7 ug/L | 67.06 | 4886.7 ppb | 67.06 | 1.37% |
| Mn 257.610†        | 348067.1 | 481.67 ug/L | 1.193 | 481.67 ppb | 1.193 | 0.25% |
| Mo 202.031†        | 5222.2   | 477.36 ug/L | 0.855 | 477.36 ppb | 0.855 | 0.18% |
| Na 589.592 Radial† | 14195.5  | 4490.7 ug/L | 26.53 | 4490.7 ppb | 26.53 | 0.59% |
| Ni 231.604†        | 14789.1  | 494.08 ug/L | 1.464 | 494.08 ppb | 1.464 | 0.30% |
| P 214.914†         | 677.0    | 449.17 ug/L | 6.189 | 449.17 ppb | 6.189 | 1.38% |
| Pb 220.353†        | 2889.6   | 475.33 ug/L | 0.776 | 475.33 ppb | 0.776 | 0.16% |
| S 181.975 Axial†   | 2559.5   | 4888.1 ug/L | 0.38  | 4888.1 ppb | 0.38  | 0.01% |
| Sb 206.836†        | 1156.5   | 514.01 ug/L | 0.919 | 514.01 ppb | 0.919 | 0.18% |
| Se 196.026†        | 573.0    | 505.61 ug/L | 6.288 | 505.61 ppb | 6.288 | 1.24% |
| Si 251.611†        | 120729.9 | 4714.3 ug/L | 24.25 | 4714.3 ppb | 24.25 | 0.51% |
| Sn 189.927†        | 2031.8   | 484.44 ug/L | 1.436 | 484.44 ppb | 1.436 | 0.30% |
| Sr 421.552†        | 48432.7  | 466.38 ug/L | 1.673 | 466.38 ppb | 1.673 | 0.36% |
| Ti 334.940†        | 262679.2 | 471.02 ug/L | 1.894 | 471.02 ppb | 1.894 | 0.40% |
| Tl 190.801†        | 1185.2   | 490.76 ug/L | 1.038 | 490.76 ppb | 1.038 | 0.21% |
| U 409.014†         | 16815.9  | 509.16 ug/L | 4.323 | 509.16 ppb | 4.323 | 0.85% |
| V 292.402†         | 58961.0  | 489.51 ug/L | 1.647 | 489.51 ppb | 1.647 | 0.34% |
| Zn 213.857†        | 37770.1  | 478.63 ug/L | 1.786 | 478.63 ppb | 1.786 | 0.37% |
| SiO2†              | 121067.5 | 10158 ug/L  | 86.5  | 10158 ppb  | 86.5  | 0.85% |

Sequence No.: 9  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/10/2010 20:04:53  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1     | Sc Radial          | 3383.3        | 3383.3              | 106 %              |                    | 20:07:05      |
| 1     | Y RADIAL           | 2783.9        | 2783.9              | 106.0 %            |                    | 20:07:05      |
| 1     | Al 396.153Radial†  | 2327.3        | 2266.3              | 4880.1 ug/L        | 4880.1 ppb         | 20:06:45      |
| 1     | Ca 317.933Radial†  | 1293.5        | 1212.7              | 5067.0 ug/L        | 5067.0 ppb         | 20:07:05      |
| 1     | Fe 238.204 Radial† | 200.0         | 180.0               | 5194.3 ug/L        | 5194.3 ppb         | 20:07:05      |
| 1     | K 766.490 Radial†  | 12565.1       | 9874.8              | 4818.0 ug/L        | 4818.0 ppb         | 20:06:45      |
| 1     | Mg 279.077 IEC†    | 54.5          | 50.0                | 5168.7 ug/L        | 5168.7 ppb         | 20:07:05      |
| 1     | Na 589.592 Radial† | 32144.4       | 31179.2             | 9863.4 ug/L        | 9863.4 ppb         | 20:06:45      |
| 1     | Sr 421.552†        | 54792.1       | 51863.4             | 499.41 ug/L        | 499.41 ppb         | 20:06:45      |
| 1     | Sc 361.383         | 865774.3      | 865774.3            | 109.32 %           |                    | 20:08:02      |
| 1     | Y 371.029          | 733265.8      | 733265.8            | 108.21 %           |                    | 20:08:02      |
| 1     | Ag 328.068†        | 99861.1       | 91216.4             | 486.73 ug/L        | 486.73 ppb         | 20:08:08      |
| 1     | As 188.979†        | 891.9         | 834.7               | 493.04 ug/L        | 493.04 ppb         | 20:08:28      |
| 1     | B 249.677†         | 17427.8       | 16319.3             | 472.66 ug/L        | 472.66 ppb         | 20:08:08      |
| 1     | Ba 233.527†        | 53468.0       | 48910.1             | 485.48 ug/L        | 485.48 ppb         | 20:08:08      |
| 1     | Be 313.107†        | 1186462.8     | 1088856.1           | 493.54 ug/L        | 493.54 ppb         | 20:08:02      |
| 1     | Cd 226.502†        | 34559.7       | 31769.7             | 484.50 ug/L        | 484.50 ppb         | 20:08:08      |
| 1     | Co 228.616†        | 19529.4       | 17910.4             | 494.24 ug/L        | 494.24 ppb         | 20:08:08      |
| 1     | Cr 267.716†        | 38629.0       | 35282.9             | 485.06 ug/L        | 485.06 ppb         | 20:08:08      |
| 1     | Cu 324.752†        | 161358.1      | 141390.0            | 477.53 ug/L        | 477.53 ppb         | 20:08:08      |
| 1     | Mn 257.610†        | 386763.3      | 353392.0            | 489.07 ug/L        | 489.07 ppb         | 20:08:02      |
| 1     | Mo 202.031†        | 5864.8        | 5351.8              | 489.23 ug/L        | 489.23 ppb         | 20:08:28      |
| 1     | Ni 231.604†        | 16221.1       | 14777.6             | 493.68 ug/L        | 493.68 ppb         | 20:08:08      |
| 1     | P 214.914†         | 3480.8        | 3019.8              | 2330.8 ug/L        | 2330.8 ppb         | 20:08:28      |
| 1     | Pb 220.353†        | 3214.4        | 2984.0              | 490.84 ug/L        | 490.84 ppb         | 20:08:28      |
| 1     | S 181.975 Axial†   | 586.2         | 505.4               | 964.49 ug/L        | 964.49 ppb         | 20:08:28      |
| 1     | Sb 206.836†        | 1252.2        | 1122.7              | 499.74 ug/L        | 499.74 ppb         | 20:08:28      |
| 1     | Se 196.026†        | 616.0         | 584.2               | 516.48 ug/L        | 516.48 ppb         | 20:08:28      |
| 1     | Si 251.611†        | 67604.2       | 61364.7             | 2393.2 ug/L        | 2393.2 ppb         | 20:08:08      |
| 1     | Sn 189.927†        | 2232.4        | 2034.3              | 485.07 ug/L        | 485.07 ppb         | 20:08:28      |
| 1     | Ti 334.940†        | 287465.7      | 263887.1            | 473.20 ug/L        | 473.20 ppb         | 20:08:08      |
| 1     | Tl 190.801†        | 1275.7        | 1192.9              | 493.90 ug/L        | 493.90 ppb         | 20:08:28      |
| 1     | U 409.014†         | 15592.0       | 16234.8             | 491.45 ug/L        | 491.45 ppb         | 20:08:08      |
| 1     | V 292.402†         | 63073.4       | 58888.6             | 488.99 ug/L        | 488.99 ppb         | 20:08:08      |
| 1     | Zn 213.857†        | 42072.5       | 37974.3             | 481.19 ug/L        | 481.19 ppb         | 20:08:08      |
| 1     | SiO2†              | 68330.2       | 62029.9             | 5198.1 ug/L        | 5198.1 ppb         | 20:09:35      |
| 2     | Sc Radial          | 3412.8        | 3412.8              | 106 %              |                    | 20:07:30      |
| 2     | Y RADIAL           | 2788.6        | 2788.6              | 106.1 %            |                    | 20:07:30      |
| 2     | Al 396.153Radial†  | 2377.5        | 2294.5              | 4940.6 ug/L        | 4940.6 ppb         | 20:07:10      |
| 2     | Ca 317.933Radial†  | 1293.8        | 1202.4              | 5023.7 ug/L        | 5023.7 ppb         | 20:07:30      |
| 2     | Fe 238.204 Radial† | 194.8         | 173.5               | 5007.7 ug/L        | 5007.7 ppb         | 20:07:30      |
| 2     | K 766.490 Radial†  | 12547.4       | 9755.0              | 4759.5 ug/L        | 4759.5 ppb         | 20:07:10      |
| 2     | Mg 279.077 IEC†    | 55.5          | 50.4                | 5215.9 ug/L        | 5215.9 ppb         | 20:07:30      |
| 2     | Na 589.592 Radial† | 32195.5       | 30963.3             | 9795.2 ug/L        | 9795.2 ppb         | 20:07:10      |
| 2     | Sr 421.552†        | 55151.8       | 51751.5             | 498.34 ug/L        | 498.34 ppb         | 20:07:10      |
| 2     | Sc 361.383         | 855383.6      | 855383.6            | 108.01 %           |                    | 20:08:33      |
| 2     | Y 371.029          | 723955.5      | 723955.5            | 106.83 %           |                    | 20:08:33      |
| 2     | Ag 328.068†        | 101998.3      | 94304.8             | 503.09 ug/L        | 503.09 ppb         | 20:08:39      |
| 2     | As 188.979†        | 891.0         | 843.8               | 498.47 ug/L        | 498.47 ppb         | 20:08:59      |
| 2     | B 249.677†         | 17966.6       | 17011.8             | 492.79 ug/L        | 492.79 ppb         | 20:08:39      |
| 2     | Ba 233.527†        | 54452.5       | 50415.7             | 500.41 ug/L        | 500.41 ppb         | 20:08:39      |
| 2     | Be 313.107†        | 1176405.1     | 1092727.8           | 495.33 ug/L        | 495.33 ppb         | 20:08:33      |
| 2     | Cd 226.502†        | 35216.8       | 32762.1             | 499.67 ug/L        | 499.67 ppb         | 20:08:39      |
| 2     | Co 228.616†        | 19970.0       | 18535.3             | 511.47 ug/L        | 511.47 ppb         | 20:08:39      |
| 2     | Cr 267.716†        | 39323.6       | 36355.3             | 499.79 ug/L        | 499.79 ppb         | 20:08:39      |
| 2     | Cu 324.752†        | 165142.3      | 146686.6            | 495.40 ug/L        | 495.40 ppb         | 20:08:39      |
| 2     | Mn 257.610†        | 383963.7      | 355097.6            | 491.41 ug/L        | 491.41 ppb         | 20:08:33      |
| 2     | Mo 202.031†        | 5870.3        | 5422.0              | 495.62 ug/L        | 495.62 ppb         | 20:08:59      |
| 2     | Ni 231.604†        | 16538.0       | 15251.2             | 509.50 ug/L        | 509.50 ppb         | 20:08:39      |



|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 3496.0    | 3072.5    | 2369.8 ug/L | 2369.8 ppb | 20:08:59 |
| 2 | Pb 220.353†        | 3216.2    | 3021.4    | 497.02 ug/L | 497.02 ppb | 20:08:59 |
| 2 | S 181.975 Axial†   | 590.0     | 515.5     | 983.65 ug/L | 983.65 ppb | 20:08:59 |
| 2 | Sb 206.836†        | 1251.2    | 1135.7    | 505.54 ug/L | 505.54 ppb | 20:08:59 |
| 2 | Se 196.026†        | 613.4     | 588.6     | 519.76 ug/L | 519.76 ppb | 20:08:59 |
| 2 | Si 251.611†        | 69025.9   | 63432.2   | 2473.9 ug/L | 2473.9 ppb | 20:08:39 |
| 2 | Sn 189.927†        | 2229.9    | 2056.8    | 490.42 ug/L | 490.42 ppb | 20:08:59 |
| 2 | Ti 334.940†        | 293143.8  | 272338.4  | 488.34 ug/L | 488.34 ppb | 20:08:39 |
| 2 | Tl 190.801†        | 1262.0    | 1194.4    | 494.55 ug/L | 494.55 ppb | 20:08:59 |
| 2 | U 409.014†         | 16012.1   | 16797.0   | 508.51 ug/L | 508.51 ppb | 20:08:39 |
| 2 | V 292.402†         | 64270.6   | 60697.8   | 503.94 ug/L | 503.94 ppb | 20:08:39 |
| 2 | Zn 213.857†        | 42843.9   | 39156.1   | 496.21 ug/L | 496.21 ppb | 20:08:39 |
| 2 | SiO2†              | 67197.9   | 61740.8   | 5173.6 ug/L | 5173.6 ppb | 20:09:40 |
| 3 | Sc Radial          | 3387.2    | 3387.2    | 106 %       |            | 20:07:55 |
| 3 | Y RADIAL           | 2784.6    | 2784.6    | 106.0 %     |            | 20:07:55 |
| 3 | Al 396.153Radial†  | 2322.3    | 2259.1    | 4864.5 ug/L | 4864.5 ppb | 20:07:35 |
| 3 | Ca 317.933Radial†  | 1288.7    | 1206.7    | 5041.8 ug/L | 5041.8 ppb | 20:07:55 |
| 3 | Fe 238.204 Radial† | 192.4     | 172.5     | 4981.2 ug/L | 4981.2 ppb | 20:07:55 |
| 3 | K 766.490 Radial†  | 12521.7   | 9820.0    | 4791.3 ug/L | 4791.3 ppb | 20:07:35 |
| 3 | Mg 279.077 IEC†    | 54.6      | 49.9      | 5168.5 ug/L | 5168.5 ppb | 20:07:55 |
| 3 | Na 589.592 Radial† | 31785.7   | 30804.6   | 9744.9 ug/L | 9744.9 ppb | 20:07:35 |
| 3 | Sr 421.552†        | 54565.8   | 51589.3   | 496.77 ug/L | 496.77 ppb | 20:07:35 |
| 3 | Sc 361.383         | 860869.3  | 860869.3  | 108.70 %    |            | 20:09:05 |
| 3 | Y 371.029          | 728841.3  | 728841.3  | 107.56 %    |            | 20:09:05 |
| 3 | Ag 328.068†        | 100949.7  | 92738.3   | 494.76 ug/L | 494.76 ppb | 20:09:10 |
| 3 | As 188.979†        | 881.4     | 829.7     | 490.16 ug/L | 490.16 ppb | 20:09:30 |
| 3 | B 249.677†         | 17685.5   | 16647.2   | 482.22 ug/L | 482.22 ppb | 20:09:10 |
| 3 | Ba 233.527†        | 53786.2   | 49481.4   | 491.15 ug/L | 491.15 ppb | 20:09:10 |
| 3 | Be 313.107†        | 1177578.1 | 1086866.4 | 492.66 ug/L | 492.66 ppb | 20:09:05 |
| 3 | Cd 226.502†        | 34879.8   | 32244.2   | 491.76 ug/L | 491.76 ppb | 20:09:10 |
| 3 | Co 228.616†        | 19670.8   | 18142.2   | 500.63 ug/L | 500.63 ppb | 20:09:10 |
| 3 | Cr 267.716†        | 38885.7   | 35720.5   | 491.07 ug/L | 491.07 ppb | 20:09:10 |
| 3 | Cu 324.752†        | 163056.9  | 143793.8  | 485.63 ug/L | 485.63 ppb | 20:09:10 |
| 3 | Mn 257.610†        | 384006.3  | 352871.5  | 488.33 ug/L | 488.33 ppb | 20:09:05 |
| 3 | Mo 202.031†        | 5841.4    | 5360.8    | 490.04 ug/L | 490.04 ppb | 20:09:30 |
| 3 | Ni 231.604†        | 16304.7   | 14939.1   | 499.07 ug/L | 499.07 ppb | 20:09:10 |
| 3 | P 214.914†         | 3451.1    | 3010.6    | 2322.0 ug/L | 2322.0 ppb | 20:09:30 |
| 3 | Pb 220.353†        | 3205.0    | 2992.1    | 492.19 ug/L | 492.19 ppb | 20:09:30 |
| 3 | S 181.975 Axial†   | 593.3     | 515.0     | 982.87 ug/L | 982.87 ppb | 20:09:30 |
| 3 | Sb 206.836†        | 1254.0    | 1130.9    | 503.29 ug/L | 503.29 ppb | 20:09:30 |
| 3 | Se 196.026†        | 603.7     | 576.0     | 508.93 ug/L | 508.93 ppb | 20:09:30 |
| 3 | Si 251.611†        | 68160.4   | 62228.7   | 2426.9 ug/L | 2426.9 ppb | 20:09:10 |
| 3 | Sn 189.927†        | 2223.2    | 2037.4    | 485.81 ug/L | 485.81 ppb | 20:09:30 |
| 3 | Ti 334.940†        | 289848.6  | 267577.5  | 479.81 ug/L | 479.81 ppb | 20:09:10 |
| 3 | Tl 190.801†        | 1267.0    | 1191.6    | 493.36 ug/L | 493.36 ppb | 20:09:30 |
| 3 | U 409.014†         | 15818.4   | 16524.3   | 500.25 ug/L | 500.25 ppb | 20:09:10 |
| 3 | V 292.402†         | 63708.5   | 59801.5   | 496.52 ug/L | 496.52 ppb | 20:09:10 |
| 3 | Zn 213.857†        | 42361.8   | 38459.8   | 487.38 ug/L | 487.38 ppb | 20:09:10 |
| 3 | SiO2†              | 68326.4   | 62382.5   | 5227.7 ug/L | 5227.7 ppb | 20:09:45 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383  | 860675.7                 | 108.68 %    |        | 0.656    |                    |          | 0.60% |
| Sc Radial   | 3394.4                   | 106 %       |        | 0.5      |                    |          | 0.47% |
| Y 371.029   | 728687.6                 | 107.53 %    |        | 0.687    |                    |          | 0.64% |
| Y RADIAL  | 2785.7                   | 106.0 %     |        | 0.10     |                    |          | 0.09% |
| Ag 328.068†   | 92753.2                  | 494.86 ug/L |        | 8.182    | 494.86 ppb         | 8.182    | 1.65% |
| QC value within limits for Ag 328.068 Recovery = 98.97%       |                          |             |        |          |                    |          |       |
| Al 396.153Radial†   | 2273.3                   | 4895.1 ug/L |        | 40.22    | 4895.1 ppb         | 40.22    | 0.82% |
| QC value within limits for Al 396.153Radial Recovery = 97.90% |                          |             |        |          |                    |          |       |
| As 188.979†   | 836.1                    | 493.89 ug/L |        | 4.221    | 493.89 ppb         | 4.221    | 0.85% |
| QC value within limits for As 188.979 Recovery = 98.78%       |                          |             |        |          |                    |          |       |
| B 249.677†  | 16659.4                  | 482.56 ug/L |        | 10.072   | 482.56 ppb         | 10.072   | 2.09% |
| QC value within limits for B 249.677 Recovery = 96.51%        |                          |             |        |          |                    |          |       |
| Ba 233.527†   | 49602.4                  | 492.35 ug/L |        | 7.539    | 492.35 ppb         | 7.539    | 1.53% |
| QC value within limits for Ba 233.527 Recovery = 98.47%       |                          |             |        |          |                    |          |       |
| Be 313.107†   | 1089483.4                | 493.84 ug/L |        | 1.360    | 493.84 ppb         | 1.360    | 0.28% |
| QC value within limits for Be 313.107 Recovery = 98.77%       |                          |             |        |          |                    |          |       |
| Ca 317.933Radial†   | 1207.3                   | 5044.2 ug/L |        | 21.73    | 5044.2 ppb         | 21.73    | 0.43% |

QC value within limits for Ca 317.933 Radial Recovery = 100.88%

|   |          |             |        |            |        |       |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502†   | 32258.7  | 491.98 ug/L | 7.587  | 491.98 ppb | 7.587  | 1.54% |
| QC value within limits for Cd 226.502 Recovery = 98.40%         |          |             |        |            |        |       |
| Co 228.616†   | 18195.9  | 502.11 ug/L | 8.709  | 502.11 ppb | 8.709  | 1.73% |
| QC value within limits for Co 228.616 Recovery = 100.42%        |          |             |        |            |        |       |
| Cr 267.716†   | 35786.2  | 491.98 ug/L | 7.406  | 491.98 ppb | 7.406  | 1.51% |
| QC value within limits for Cr 267.716 Recovery = 98.40%         |          |             |        |            |        |       |
| Cu 324.752†   | 143956.8 | 486.19 ug/L | 8.948  | 486.19 ppb | 8.948  | 1.84% |
| QC value within limits for Cu 324.752 Recovery = 97.24%         |          |             |        |            |        |       |
| Fe 238.204 Radial†  | 175.3    | 5061.1 ug/L | 116.18 | 5061.1 ppb | 116.18 | 2.30% |
| QC value within limits for Fe 238.204 Radial Recovery = 101.22% |          |             |        |            |        |       |
| K 766.490 Radial†   | 9816.6   | 4789.6 ug/L | 29.27  | 4789.6 ppb | 29.27  | 0.61% |
| QC value within limits for K 766.490 Radial Recovery = 95.79%   |          |             |        |            |        |       |
| Mg 279.077 IEC†   | 50.1     | 5184.4 ug/L | 27.30  | 5184.4 ppb | 27.30  | 0.53% |
| QC value within limits for Mg 279.077 IEC Recovery = 103.69%    |          |             |        |            |        |       |
| Mn 257.610†   | 353787.0 | 489.60 ug/L | 1.607  | 489.60 ppb | 1.607  | 0.33% |
| QC value within limits for Mn 257.610 Recovery = 97.92%         |          |             |        |            |        |       |
| Mo 202.031†   | 5378.2   | 491.63 ug/L | 3.482  | 491.63 ppb | 3.482  | 0.71% |
| QC value within limits for Mo 202.031 Recovery = 98.33%         |          |             |        |            |        |       |
| Na 589.592 Radial†  | 30982.4  | 9801.2 ug/L | 59.48  | 9801.2 ppb | 59.48  | 0.61% |
| QC value within limits for Na 589.592 Radial Recovery = 98.01%  |          |             |        |            |        |       |
| Ni 231.604†   | 14989.3  | 500.75 ug/L | 8.043  | 500.75 ppb | 8.043  | 1.61% |
| QC value within limits for Ni 231.604 Recovery = 100.15%        |          |             |        |            |        |       |
| P 214.914†  | 3034.3   | 2340.9 ug/L | 25.43  | 2340.9 ppb | 25.43  | 1.09% |
| QC value within limits for P 214.914 Recovery = 93.64%          |          |             |        |            |        |       |
| Pb 220.353†   | 2999.2   | 493.35 ug/L | 3.252  | 493.35 ppb | 3.252  | 0.66% |
| QC value within limits for Pb 220.353 Recovery = 98.67%         |          |             |        |            |        |       |
| S 181.975 Axial†  | 512.0    | 977.00 ug/L | 10.844 | 977.00 ppb | 10.844 | 1.11% |
| QC value within limits for S 181.975 Axial Recovery = 97.70%    |          |             |        |            |        |       |
| Sb 206.836†   | 1129.8   | 502.86 ug/L | 2.925  | 502.86 ppb | 2.925  | 0.58% |
| QC value within limits for Sb 206.836 Recovery = 100.57%        |          |             |        |            |        |       |
| Se 196.026†   | 582.9    | 515.06 ug/L | 5.551  | 515.06 ppb | 5.551  | 1.08% |
| QC value within limits for Se 196.026 Recovery = 103.01%        |          |             |        |            |        |       |
| Si 251.611†   | 62341.9  | 2431.3 ug/L | 40.56  | 2431.3 ppb | 40.56  | 1.67% |
| QC value within limits for Si 251.611 Recovery = 97.25%         |          |             |        |            |        |       |
| Sn 189.927†   | 2042.8   | 487.10 ug/L | 2.900  | 487.10 ppb | 2.900  | 0.60% |
| QC value within limits for Sn 189.927 Recovery = 97.42%         |          |             |        |            |        |       |
| Sr 421.552†   | 51734.7  | 498.17 ug/L | 1.327  | 498.17 ppb | 1.327  | 0.27% |
| QC value within limits for Sr 421.552 Recovery = 99.63%         |          |             |        |            |        |       |
| Ti 334.940†   | 267934.3 | 480.45 ug/L | 7.589  | 480.45 ppb | 7.589  | 1.58% |
| QC value within limits for Ti 334.940 Recovery = 96.09%         |          |             |        |            |        |       |
| Tl 190.801†   | 1193.0   | 493.94 ug/L | 0.592  | 493.94 ppb | 0.592  | 0.12% |
| QC value within limits for Tl 190.801 Recovery = 98.79%         |          |             |        |            |        |       |
| U 409.014†  | 16518.7  | 500.07 ug/L | 8.533  | 500.07 ppb | 8.533  | 1.71% |
| QC value within limits for U 409.014 Recovery = 100.01%         |          |             |        |            |        |       |
| V 292.402†  | 59796.0  | 496.48 ug/L | 7.477  | 496.48 ppb | 7.477  | 1.51% |
| QC value within limits for V 292.402 Recovery = 99.30%          |          |             |        |            |        |       |
| Zn 213.857†   | 38530.1  | 488.26 ug/L | 7.548  | 488.26 ppb | 7.548  | 1.55% |
| QC value within limits for Zn 213.857 Recovery = 97.65%         |          |             |        |            |        |       |
| SiO2†   | 62051.0  | 5199.8 ug/L | 27.07  | 5199.8 ppb | 27.07  | 0.52% |
| QC value within limits for SiO2 Recovery = 97.24%               |          |             |        |            |        |       |

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 3/10/2010 20:11:55  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3314.5           | 3314.5                 | 103 %                 |                       | 20:14:07         |
| 1     | Y RADIAL           | 2707.0           | 2707.0                 | 103.0 %               |                       | 20:14:07         |
| 1     | Al 396.153Radial†  | -74.0            | -9.6                   | -20.695 ug/L          | -20.695 ppb           | 20:14:07         |
| 1     | Ca 317.933Radial†  | 14.5             | 1.6                    | 6.5896 ug/L           | 6.5896 ppb            | 20:14:07         |
| 1     | Fe 238.204 Radial† | 9.2              | -0.6                   | -17.506 ug/L          | -17.506 ppb           | 20:14:07         |
| 1     | K 766.490 Radial†  | 1961.6           | -130.1                 | -63.543 ug/L          | -63.543 ppb           | 20:13:47         |
| 1     | Mg 279.077 IEC†    | 2.5              | 0.7                    | 69.887 ug/L           | 69.887 ppb            | 20:14:07         |
| 1     | Na 589.592 Radial† | -766.1           | -8.1                   | -2.5618 ug/L          | -2.5618 ppb           | 20:13:47         |
| 1     | Sr 421.552†        | 17.0             | -18.2                  | -0.1755 ug/L          | -0.1755 ppb           | 20:13:47         |
| 1     | Sc 361.383         | 814835.6         | 814835.6               | 102.89 %              |                       | 20:15:04         |
| 1     | Y 371.029          | 697428.4         | 697428.4               | 102.92 %              |                       | 20:15:04         |
| 1     | Ag 328.068†        | 171.1            | 34.9                   | 0.1774 ug/L           | 0.1774 ppb            | 20:15:04         |
| 1     | As 188.979†        | -19.5            | -0.1                   | -0.0853 ug/L          | -0.0853 ppb           | 20:15:24         |
| 1     | B 249.677†         | -227.3           | 156.4                  | 4.5522 ug/L           | 4.5522 ppb            | 20:15:24         |
| 1     | Ba 233.527†        | 59.4             | 58.0                   | 0.5742 ug/L           | 0.5742 ppb            | 20:15:24         |
| 1     | Be 313.107†        | -3397.0          | 240.3                  | 0.1088 ug/L           | 0.1088 ppb            | 20:15:04         |
| 1     | Cd 226.502†        | -136.0           | 24.0                   | 0.3693 ug/L           | 0.3693 ppb            | 20:15:24         |
| 1     | Co 228.616†        | -34.3            | 12.6                   | 0.3464 ug/L           | 0.3464 ppb            | 20:15:24         |
| 1     | Cr 267.716†        | 76.4             | 21.4                   | 0.2914 ug/L           | 0.2914 ppb            | 20:15:24         |
| 1     | Cu 324.752†        | 6432.3           | 39.7                   | 0.1310 ug/L           | 0.1310 ppb            | 20:15:04         |
| 1     | Mn 257.610†        | 458.9            | 47.1                   | 0.0606 ug/L           | 0.0606 ppb            | 20:15:24         |
| 1     | Mo 202.031†        | 11.9             | -1.5                   | -0.1388 ug/L          | -0.1388 ppb           | 20:15:24         |
| 1     | Ni 231.604†        | 69.4             | 6.8                    | 0.2278 ug/L           | 0.2278 ppb            | 20:15:24         |
| 1     | P 214.914†         | 168.7            | -0.4                   | -0.3223 ug/L          | -0.3223 ppb           | 20:15:24         |
| 1     | Pb 220.353†        | -33.2            | 11.4                   | 1.8746 ug/L           | 1.8746 ppb            | 20:15:24         |
| 1     | S 181.975 Axial†   | 26.8             | -4.8                   | -9.1028 ug/L          | -9.1028 ppb           | 20:15:24         |
| 1     | Sb 206.836†        | 37.8             | 14.0                   | 5.9756 ug/L           | 5.9756 ppb            | 20:15:24         |
| 1     | Se 196.026†        | -16.5            | 4.6                    | 3.8904 ug/L           | 3.8904 ppb            | 20:15:24         |
| 1     | Si 251.611†        | 489.3            | -0.6                   | -0.0200 ug/L          | -0.0200 ppb           | 20:15:24         |
| 1     | Sn 189.927†        | 2.9              | -5.0                   | -1.1887 ug/L          | -1.1887 ppb           | 20:15:24         |
| 1     | Ti 334.940†        | -914.7           | 39.4                   | 0.0639 ug/L           | 0.0639 ppb            | 20:15:04         |
| 1     | Tl 190.801†        | -21.7            | 4.8                    | 1.9899 ug/L           | 1.9899 ppb            | 20:15:24         |
| 1     | U 409.014†         | -1890.7          | 134.4                  | 4.0836 ug/L           | 4.0836 ppb            | 20:15:04         |
| 1     | V 292.402†         | -1198.7          | 27.2                   | 0.2322 ug/L           | 0.2322 ppb            | 20:15:04         |
| 1     | Zn 213.857†        | 613.1            | 84.5                   | 1.0814 ug/L           | 1.0814 ppb            | 20:15:24         |
| 1     | SiO2†              | 507.0            | 17.7                   | 1.4947 ug/L           | 1.4947 ppb            | 20:16:35         |
| 2     | Sc Radial          | 3273.6           | 3273.6                 | 102 %                 |                       | 20:14:32         |
| 2     | Y RADIAL           | 2686.0           | 2686.0                 | 102.2 %               |                       | 20:14:32         |
| 2     | Al 396.153Radial†  | -54.9            | 8.3                    | 17.992 ug/L           | 17.992 ppb            | 20:14:32         |
| 2     | Ca 317.933Radial†  | 11.9             | -0.8                   | -3.4916 ug/L          | -3.4916 ppb           | 20:14:32         |
| 2     | Fe 238.204 Radial† | 10.4             | 0.7                    | 19.743 ug/L           | 19.743 ppb            | 20:14:32         |
| 2     | K 766.490 Radial†  | 2109.0           | 37.8                   | 18.487 ug/L           | 18.487 ppb            | 20:14:12         |
| 2     | Mg 279.077 IEC†    | 1.8              | 0.1                    | 7.7848 ug/L           | 7.7848 ppb            | 20:14:32         |
| 2     | Na 589.592 Radial† | -743.6           | 4.7                    | 1.4733 ug/L           | 1.4733 ppb            | 20:14:12         |
| 2     | Sr 421.552†        | 41.3             | 5.8                    | 0.0559 ug/L           | 0.0559 ppb            | 20:14:12         |
| 2     | Sc 361.383         | 812107.2         | 812107.2               | 102.54 %              |                       | 20:15:29         |
| 2     | Y 371.029          | 694344.8         | 694344.8               | 102.47 %              |                       | 20:15:29         |
| 2     | Ag 328.068†        | 146.7            | 11.7                   | 0.0647 ug/L           | 0.0647 ppb            | 20:15:29         |
| 2     | As 188.979†        | -17.2            | 2.1                    | 1.2215 ug/L           | 1.2215 ppb            | 20:15:49         |
| 2     | B 249.677†         | -223.5           | 159.3                  | 4.6315 ug/L           | 4.6315 ppb            | 20:15:49         |
| 2     | Ba 233.527†        | 56.9             | 55.8                   | 0.5536 ug/L           | 0.5536 ppb            | 20:15:49         |
| 2     | Be 313.107†        | -3509.4          | 119.6                  | 0.0544 ug/L           | 0.0544 ppb            | 20:15:29         |
| 2     | Cd 226.502†        | -136.6           | 23.1                   | 0.3511 ug/L           | 0.3511 ppb            | 20:15:49         |
| 2     | Co 228.616†        | -43.9            | 3.1                    | 0.0834 ug/L           | 0.0834 ppb            | 20:15:49         |
| 2     | Cr 267.716†        | 103.1            | 47.7                   | 0.6539 ug/L           | 0.6539 ppb            | 20:15:49         |
| 2     | Cu 324.752†        | 6376.3           | 6.2                    | 0.0189 ug/L           | 0.0189 ppb            | 20:15:29         |
| 2     | Mn 257.610†        | 475.6            | 65.0                   | 0.0915 ug/L           | 0.0915 ppb            | 20:15:49         |
| 2     | Mo 202.031†        | 7.5              | -5.7                   | -0.5189 ug/L          | -0.5189 ppb           | 20:15:49         |
| 2     | Ni 231.604†        | 61.4             | -0.7                   | -0.0231 ug/L          | -0.0231 ppb           | 20:15:49         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 177.7    | 9.0      | 7.2060 ug/L  | 7.2060 ppb  | 20:15:49 |
| 2 | Pb 220.353†        | -34.1    | 10.4     | 1.7112 ug/L  | 1.7112 ppb  | 20:15:49 |
| 2 | S 181.975 Axial†   | 32.0     | 0.4      | 0.8163 ug/L  | 0.8163 ppb  | 20:15:49 |
| 2 | Sb 206.836†        | 31.2     | 7.7      | 3.3230 ug/L  | 3.3230 ppb  | 20:15:49 |
| 2 | Se 196.026†        | -14.6    | 6.4      | 5.5469 ug/L  | 5.5469 ppb  | 20:15:49 |
| 2 | Si 251.611†        | 476.7    | -11.2    | -0.4324 ug/L | -0.4324 ppb | 20:15:49 |
| 2 | Sn 189.927†        | 13.3     | 5.1      | 1.2238 ug/L  | 1.2238 ppb  | 20:15:49 |
| 2 | Ti 334.940†        | -879.3   | 70.9     | 0.1234 ug/L  | 0.1234 ppb  | 20:15:29 |
| 2 | Tl 190.801†        | -23.3    | 3.2      | 1.3221 ug/L  | 1.3221 ppb  | 20:15:49 |
| 2 | U 409.014†         | -1831.3  | 186.2    | 5.6509 ug/L  | 5.6509 ppb  | 20:15:29 |
| 2 | V 292.402†         | -1194.1  | 27.8     | 0.2283 ug/L  | 0.2283 ppb  | 20:15:29 |
| 2 | Zn 213.857†        | 612.8    | 86.2     | 1.1002 ug/L  | 1.1002 ppb  | 20:15:49 |
| 2 | SiO2†              | 500.4    | 12.9     | 1.0986 ug/L  | 1.0986 ppb  | 20:16:55 |
| 3 | Sc Radial          | 3336.2   | 3336.2   | 104 %        |             | 20:14:57 |
| 3 | Y RADIAL           | 2727.4   | 2727.4   | 103.8 %      |             | 20:14:57 |
| 3 | Al 396.153Radial†  | -55.7    | 8.5      | 18.395 ug/L  | 18.395 ppb  | 20:14:57 |
| 3 | Ca 317.933Radial†  | 14.6     | 1.6      | 6.5142 ug/L  | 6.5142 ppb  | 20:14:57 |
| 3 | Fe 238.204 Radial† | 8.1      | -1.7     | -50.232 ug/L | -50.232 ppb | 20:14:57 |
| 3 | K 766.490 Radial†  | 2057.3   | -50.5    | -24.666 ug/L | -24.666 ppb | 20:14:37 |
| 3 | Mg 279.077 IEC†    | 0.5      | -1.2     | -124.81 ug/L | -124.81 ppb | 20:14:57 |
| 3 | Na 589.592 Radial† | -781.7   | -18.2    | -5.7612 ug/L | -5.7612 ppb | 20:14:37 |
| 3 | Sr 421.552†        | 28.2     | -7.5     | -0.0723 ug/L | -0.0723 ppb | 20:14:37 |
| 3 | Sc 361.383         | 805433.6 | 805433.6 | 101.70 %     |             | 20:15:54 |
| 3 | Y 371.029          | 689940.8 | 689940.8 | 101.82 %     |             | 20:15:54 |
| 3 | Ag 328.068†        | 200.2    | 65.5     | 0.3360 ug/L  | 0.3360 ppb  | 20:15:54 |
| 3 | As 188.979†        | -20.6    | -1.4     | -0.8379 ug/L | -0.8379 ppb | 20:16:14 |
| 3 | B 249.677†         | -244.4   | 136.9    | 3.9912 ug/L  | 3.9912 ppb  | 20:16:14 |
| 3 | Ba 233.527†        | 57.2     | 56.6     | 0.5596 ug/L  | 0.5596 ppb  | 20:16:14 |
| 3 | Be 313.107†        | -3450.7  | 148.9    | 0.0676 ug/L  | 0.0676 ppb  | 20:15:54 |
| 3 | Cd 226.502†        | -141.6   | 17.0     | 0.2638 ug/L  | 0.2638 ppb  | 20:16:14 |
| 3 | Co 228.616†        | -35.4    | 11.1     | 0.3064 ug/L  | 0.3064 ppb  | 20:16:14 |
| 3 | Cr 267.716†        | 78.8     | 24.6     | 0.3376 ug/L  | 0.3376 ppb  | 20:16:14 |
| 3 | Cu 324.752†        | 6204.8   | -110.9   | -0.3757 ug/L | -0.3757 ppb | 20:15:54 |
| 3 | Mn 257.610†        | 451.0    | 44.6     | 0.0618 ug/L  | 0.0618 ppb  | 20:16:14 |
| 3 | Mo 202.031†        | 11.9     | -1.3     | -0.1261 ug/L | -0.1261 ppb | 20:16:14 |
| 3 | Ni 231.604†        | 67.3     | 5.5      | 0.1850 ug/L  | 0.1850 ppb  | 20:16:14 |
| 3 | P 214.914†         | 163.0    | -4.0     | -3.1385 ug/L | -3.1385 ppb | 20:16:14 |
| 3 | Pb 220.353†        | -43.8    | 0.6      | 0.1132 ug/L  | 0.1132 ppb  | 20:16:14 |
| 3 | S 181.975 Axial†   | 32.8     | 1.4      | 2.7298 ug/L  | 2.7298 ppb  | 20:16:14 |
| 3 | Sb 206.836†        | 20.8     | -2.3     | -1.0094 ug/L | -1.0094 ppb | 20:16:14 |
| 3 | Se 196.026†        | -21.6    | -0.6     | -0.6287 ug/L | -0.6287 ppb | 20:16:14 |
| 3 | Si 251.611†        | 498.6    | 14.1     | 0.5540 ug/L  | 0.5540 ppb  | 20:16:14 |
| 3 | Sn 189.927†        | 0.9      | -6.9     | -1.6358 ug/L | -1.6358 ppb | 20:16:14 |
| 3 | Ti 334.940†        | -872.3   | 70.7     | 0.1390 ug/L  | 0.1390 ppb  | 20:15:54 |
| 3 | Tl 190.801†        | -21.1    | 5.2      | 2.1489 ug/L  | 2.1489 ppb  | 20:16:14 |
| 3 | U 409.014†         | -2100.3  | -93.1    | -2.8234 ug/L | -2.8234 ppb | 20:15:54 |
| 3 | V 292.402†         | -1151.1  | 60.4     | 0.4925 ug/L  | 0.4925 ppb  | 20:15:54 |
| 3 | Zn 213.857†        | 600.1    | 78.6     | 1.0127 ug/L  | 1.0127 ppb  | 20:16:14 |
| 3 | SiO2†              | 498.7    | 15.4     | 1.2945 ug/L  | 1.2945 ppb  | 20:17:15 |

## Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD     |
|---|--------------------------|-------------|--------|----------|-------------|--------|----------|---------|
| Sc 361.383  | 810792.2                 | 102.38 %    |        | 0.611    |             |        |          | 0.60%   |
| Sc Radial   | 3308.1                   | 103 %       |        | 1.0      |             |        |          | 0.96%   |
| Y 371.029   | 693904.7                 | 102.40 %    |        | 0.555    |             |        |          | 0.54%   |
| Y RADIAL  | 2706.8                   | 103.0 %     |        | 0.79     |             |        |          | 0.76%   |
| Ag 328.068†   | 37.4                     | 0.1927 ug/L |        | 0.13632  | 0.1927 ppb  |        | 0.13632  | 70.75%  |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |             |        |          |             |        |          |         |
| Al 396.153Radial†   | 2.4                      | 5.2308 ug/L |        | 22.45296 | 5.2308 ppb  |        | 22.45296 | 429.25% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |             |        |          |             |        |          |         |
| As 188.979†   | 0.2                      | 0.0994 ug/L |        | 1.04207  | 0.0994 ppb  |        | 1.04207  | >999.9% |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |             |        |          |             |        |          |         |
| B 249.677†  | 150.8                    | 4.3917 ug/L |        | 0.34906  | 4.3917 ppb  |        | 0.34906  | 7.95%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |             |        |          |             |        |          |         |
| Ba 233.527†   | 56.8                     | 0.5625 ug/L |        | 0.01055  | 0.5625 ppb  |        | 0.01055  | 1.88%   |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |             |        |          |             |        |          |         |
| Be 313.107†   | 169.6                    | 0.0770 ug/L |        | 0.02841  | 0.0770 ppb  |        | 0.02841  | 36.92%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |             |        |          |             |        |          |         |
| Ca 317.933Radial†   | 0.8                      | 3.2041 ug/L |        | 5.79876  | 3.2041 ppb  |        | 5.79876  | 180.98% |

|  |                 |       |              |         |             |         |         |  |  |
|--|-----------------|-------|--------------|---------|-------------|---------|---------|--|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| Cd   | 226.502†        | 21.4  | 0.3281 ug/L  | 0.05639 | 0.3281 ppb  | 0.05639 | 17.19%  |  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Co   | 228.616†        | 8.9   | 0.2454 ug/L  | 0.14174 | 0.2454 ppb  | 0.14174 | 57.76%  |  |  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Cr   | 267.716†        | 31.2  | 0.4276 ug/L  | 0.19734 | 0.4276 ppb  | 0.19734 | 46.14%  |  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Cu   | 324.752†        | -21.7 | -0.0753 ug/L | 0.26612 | -0.0753 ppb | 0.26612 | 353.55% |  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Fe   | 238.204 Radial† | -0.6  | -15.998 ug/L | 35.0115 | -15.998 ppb | 35.0115 | 218.84% |  |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| K  | 766.490 Radial† | -47.6 | -23.241 ug/L | 41.0338 | -23.241 ppb | 41.0338 | 176.56% |  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |         |             |         |         |  |  |
| Mg   | 279.077 IEC†    | -0.2  | -15.712 ug/L | 99.4521 | -15.712 ppb | 99.4521 | 632.95% |  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |         |             |         |         |  |  |
| Mn   | 257.610†        | 52.2  | 0.0713 ug/L  | 0.01752 | 0.0713 ppb  | 0.01752 | 24.57%  |  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Mo   | 202.031†        | -2.8  | -0.2613 ug/L | 0.22323 | -0.2613 ppb | 0.22323 | 85.44%  |  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Na   | 589.592 Radial† | -7.2  | -2.2832 ug/L | 3.62527 | -2.2832 ppb | 3.62527 | 158.78% |  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| Ni   | 231.604†        | 3.9   | 0.1299 ug/L  | 0.13422 | 0.1299 ppb  | 0.13422 | 103.30% |  |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| P  | 214.914†        | 1.5   | 1.2484 ug/L  | 5.34811 | 1.2484 ppb  | 5.34811 | 428.40% |  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| Pb   | 220.353†        | 7.5   | 1.2330 ug/L  | 0.97324 | 1.2330 ppb  | 0.97324 | 78.93%  |  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| S  | 181.975 Axial†  | -1.0  | -1.8523 ug/L | 6.35162 | -1.8523 ppb | 6.35162 | 342.91% |  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |         |             |         |         |  |  |
| Sb   | 206.836†        | 6.5   | 2.7630 ug/L  | 3.52599 | 2.7630 ppb  | 3.52599 | 127.61% |  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Se   | 196.026†        | 3.5   | 2.9362 ug/L  | 3.19648 | 2.9362 ppb  | 3.19648 | 108.87% |  |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Si   | 251.611†        | 0.8   | 0.0339 ug/L  | 0.49543 | 0.0339 ppb  | 0.49543 | >999.9% |  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Sn   | 189.927†        | -2.2  | -0.5336 ug/L | 1.53824 | -0.5336 ppb | 1.53824 | 288.29% |  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Sr   | 421.552†        | -6.6  | -0.0640 ug/L | 0.11593 | -0.0640 ppb | 0.11593 | 181.21% |  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Ti   | 334.940†        | 60.3  | 0.1088 ug/L  | 0.03961 | 0.1088 ppb  | 0.03961 | 36.42%  |  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Tl   | 190.801†        | 4.4   | 1.8203 ug/L  | 0.43870 | 1.8203 ppb  | 0.43870 | 24.10%  |  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| U  | 409.014†        | 75.8  | 2.3037 ug/L  | 4.50881 | 2.3037 ppb  | 4.50881 | 195.72% |  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| V  | 292.402†        | 38.5  | 0.3177 ug/L  | 0.15144 | 0.3177 ppb  | 0.15144 | 47.67%  |  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| Zn   | 213.857†        | 83.1  | 1.0648 ug/L  | 0.04603 | 1.0648 ppb  | 0.04603 | 4.32%   |  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| SiO2†  |                 | 15.3  | 1.2959 ug/L  | 0.19805 | 1.2959 ppb  | 0.19805 | 15.28%  |  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |         |             |         |         |  |  |
| All analyte(s) passed QC.  |                 |       |              |         |             |         |         |  |  |

Sequence No.: 12

Sample ID: 247192001|954668|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 3/10/2010 20:26:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247192001|954668|1

| Rep# | Analyte            | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1    | Sc Radial          | 3373.7        | 3373.7              | 105 %              |                    | 20:28:24      |
| 1    | Y RADIAL           | 2765.8        | 2765.8              | 105.3 %            |                    | 20:28:24      |
| 1    | Al 396.153Radial†  | -47.4         | 17.0                | 36.776 ug/L        | 36.776 ppb         | 20:28:24      |
| 1    | Ca 317.933Radial†  | 24.6          | 10.9                | 45.569 ug/L        | 45.569 ppb         | 20:28:24      |
| 1    | Fe 238.204 Radial† | 8.8           | -1.1                | -32.046 ug/L       | -32.046 ppb        | 20:28:24      |
| 1    | K 766.490 Radial†  | 2519.3        | 366.4               | 178.88 ug/L        | 178.88 ppb         | 20:28:04      |
| 1    | Mg 279.077 IEC†    | 1.4           | -0.4                | -39.155 ug/L       | -39.155 ppb        | 20:28:24      |
| 1    | Na 589.592 Radial† | 98.1          | 825.8               | 261.23 ug/L        | 261.23 ppb         | 20:28:04      |
| 1    | Sr 421.552†        | 41.8          | 5.1                 | 0.0489 ug/L        | 0.0489 ppb         | 20:28:04      |
| 1    | Sc 361.383         | 832026.7      | 832026.7            | 105.06 %           |                    | 20:29:21      |
| 1    | Y 371.029          | 710181.7      | 710181.7            | 104.80 %           |                    | 20:29:21      |
| 1    | Ag 328.068†        | 222.5         | 80.4                | 0.4141 ug/L        | 0.4141 ppb         | 20:29:21      |
| 1    | As 188.979†        | -19.3         | 0.5                 | 0.2882 ug/L        | 0.2882 ppb         | 20:29:41      |
| 1    | B 249.677†         | 853.9         | 1190.0              | 34.636 ug/L        | 34.636 ppb         | 20:29:41      |
| 1    | Ba 233.527†        | 43.4          | 41.6                | 0.4109 ug/L        | 0.4109 ppb         | 20:29:41      |
| 1    | Be 313.107†        | -3565.1       | 148.5               | 0.0695 ug/L        | 0.0695 ppb         | 20:29:21      |
| 1    | Cd 226.502†        | -143.6        | 19.6                | 0.3034 ug/L        | 0.3034 ppb         | 20:29:41      |
| 1    | Co 228.616†        | -46.5         | 1.7                 | 0.0429 ug/L        | 0.0429 ppb         | 20:29:41      |
| 1    | Cr 267.716†        | 185.6         | 123.8               | 1.6973 ug/L        | 1.6973 ppb         | 20:29:41      |
| 1    | Cu 324.752†        | 6612.5        | 82.1                | 0.2746 ug/L        | 0.2746 ppb         | 20:29:21      |
| 1    | Mn 257.610†        | 1405.0        | 938.5               | 1.2965 ug/L        | 1.2965 ppb         | 20:29:41      |
| 1    | Mo 202.031†        | 10.9          | -2.6                | -0.2417 ug/L       | -0.2417 ppb        | 20:29:41      |
| 1    | Ni 231.604†        | 98.5          | 33.2                | 1.1094 ug/L        | 1.1094 ppb         | 20:29:41      |
| 1    | P 214.914†         | 172.7         | 0.0                 | -0.0120 ug/L       | -0.0120 ppb        | 20:29:41      |
| 1    | Pb 220.353†        | -34.7         | 10.7                | 1.7633 ug/L        | 1.7633 ppb         | 20:29:41      |
| 1    | S 181.975 Axial†   | 44.9          | 11.9                | 22.755 ug/L        | 22.755 ppb         | 20:29:41      |
| 1    | Sb 206.836†        | 30.5          | 6.3                 | 2.6837 ug/L        | 2.6837 ppb         | 20:29:41      |
| 1    | Se 196.026†        | -16.6         | 4.9                 | 4.0688 ug/L        | 4.0688 ppb         | 20:29:41      |
| 1    | Si 251.611†        | 56544.2       | 53345.5             | 2085.6 ug/L        | 2085.6 ppb         | 20:29:21      |
| 1    | Sn 189.927†        | 3.8           | -4.2                | -0.9868 ug/L       | -0.9868 ppb        | 20:29:41      |
| 1    | Ti 334.940†        | -372.9        | 573.5               | 1.0365 ug/L        | 1.0365 ppb         | 20:29:21      |
| 1    | Tl 190.801†        | -17.8         | 9.0                 | 3.7114 ug/L        | 3.7114 ppb         | 20:29:41      |
| 1    | U 409.014†         | -2000.7       | 67.7                | 2.0554 ug/L        | 2.0554 ppb         | 20:29:21      |
| 1    | V 292.402†         | -1259.0       | -6.2                | -0.0477 ug/L       | -0.0477 ppb        | 20:29:21      |
| 1    | Zn 213.857†        | 791.2         | 241.7               | 3.0893 ug/L        | 3.0893 ppb         | 20:29:41      |
| 1    | SiO2†              | 57036.6       | 53815.3             | 4521.2 ug/L        | 4521.2 ppb         | 20:30:37      |
| 2    | Sc Radial          | 3375.9        | 3375.9              | 105 %              |                    | 20:28:49      |
| 2    | Y RADIAL           | 2761.8        | 2761.8              | 105.1 %            |                    | 20:28:49      |
| 2    | Al 396.153Radial†  | -37.6         | 26.3                | 56.881 ug/L        | 56.881 ppb         | 20:28:49      |
| 2    | Ca 317.933Radial†  | 24.9          | 11.1                | 46.516 ug/L        | 46.516 ppb         | 20:28:49      |
| 2    | Fe 238.204 Radial† | 7.3           | -2.6                | -73.667 ug/L       | -73.667 ppb        | 20:28:49      |
| 2    | K 766.490 Radial†  | 2643.1        | 482.3               | 235.53 ug/L        | 235.53 ppb         | 20:28:29      |
| 2    | Mg 279.077 IEC†    | 0.9           | -0.9                | -88.183 ug/L       | -88.183 ppb        | 20:28:49      |
| 2    | Na 589.592 Radial† | 28.2          | 759.4               | 240.23 ug/L        | 240.23 ppb         | 20:28:29      |
| 2    | Sr 421.552†        | 30.9          | -5.3                | -0.0515 ug/L       | -0.0515 ppb        | 20:28:29      |
| 2    | Sc 361.383         | 834697.4      | 834697.4            | 105.40 %           |                    | 20:29:46      |
| 2    | Y 371.029          | 713334.1      | 713334.1            | 105.27 %           |                    | 20:29:46      |
| 2    | Ag 328.068†        | 132.4         | -5.7                | -0.0572 ug/L       | -0.0572 ppb        | 20:29:46      |
| 2    | As 188.979†        | -14.2         | 5.3                 | 3.1178 ug/L        | 3.1178 ppb         | 20:30:06      |
| 2    | B 249.677†         | 868.4         | 1201.2              | 34.967 ug/L        | 34.967 ppb         | 20:30:06      |
| 2    | Ba 233.527†        | 41.0          | 39.1                | 0.3866 ug/L        | 0.3866 ppb         | 20:30:06      |
| 2    | Be 313.107†        | -3538.9       | 184.1               | 0.0861 ug/L        | 0.0861 ppb         | 20:29:46      |
| 2    | Cd 226.502†        | -138.3        | 25.1                | 0.3919 ug/L        | 0.3919 ppb         | 20:30:06      |
| 2    | Co 228.616†        | -42.1         | 6.0                 | 0.1639 ug/L        | 0.1639 ppb         | 20:30:06      |
| 2    | Cr 267.716†        | 174.3         | 112.5               | 1.5394 ug/L        | 1.5394 ppb         | 20:30:06      |
| 2    | Cu 324.752†        | 6640.6        | 88.7                | 0.2917 ug/L        | 0.2917 ppb         | 20:29:46      |
| 2    | Mn 257.610†        | 1423.7        | 952.0               | 1.3130 ug/L        | 1.3130 ppb         | 20:30:06      |
| 2    | Mo 202.031†        | 18.0          | 4.1                 | 0.3660 ug/L        | 0.3660 ppb         | 20:30:06      |
| 2    | Ni 231.604†        | 90.2          | 25.0                | 0.8343 ug/L        | 0.8343 ppb         | 20:30:06      |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 170.6    | -2.5     | -1.9750 ug/L | -1.9750 ppb | 20:30:06 |
| 2 | Pb 220.353†        | -45.3    | 0.7      | 0.1374 ug/L  | 0.1374 ppb  | 20:30:06 |
| 2 | S 181.975 Axial†   | 45.7     | 12.5     | 23.942 ug/L  | 23.942 ppb  | 20:30:06 |
| 2 | Sb 206.836†        | 26.4     | 2.3      | 1.0072 ug/L  | 1.0072 ppb  | 20:30:06 |
| 2 | Se 196.026†        | -21.5    | 0.3      | 0.0464 ug/L  | 0.0464 ppb  | 20:30:06 |
| 2 | Si 251.611†        | 56537.5  | 53166.9  | 2078.7 ug/L  | 2078.7 ppb  | 20:29:46 |
| 2 | Sn 189.927†        | 14.2     | 5.7      | 1.3630 ug/L  | 1.3630 ppb  | 20:30:06 |
| 2 | Ti 334.940†        | -249.6   | 691.6    | 1.2503 ug/L  | 1.2503 ppb  | 20:29:46 |
| 2 | Tl 190.801†        | -25.1    | 2.2      | 0.9150 ug/L  | 0.9150 ppb  | 20:30:06 |
| 2 | U 409.014†         | -1835.2  | 230.8    | 7.0156 ug/L  | 7.0156 ppb  | 20:29:46 |
| 2 | V 292.402†         | -1182.8  | 70.0     | 0.5996 ug/L  | 0.5996 ppb  | 20:29:46 |
| 2 | Zn 213.857†        | 802.1    | 249.6    | 3.1986 ug/L  | 3.1986 ppb  | 20:30:06 |
| 2 | SiO2†              | 57106.4  | 53707.8  | 4512.2 ug/L  | 4512.2 ppb  | 20:30:42 |
| 3 | Sc Radial          | 3375.1   | 3375.1   | 105 %        |             | 20:29:14 |
| 3 | Y RADIAL           | 2753.2   | 2753.2   | 104.8 %      |             | 20:29:14 |
| 3 | Al 396.153Radial†  | -39.7    | 24.3     | 52.532 ug/L  | 52.532 ppb  | 20:29:14 |
| 3 | Ca 317.933Radial†  | 24.6     | 10.8     | 45.244 ug/L  | 45.244 ppb  | 20:29:14 |
| 3 | Fe 238.204 Radial† | 11.1     | 1.0      | 29.356 ug/L  | 29.356 ppb  | 20:29:14 |
| 3 | K 766.490 Radial†  | 2562.4   | 406.3    | 198.40 ug/L  | 198.40 ppb  | 20:28:54 |
| 3 | Mg 279.077 IEC†    | 1.1      | -0.7     | -67.956 ug/L | -67.956 ppb | 20:29:14 |
| 3 | Na 589.592 Radial† | 61.7     | 791.2    | 250.31 ug/L  | 250.31 ppb  | 20:28:54 |
| 3 | Sr 421.552†        | 21.4     | -14.3    | -0.1380 ug/L | -0.1380 ppb | 20:28:54 |
| 3 | Sc 361.383         | 839365.7 | 839365.7 | 105.99 %     |             | 20:30:11 |
| 3 | Y 371.029          | 717386.9 | 717386.9 | 105.87 %     |             | 20:30:11 |
| 3 | Ag 328.068†        | 169.3    | 28.4     | 0.1572 ug/L  | 0.1572 ppb  | 20:30:11 |
| 3 | As 188.979†        | -21.6    | -1.6     | -0.8939 ug/L | -0.8939 ppb | 20:30:32 |
| 3 | B 249.677†         | 874.4    | 1202.2   | 34.980 ug/L  | 34.980 ppb  | 20:30:32 |
| 3 | Ba 233.527†        | 60.8     | 57.7     | 0.5741 ug/L  | 0.5741 ppb  | 20:30:32 |
| 3 | Be 313.107†        | -3531.9  | 209.5    | 0.0975 ug/L  | 0.0975 ppb  | 20:30:11 |
| 3 | Cd 226.502†        | -133.0   | 30.7     | 0.4679 ug/L  | 0.4679 ppb  | 20:30:32 |
| 3 | Co 228.616†        | -32.8    | 14.9     | 0.4071 ug/L  | 0.4071 ppb  | 20:30:32 |
| 3 | Cr 267.716†        | 181.2    | 118.2    | 1.6219 ug/L  | 1.6219 ppb  | 20:30:32 |
| 3 | Cu 324.752†        | 6689.6   | 99.8     | 0.3350 ug/L  | 0.3350 ppb  | 20:30:11 |
| 3 | Mn 257.610†        | 1409.2   | 930.7    | 1.2929 ug/L  | 1.2929 ppb  | 20:30:32 |
| 3 | Mo 202.031†        | 11.7     | -2.0     | -0.1803 ug/L | -0.1803 ppb | 20:30:32 |
| 3 | Ni 231.604†        | 99.0     | 32.8     | 1.0969 ug/L  | 1.0969 ppb  | 20:30:32 |
| 3 | P 214.914†         | 184.9    | 10.2     | 8.0790 ug/L  | 8.0790 ppb  | 20:30:32 |
| 3 | Pb 220.353†        | -35.1    | 10.6     | 1.7422 ug/L  | 1.7422 ppb  | 20:30:32 |
| 3 | S 181.975 Axial†   | 56.7     | 22.7     | 43.373 ug/L  | 43.373 ppb  | 20:30:32 |
| 3 | Sb 206.836†        | 33.9     | 9.3      | 3.9505 ug/L  | 3.9505 ppb  | 20:30:32 |
| 3 | Se 196.026†        | -21.0    | 0.9      | 0.8527 ug/L  | 0.8527 ppb  | 20:30:32 |
| 3 | Si 251.611†        | 57006.7  | 53311.4  | 2084.3 ug/L  | 2084.3 ppb  | 20:30:11 |
| 3 | Sn 189.927†        | 0.5      | -7.3     | -1.7338 ug/L | -1.7338 ppb | 20:30:32 |
| 3 | Ti 334.940†        | -258.5   | 684.5    | 1.2359 ug/L  | 1.2359 ppb  | 20:30:11 |
| 3 | Tl 190.801†        | -24.1    | 3.2      | 1.3493 ug/L  | 1.3493 ppb  | 20:30:32 |
| 3 | U 409.014†         | -1853.6  | 223.1    | 6.7701 ug/L  | 6.7701 ppb  | 20:30:11 |
| 3 | V 292.402†         | -1147.2  | 109.8    | 0.9026 ug/L  | 0.9026 ppb  | 20:30:11 |
| 3 | Zn 213.857†        | 805.8    | 248.9    | 3.1719 ug/L  | 3.1719 ppb  | 20:30:32 |
| 3 | SiO2†              | 57482.9  | 53761.7  | 4516.7 ug/L  | 4516.7 ppb  | 20:30:47 |

Mean Data: 247192001|954668|1

| Analyte            | Mean Corrected | Conc.   | Calib. | Std.Dev. | Conc.   | Sample | Std.Dev. | RSD     |
|--------------------|----------------|---------|--------|----------|---------|--------|----------|---------|
| Sc 361.383         | 835363.3       | 105.48  | %      | 0.469    |         |        |          | 0.44%   |
| Sc Radial          | 3374.9         | 105     | %      | 0.0      |         |        |          | 0.03%   |
| Y 371.029          | 713634.2       | 105.31  | %      | 0.533    |         |        |          | 0.51%   |
| Y RADIAL           | 2760.3         | 105.1   | %      | 0.25     |         |        |          | 0.23%   |
| Ag 328.068†        | 34.4           | 0.1714  | ug/L   | 0.23597  | 0.1714  | ppb    | 0.23597  | 137.71% |
| Al 396.153Radial†  | 22.5           | 48.730  | ug/L   | 10.5784  | 48.730  | ppb    | 10.5784  | 21.71%  |
| As 188.979†        | 1.4            | 0.8374  | ug/L   | 2.06143  | 0.8374  | ppb    | 2.06143  | 246.18% |
| B 249.677†         | 1197.8         | 34.861  | ug/L   | 0.1950   | 34.861  | ppb    | 0.1950   | 0.56%   |
| Ba 233.527†        | 46.2           | 0.4572  | ug/L   | 0.10198  | 0.4572  | ppb    | 0.10198  | 22.30%  |
| Be 313.107†        | 180.7          | 0.0844  | ug/L   | 0.01411  | 0.0844  | ppb    | 0.01411  | 16.72%  |
| Ca 317.933Radial†  | 11.0           | 45.776  | ug/L   | 0.6607   | 45.776  | ppb    | 0.6607   | 1.44%   |
| Cd 226.502†        | 25.1           | 0.3877  | ug/L   | 0.08233  | 0.3877  | ppb    | 0.08233  | 21.23%  |
| Co 228.616†        | 7.5            | 0.2046  | ug/L   | 0.18549  | 0.2046  | ppb    | 0.18549  | 90.65%  |
| Cr 267.716†        | 118.2          | 1.6195  | ug/L   | 0.07898  | 1.6195  | ppb    | 0.07898  | 4.88%   |
| Cu 324.752†        | 90.2           | 0.3004  | ug/L   | 0.03111  | 0.3004  | ppb    | 0.03111  | 10.36%  |
| Fe 238.204 Radial† | -0.9           | -25.452 | ug/L   | 51.8273  | -25.452 | ppb    | 51.8273  | 203.62% |
| K 766.490 Radial†  | 418.3          | 204.27  | ug/L   | 28.776   | 204.27  | ppb    | 28.776   | 14.09%  |

|                    |         |              |         |             |         |         |
|--------------------|---------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC†    | -0.6    | -65.098 ug/L | 24.6386 | -65.098 ppb | 24.6386 | 37.85%  |
| Mn 257.610†        | 940.4   | 1.3008 ug/L  | 0.01069 | 1.3008 ppb  | 0.01069 | 0.82%   |
| Mo 202.031†        | -0.2    | -0.0186 ug/L | 0.33454 | -0.0186 ppb | 0.33454 | >999.9% |
| Na 589.592 Radial† | 792.1   | 250.59 ug/L  | 10.499  | 250.59 ppb  | 10.499  | 4.19%   |
| Ni 231.604†        | 30.3    | 1.0135 ug/L  | 0.15536 | 1.0135 ppb  | 0.15536 | 15.33%  |
| P 214.914†         | 2.6     | 2.0307 ug/L  | 5.32918 | 2.0307 ppb  | 5.32918 | 262.44% |
| Pb 220.353†        | 7.3     | 1.2143 ug/L  | 0.93271 | 1.2143 ppb  | 0.93271 | 76.81%  |
| S 181.975 Axial†   | 15.7    | 30.023 ug/L  | 11.5762 | 30.023 ppb  | 11.5762 | 38.56%  |
| Sb 206.836†        | 6.0     | 2.5471 ug/L  | 1.47639 | 2.5471 ppb  | 1.47639 | 57.96%  |
| Se 196.026†        | 2.0     | 1.6560 ug/L  | 2.12812 | 1.6560 ppb  | 2.12812 | 128.51% |
| Si 251.611†        | 53274.6 | 2082.9 ug/L  | 3.71    | 2082.9 ppb  | 3.71    | 0.18%   |
| Sn 189.927†        | -1.9    | -0.4525 ug/L | 1.61607 | -0.4525 ppb | 1.61607 | 357.13% |
| Sr 421.552†        | -4.8    | -0.0469 ug/L | 0.09350 | -0.0469 ppb | 0.09350 | 199.47% |
| Ti 334.940†        | 649.9   | 1.1743 ug/L  | 0.11950 | 1.1743 ppb  | 0.11950 | 10.18%  |
| Tl 190.801†        | 4.8     | 1.9919 ug/L  | 1.50491 | 1.9919 ppb  | 1.50491 | 75.55%  |
| U 409.014†         | 173.9   | 5.2804 ug/L  | 2.79560 | 5.2804 ppb  | 2.79560 | 52.94%  |
| V 292.402†         | 57.9    | 0.4848 ug/L  | 0.48546 | 0.4848 ppb  | 0.48546 | 100.13% |
| Zn 213.857†        | 246.7   | 3.1533 ug/L  | 0.05698 | 3.1533 ppb  | 0.05698 | 1.81%   |
| SiO2†              | 53761.6 | 4516.7 ug/L  | 4.53    | 4516.7 ppb  | 4.53    | 0.10%   |



Sequence No.: 13  
 Sample ID: 1202046567|954668|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 46  
 Date Collected: 3/10/2010 20:32:58  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202046567|954668|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3420.7           | 3420.7                 | 107 %                 |                       | 20:35:11         |
| 1     | Y RADIAL           | 2815.2           | 2815.2                 | 107.1 %               |                       | 20:35:11         |
| 1     | Al 396.153Radial†  | -41.4            | 23.2                   | 50.263 ug/L           | 50.263 ppb            | 20:35:11         |
| 1     | Ca 317.933Radial†  | 17.4             | 3.8                    | 15.946 ug/L           | 15.946 ppb            | 20:35:11         |
| 1     | Fe 238.204 Radial† | 9.9              | -0.2                   | -6.0293 ug/L          | -6.0293 ppb           | 20:35:11         |
| 1     | K 766.490 Radial†  | 2574.5           | 385.1                  | 188.05 ug/L           | 188.05 ppb            | 20:34:51         |
| 1     | Mg 279.077 IEC†    | 0.4              | -1.3                   | -137.04 ug/L          | -137.04 ppb           | 20:35:11         |
| 1     | Na 589.592 Radial† | 74.7             | 802.6                  | 253.91 ug/L           | 253.91 ppb            | 20:34:51         |
| 1     | Sr 421.552†        | 27.8             | -8.6                   | -0.0826 ug/L          | -0.0826 ppb           | 20:34:51         |
| 1     | Sc 361.383         | 842296.1         | 842296.1               | 106.36 %              |                       | 20:36:08         |
| 1     | Y 371.029          | 718491.7         | 718491.7               | 106.03 %              |                       | 20:36:08         |
| 1     | Ag 328.068†        | 169.9            | 28.5                   | 0.1469 ug/L           | 0.1469 ppb            | 20:36:08         |
| 1     | As 188.979†        | -15.4            | 4.4                    | 2.5730 ug/L           | 2.5730 ppb            | 20:36:28         |
| 1     | B 249.677†         | 842.2            | 1169.1                 | 34.022 ug/L           | 34.022 ppb            | 20:36:28         |
| 1     | Ba 233.527†        | 43.8             | 41.4                   | 0.4112 ug/L           | 0.4112 ppb            | 20:36:28         |
| 1     | Be 313.107†        | -3528.9          | 223.9                  | 0.1036 ug/L           | 0.1036 ppb            | 20:36:08         |
| 1     | Cd 226.502†        | -140.1           | 24.6                   | 0.3769 ug/L           | 0.3769 ppb            | 20:36:28         |
| 1     | Co 228.616†        | -36.5            | 11.6                   | 0.3155 ug/L           | 0.3155 ppb            | 20:36:28         |
| 1     | Cr 267.716†        | 169.8            | 106.9                  | 1.4655 ug/L           | 1.4655 ppb            | 20:36:28         |
| 1     | Cu 324.752†        | 6538.2           | -64.5                  | -0.2208 ug/L          | -0.2208 ppb           | 20:36:08         |
| 1     | Mn 257.610†        | 1325.3           | 847.3                  | 1.1768 ug/L           | 1.1768 ppb            | 20:36:28         |
| 1     | Mo 202.031†        | 8.4              | -5.2                   | -0.4716 ug/L          | -0.4716 ppb           | 20:36:28         |
| 1     | Ni 231.604†        | 95.4             | 29.1                   | 0.9726 ug/L           | 0.9726 ppb            | 20:36:28         |
| 1     | P 214.914†         | 186.5            | 11.0                   | 8.8931 ug/L           | 8.8931 ppb            | 20:36:28         |
| 1     | Pb 220.353†        | -43.4            | 2.8                    | 0.4757 ug/L           | 0.4757 ppb            | 20:36:28         |
| 1     | S 181.975 Axial†   | 42.2             | 8.9                    | 17.004 ug/L           | 17.004 ppb            | 20:36:28         |
| 1     | Sb 206.836†        | 17.6             | -6.2                   | -2.6483 ug/L          | -2.6483 ppb           | 20:36:28         |
| 1     | Se 196.026†        | -13.6            | 7.9                    | 6.7702 ug/L           | 6.7702 ppb            | 20:36:28         |
| 1     | Si 251.611†        | 56557.7          | 52702.0                | 2060.5 ug/L           | 2060.5 ppb            | 20:36:08         |
| 1     | Sn 189.927†        | 11.6             | 3.1                    | 0.7383 ug/L           | 0.7383 ppb            | 20:36:28         |
| 1     | Ti 334.940†        | -371.4           | 579.2                  | 1.0496 ug/L           | 1.0496 ppb            | 20:36:08         |
| 1     | Tl 190.801†        | -17.5            | 9.5                    | 3.9051 ug/L           | 3.9051 ppb            | 20:36:28         |
| 1     | U 409.014†         | -1926.7          | 160.5                  | 4.8734 ug/L           | 4.8734 ppb            | 20:36:08         |
| 1     | V 292.402†         | -1203.6          | 60.6                   | 0.4955 ug/L           | 0.4955 ppb            | 20:36:08         |
| 1     | Zn 213.857†        | 635.2            | 85.9                   | 1.0937 ug/L           | 1.0937 ppb            | 20:36:28         |
| 1     | SiO2†              | 56411.5          | 52565.6                | 4416.2 ug/L           | 4416.2 ppb            | 20:37:24         |
| 2     | Sc Radial          | 3433.6           | 3433.6                 | 107 %                 |                       | 20:35:36         |
| 2     | Y RADIAL           | 2831.4           | 2831.4                 | 107.8 %               |                       | 20:35:36         |
| 2     | Al 396.153Radial†  | -46.6            | 18.5                   | 40.112 ug/L           | 40.112 ppb            | 20:35:36         |
| 2     | Ca 317.933Radial†  | 20.3             | 6.5                    | 27.031 ug/L           | 27.031 ppb            | 20:35:36         |
| 2     | Fe 238.204 Radial† | 10.3             | 0.1                    | 4.2058 ug/L           | 4.2058 ppb            | 20:35:36         |
| 2     | K 766.490 Radial†  | 2597.3           | 397.4                  | 194.05 ug/L           | 194.05 ppb            | 20:35:16         |
| 2     | Mg 279.077 IEC†    | 1.4              | -0.4                   | -38.923 ug/L          | -38.923 ppb           | 20:35:36         |
| 2     | Na 589.592 Radial† | 77.6             | 805.1                  | 254.68 ug/L           | 254.68 ppb            | 20:35:16         |
| 2     | Sr 421.552†        | 20.4             | -15.6                  | -0.1500 ug/L          | -0.1500 ppb           | 20:35:16         |
| 2     | Sc 361.383         | 836865.8         | 836865.8               | 105.67 %              |                       | 20:36:33         |
| 2     | Y 371.029          | 714454.1         | 714454.1               | 105.43 %              |                       | 20:36:33         |
| 2     | Ag 328.068†        | 158.7            | 18.9                   | 0.0989 ug/L           | 0.0989 ppb            | 20:36:33         |
| 2     | As 188.979†        | -22.8            | -2.7                   | -1.5785 ug/L          | -1.5785 ppb           | 20:36:53         |
| 2     | B 249.677†         | 863.6            | 1194.5                 | 34.761 ug/L           | 34.761 ppb            | 20:36:53         |
| 2     | Ba 233.527†        | 50.2             | 47.8                   | 0.4745 ug/L           | 0.4745 ppb            | 20:36:53         |
| 2     | Be 313.107†        | -3601.3          | 133.8                  | 0.0627 ug/L           | 0.0627 ppb            | 20:36:33         |
| 2     | Cd 226.502†        | -141.0           | 22.8                   | 0.3490 ug/L           | 0.3490 ppb            | 20:36:53         |
| 2     | Co 228.616†        | -53.2            | -4.5                   | -0.1274 ug/L          | -0.1274 ppb           | 20:36:53         |
| 2     | Cr 267.716†        | 168.9            | 107.0                  | 1.4683 ug/L           | 1.4683 ppb            | 20:36:53         |
| 2     | Cu 324.752†        | 6514.7           | -46.9                  | -0.1603 ug/L          | -0.1603 ppb           | 20:36:33         |
| 2     | Mn 257.610†        | 1327.9           | 857.8                  | 1.1883 ug/L           | 1.1883 ppb            | 20:36:53         |
| 2     | Mo 202.031†        | 3.6              | -9.6                   | -0.8759 ug/L          | -0.8759 ppb           | 20:36:53         |
| 2     | Ni 231.604†        | 90.4             | 24.9                   | 0.8329 ug/L           | 0.8329 ppb            | 20:36:53         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 173.1    | -0.5     | -0.3439 ug/L | -0.3439 ppb | 20:36:53 |
| 2 | Pb 220.353†        | -36.1    | 9.5      | 1.5678 ug/L  | 1.5678 ppb  | 20:36:53 |
| 2 | S 181.975 Axial†   | 43.2     | 10.1     | 19.189 ug/L  | 19.189 ppb  | 20:36:53 |
| 2 | Sb 206.836†        | 31.5     | 7.0      | 2.9990 ug/L  | 2.9990 ppb  | 20:36:53 |
| 2 | Se 196.026†        | -17.5    | 4.1      | 3.5107 ug/L  | 3.5107 ppb  | 20:36:53 |
| 2 | Si 251.611†        | 56244.7  | 52750.9  | 2062.4 ug/L  | 2062.4 ppb  | 20:36:33 |
| 2 | Sn 189.927†        | 7.5      | -0.7     | -0.1571 ug/L | -0.1571 ppb | 20:36:53 |
| 2 | Ti 334.940†        | -415.2   | 535.5    | 0.9649 ug/L  | 0.9649 ppb  | 20:36:33 |
| 2 | Tl 190.801†        | -23.8    | 3.5      | 1.4481 ug/L  | 1.4481 ppb  | 20:36:53 |
| 2 | U 409.014†         | -1941.3  | 134.9    | 4.0943 ug/L  | 4.0943 ppb  | 20:36:33 |
| 2 | V 292.402†         | -1215.5  | 42.0     | 0.3364 ug/L  | 0.3364 ppb  | 20:36:33 |
| 2 | Zn 213.857†        | 634.2    | 88.8     | 1.1301 ug/L  | 1.1301 ppb  | 20:36:53 |
| 2 | SiO2†              | 56776.0  | 53254.8  | 4474.2 ug/L  | 4474.2 ppb  | 20:37:29 |
| 3 | Sc Radial          | 3387.9   | 3387.9   | 106 %        |             | 20:36:01 |
| 3 | Y RADIAL           | 2786.9   | 2786.9   | 106.1 %      |             | 20:36:01 |
| 3 | Al 396.153Radial†  | -52.8    | 12.1     | 26.053 ug/L  | 26.053 ppb  | 20:36:01 |
| 3 | Ca 317.933Radial†  | 18.7     | 5.2      | 21.750 ug/L  | 21.750 ppb  | 20:36:01 |
| 3 | Fe 238.204 Radial† | 9.8      | -0.3     | -7.3134 ug/L | -7.3134 ppb | 20:36:01 |
| 3 | K 766.490 Radial†  | 2599.7   | 432.3    | 211.10 ug/L  | 211.10 ppb  | 20:35:41 |
| 3 | Mg 279.077 IEC†    | 1.8      | -0.0     | -3.2296 ug/L | -3.2296 ppb | 20:36:01 |
| 3 | Na 589.592 Radial† | 160.6    | 884.5    | 279.82 ug/L  | 279.82 ppb  | 20:35:41 |
| 3 | Sr 421.552†        | 41.8     | 4.9      | 0.0471 ug/L  | 0.0471 ppb  | 20:35:41 |
| 3 | Sc 361.383         | 841755.7 | 841755.7 | 106.29 %     |             | 20:36:58 |
| 3 | Y 371.029          | 719275.4 | 719275.4 | 106.14 %     |             | 20:36:58 |
| 3 | Ag 328.068†        | 197.7    | 54.7     | 0.2852 ug/L  | 0.2852 ppb  | 20:36:58 |
| 3 | As 188.979†        | -18.1    | 1.8      | 1.0442 ug/L  | 1.0442 ppb  | 20:37:18 |
| 3 | B 249.677†         | 855.1    | 1181.8   | 34.391 ug/L  | 34.391 ppb  | 20:37:18 |
| 3 | Ba 233.527†        | 55.6     | 52.6     | 0.5212 ug/L  | 0.5212 ppb  | 20:37:18 |
| 3 | Be 313.107†        | -3570.3  | 182.8    | 0.0849 ug/L  | 0.0849 ppb  | 20:36:58 |
| 3 | Cd 226.502†        | -144.7   | 20.2     | 0.3094 ug/L  | 0.3094 ppb  | 20:37:18 |
| 3 | Co 228.616†        | -35.7    | 12.3     | 0.3371 ug/L  | 0.3371 ppb  | 20:37:18 |
| 3 | Cr 267.716†        | 167.9    | 105.1    | 1.4415 ug/L  | 1.4415 ppb  | 20:37:18 |
| 3 | Cu 324.752†        | 6489.0   | -106.8   | -0.3637 ug/L | -0.3637 ppb | 20:36:58 |
| 3 | Mn 257.610†        | 1308.1   | 831.8    | 1.1499 ug/L  | 1.1499 ppb  | 20:37:18 |
| 3 | Mo 202.031†        | 19.2     | 5.0      | 0.4582 ug/L  | 0.4582 ppb  | 20:37:18 |
| 3 | Ni 231.604†        | 78.4     | 13.1     | 0.4392 ug/L  | 0.4392 ppb  | 20:37:18 |
| 3 | P 214.914†         | 178.2    | 3.3      | 2.7423 ug/L  | 2.7423 ppb  | 20:37:18 |
| 3 | Pb 220.353†        | -39.8    | 6.2      | 1.0284 ug/L  | 1.0284 ppb  | 20:37:18 |
| 3 | S 181.975 Axial†   | 41.2     | 8.0      | 15.244 ug/L  | 15.244 ppb  | 20:37:18 |
| 3 | Sb 206.836†        | 22.1     | -1.9     | -0.8115 ug/L | -0.8115 ppb | 20:37:18 |
| 3 | Se 196.026†        | -17.0    | 4.7      | 4.0325 ug/L  | 4.0325 ppb  | 20:37:18 |
| 3 | Si 251.611†        | 56423.1  | 52609.5  | 2056.9 ug/L  | 2056.9 ppb  | 20:36:58 |
| 3 | Sn 189.927†        | 12.5     | 3.9      | 0.9371 ug/L  | 0.9371 ppb  | 20:37:18 |
| 3 | Ti 334.940†        | -399.2   | 552.9    | 0.9922 ug/L  | 0.9922 ppb  | 20:36:58 |
| 3 | Tl 190.801†        | -33.6    | -5.7     | -2.3190 ug/L | -2.3190 ppb | 20:37:18 |
| 3 | U 409.014†         | -1929.1  | 157.1    | 4.7697 ug/L  | 4.7697 ppb  | 20:36:58 |
| 3 | V 292.402†         | -1219.9  | 44.6     | 0.3802 ug/L  | 0.3802 ppb  | 20:36:58 |
| 3 | Zn 213.857†        | 639.7    | 90.4     | 1.1555 ug/L  | 1.1555 ppb  | 20:37:18 |
| 3 | SiO2†              | 55625.1  | 51859.8  | 4356.9 ug/L  | 4356.9 ppb  | 20:37:34 |

Mean Data: 1202046567|954668|1

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Conc. Units | Sample Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|-------------|-----------------|---------|
| Sc 361.383         | 840305.9                 | 106.10 %     |        | 0.378    |             |                 | 0.36%   |
| Sc Radial          | 3414.1                   | 107 %        |        | 0.7      |             |                 | 0.69%   |
| Y 371.029          | 717407.1                 | 105.87 %     |        | 0.382    |             |                 | 0.36%   |
| Y RADIAL           | 2811.2                   | 107.0 %      |        | 0.86     |             |                 | 0.80%   |
| Ag 328.068†        | 34.0                     | 0.1770 ug/L  |        | 0.09670  | 0.1770 ppb  | 0.09670         | 54.64%  |
| Al 396.153Radial†  | 17.9                     | 38.809 ug/L  |        | 12.1576  | 38.809 ppb  | 12.1576         | 31.33%  |
| As 188.979†        | 1.1                      | 0.6796 ug/L  |        | 2.09965  | 0.6796 ppb  | 2.09965         | 308.97% |
| B 249.677†         | 1181.8                   | 34.391 ug/L  |        | 0.3697   | 34.391 ppb  | 0.3697          | 1.08%   |
| Ba 233.527†        | 47.3                     | 0.4689 ug/L  |        | 0.05521  | 0.4689 ppb  | 0.05521         | 11.77%  |
| Be 313.107†        | 180.2                    | 0.0837 ug/L  |        | 0.02048  | 0.0837 ppb  | 0.02048         | 24.46%  |
| Ca 317.933Radial†  | 5.2                      | 21.576 ug/L  |        | 5.5446   | 21.576 ppb  | 5.5446          | 25.70%  |
| Cd 226.502†        | 22.5                     | 0.3451 ug/L  |        | 0.03393  | 0.3451 ppb  | 0.03393         | 9.83%   |
| Co 228.616†        | 6.5                      | 0.1750 ug/L  |        | 0.26218  | 0.1750 ppb  | 0.26218         | 149.78% |
| Cr 267.716†        | 106.3                    | 1.4584 ug/L  |        | 0.01472  | 1.4584 ppb  | 0.01472         | 1.01%   |
| Cu 324.752†        | -72.7                    | -0.2483 ug/L |        | 0.10443  | -0.2483 ppb | 0.10443         | 42.06%  |
| Fe 238.204 Radial† | -0.1                     | -3.0456 ug/L |        | 6.31265  | -3.0456 ppb | 6.31265         | 207.27% |
| K 766.490 Radial†  | 405.0                    | 197.73 ug/L  |        | 11.956   | 197.73 ppb  | 11.956          | 6.05%   |

|                    |         |              |         |             |         |         |
|--------------------|---------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC†    | -0.6    | -59.730 ug/L | 69.2889 | -59.730 ppb | 69.2889 | 116.00% |
| Mn 257.610†        | 845.6   | 1.1717 ug/L  | 0.01972 | 1.1717 ppb  | 0.01972 | 1.68%   |
| Mo 202.031†        | -3.2    | -0.2965 ug/L | 0.68406 | -0.2965 ppb | 0.68406 | 230.75% |
| Na 589.592 Radial† | 830.7   | 262.80 ug/L  | 14.740  | 262.80 ppb  | 14.740  | 5.61%   |
| Ni 231.604†        | 22.4    | 0.7483 ug/L  | 0.27660 | 0.7483 ppb  | 0.27660 | 36.97%  |
| P 214.914†         | 4.6     | 3.7638 ug/L  | 4.70248 | 3.7638 ppb  | 4.70248 | 124.94% |
| Pb 220.353†        | 6.2     | 1.0239 ug/L  | 0.54606 | 1.0239 ppb  | 0.54606 | 53.33%  |
| S 181.975 Axial†   | 9.0     | 17.146 ug/L  | 1.9767  | 17.146 ppb  | 1.9767  | 11.53%  |
| Sb 206.836†        | -0.4    | -0.1536 ug/L | 2.88058 | -0.1536 ppb | 2.88058 | >999.9% |
| Se 196.026†        | 5.6     | 4.7711 ug/L  | 1.75079 | 4.7711 ppb  | 1.75079 | 36.70%  |
| Si 251.611†        | 52687.5 | 2059.9 ug/L  | 2.82    | 2059.9 ppb  | 2.82    | 0.14%   |
| Sn 189.927†        | 2.1     | 0.5061 ug/L  | 0.58290 | 0.5061 ppb  | 0.58290 | 115.17% |
| Sr 421.552†        | -6.4    | -0.0619 ug/L | 0.10015 | -0.0619 ppb | 0.10015 | 161.90% |
| Ti 334.940†        | 555.8   | 1.0022 ug/L  | 0.04320 | 1.0022 ppb  | 0.04320 | 4.31%   |
| Tl 190.801†        | 2.4     | 1.0114 ug/L  | 3.13496 | 1.0114 ppb  | 3.13496 | 309.96% |
| U 409.014†         | 150.9   | 4.5791 ug/L  | 0.42309 | 4.5791 ppb  | 0.42309 | 9.24%   |
| V 292.402†         | 49.0    | 0.4040 ug/L  | 0.08220 | 0.4040 ppb  | 0.08220 | 20.35%  |
| Zn 213.857†        | 88.4    | 1.1264 ug/L  | 0.03106 | 1.1264 ppb  | 0.03106 | 2.76%   |
| SiO2†              | 52560.0 | 4415.8 ug/L  | 58.62   | 4415.8 ppb  | 58.62   | 1.33%   |

Sequence No.: 14

Sample ID: 1202046568|954668|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 3/10/2010 20:39:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202046568|954668|1

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3442.8           | 3442.8                 | 107 %                 |                       | 20:41:58         |
| 1     | Y RADIAL           | 2823.6           | 2823.6                 | 107.5 %               |                       | 20:41:58         |
| 1     | Al 396.153Radial†  | 2465.9           | 2357.2                 | 5076.6 ug/L           | 5076.6 ppb            | 20:41:38         |
| 1     | Ca 317.933Radial†  | 1316.7           | 1213.1                 | 5068.6 ug/L           | 5068.6 ppb            | 20:41:58         |
| 1     | Fe 238.204 Radial† | 198.7            | 175.4                  | 5064.6 ug/L           | 5064.6 ppb            | 20:41:58         |
| 1     | K 766.490 Radial†  | 13469.7          | 10511.0                | 5130.6 ug/L           | 5130.6 ppb            | 20:41:38         |
| 1     | Mg 279.077 IEC†    | 55.9             | 50.3                   | 5203.8 ug/L           | 5203.8 ppb            | 20:41:58         |
| 1     | Na 589.592 Radial† | 17438.4          | 16964.3                | 5366.6 ug/L           | 5366.6 ppb            | 20:41:38         |
| 1     | Sr 421.552†        | 58052.9          | 54001.0                | 520.00 ug/L           | 520.00 ppb            | 20:41:38         |
| 1     | Sc 361.383         | 865814.4         | 865814.4               | 109.32 %              |                       | 20:42:56         |
| 1     | Y 371.029          | 731153.0         | 731153.0               | 107.90 %              |                       | 20:42:56         |
| 1     | Ag 328.068†        | 99489.3          | 90872.0                | 484.92 ug/L           | 484.92 ppb            | 20:43:01         |
| 1     | As 188.979†        | 899.9            | 842.0                  | 497.45 ug/L           | 497.45 ppb            | 20:43:21         |
| 1     | B 249.677†         | 19001.5          | 17758.0                | 514.54 ug/L           | 514.54 ppb            | 20:43:01         |
| 1     | Ba 233.527†        | 55223.5          | 50513.5                | 501.40 ug/L           | 501.40 ppb            | 20:43:01         |
| 1     | Be 313.107†        | 1194119.2        | 1095809.1              | 496.72 ug/L           | 496.72 ppb            | 20:42:56         |
| 1     | Cd 226.502†        | 34826.0          | 32011.8                | 488.23 ug/L           | 488.23 ppb            | 20:43:01         |
| 1     | Co 228.616†        | 19621.7          | 17994.0                | 496.53 ug/L           | 496.53 ppb            | 20:43:01         |
| 1     | Cr 267.716†        | 40018.9          | 36552.7                | 502.50 ug/L           | 502.50 ppb            | 20:43:01         |
| 1     | Cu 324.752†        | 169862.0         | 149161.7               | 503.75 ug/L           | 503.75 ppb            | 20:43:01         |
| 1     | Mn 257.610†        | 389929.9         | 356272.1               | 493.04 ug/L           | 493.04 ppb            | 20:43:01         |
| 1     | Mo 202.031†        | 5925.5           | 5407.1                 | 494.26 ug/L           | 494.26 ppb            | 20:43:21         |
| 1     | Ni 231.604†        | 16933.2          | 15428.3                | 515.43 ug/L           | 515.43 ppb            | 20:43:01         |
| 1     | P 214.914†         | 948.1            | 702.9                  | 466.10 ug/L           | 466.10 ppb            | 20:43:21         |
| 1     | Pb 220.353†        | 3223.4           | 2992.1                 | 492.22 ug/L           | 492.22 ppb            | 20:43:21         |
| 1     | S 181.975 Axial†   | 2929.6           | 2648.9                 | 5058.8 ug/L           | 5058.8 ppb            | 20:43:21         |
| 1     | Sb 206.836†        | 1332.0           | 1195.7                 | 531.46 ug/L           | 531.46 ppb            | 20:43:21         |
| 1     | Se 196.026†        | 617.4            | 585.4                  | 517.25 ug/L           | 517.25 ppb            | 20:43:21         |
| 1     | Si 251.611†        | 194109.8         | 177077.2               | 6917.1 ug/L           | 6917.1 ppb            | 20:43:01         |
| 1     | Sn 189.927†        | 2306.7           | 2102.1                 | 501.22 ug/L           | 501.22 ppb            | 20:43:21         |
| 1     | Ti 334.940†        | 297756.9         | 273288.3               | 490.04 ug/L           | 490.04 ppb            | 20:43:01         |
| 1     | Tl 190.801†        | 1282.5           | 1199.0                 | 496.54 ug/L           | 496.54 ppb            | 20:43:21         |
| 1     | U 409.014†         | 17045.9          | 17564.0                | 531.80 ug/L           | 531.80 ppb            | 20:43:01         |
| 1     | V 292.402†         | 65832.7          | 61409.8                | 509.79 ug/L           | 509.79 ppb            | 20:43:01         |
| 1     | Zn 213.857†        | 43163.4          | 38970.4                | 493.77 ug/L           | 493.77 ppb            | 20:43:01         |
| 1     | SiO2†              | 193172.5         | 176220.9               | 14792 ug/L            | 14792 ppb             | 20:44:28         |
| 2     | Sc Radial          | 3449.3           | 3449.3                 | 108 %                 |                       | 20:42:24         |
| 2     | Y RADIAL           | 2822.5           | 2822.5                 | 107.4 %               |                       | 20:42:24         |
| 2     | Al 396.153Radial†  | 2468.0           | 2354.9                 | 5071.2 ug/L           | 5071.2 ppb            | 20:42:03         |
| 2     | Ca 317.933Radial†  | 1317.7           | 1211.7                 | 5062.8 ug/L           | 5062.8 ppb            | 20:42:24         |
| 2     | Fe 238.204 Radial† | 198.6            | 175.0                  | 5052.0 ug/L           | 5052.0 ppb            | 20:42:24         |
| 2     | K 766.490 Radial†  | 13459.0          | 10477.4                | 5114.2 ug/L           | 5114.2 ppb            | 20:42:03         |
| 2     | Mg 279.077 IEC†    | 53.4             | 47.9                   | 4958.5 ug/L           | 4958.5 ppb            | 20:42:24         |
| 2     | Na 589.592 Radial† | 17375.9          | 16875.7                | 5338.6 ug/L           | 5338.6 ppb            | 20:42:03         |
| 2     | Sr 421.552†        | 58029.3          | 53877.4                | 518.81 ug/L           | 518.81 ppb            | 20:42:03         |
| 2     | Sc 361.383         | 860829.7         | 860829.7               | 108.70 %              |                       | 20:43:26         |
| 2     | Y 371.029          | 727892.3         | 727892.3               | 107.42 %              |                       | 20:43:26         |
| 2     | Ag 328.068†        | 99554.8          | 91459.3                | 488.04 ug/L           | 488.04 ppb            | 20:43:32         |
| 2     | As 188.979†        | 903.8            | 850.3                  | 502.34 ug/L           | 502.34 ppb            | 20:43:52         |
| 2     | B 249.677†         | 19103.6          | 17952.6                | 520.21 ug/L           | 520.21 ppb            | 20:43:32         |
| 2     | Ba 233.527†        | 55138.4          | 50727.8                | 503.52 ug/L           | 503.52 ppb            | 20:43:32         |
| 2     | Be 313.107†        | 1188271.2        | 1096753.8              | 497.16 ug/L           | 497.16 ppb            | 20:43:26         |
| 2     | Cd 226.502†        | 34742.8          | 32119.7                | 489.87 ug/L           | 489.87 ppb            | 20:43:32         |
| 2     | Co 228.616†        | 19485.4          | 17972.4                | 495.94 ug/L           | 495.94 ppb            | 20:43:32         |
| 2     | Cr 267.716†        | 39916.3          | 36670.2                | 504.12 ug/L           | 504.12 ppb            | 20:43:32         |
| 2     | Cu 324.752†        | 170718.6         | 150849.5               | 509.45 ug/L           | 509.45 ppb            | 20:43:32         |
| 2     | Mn 257.610†        | 389130.2         | 357601.8               | 494.88 ug/L           | 494.88 ppb            | 20:43:32         |
| 2     | Mo 202.031†        | 5949.1           | 5460.1                 | 499.11 ug/L           | 499.11 ppb            | 20:43:52         |
| 2     | Ni 231.604†        | 16832.5          | 15425.4                | 515.33 ug/L           | 515.33 ppb            | 20:43:32         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 945.1     | 705.2     | 466.82 ug/L | 466.82 ppb | 20:43:52 |
| 2 | Pb 220.353†        | 3228.6    | 3014.0    | 495.82 ug/L | 495.82 ppb | 20:43:52 |
| 2 | S 181.975 Axial†   | 2911.9    | 2648.1    | 5057.3 ug/L | 5057.3 ppb | 20:43:52 |
| 2 | Sb 206.836†        | 1333.9    | 1204.5    | 535.41 ug/L | 535.41 ppb | 20:43:52 |
| 2 | Se 196.026†        | 608.7     | 580.7     | 513.20 ug/L | 513.20 ppb | 20:43:52 |
| 2 | Si 251.611†        | 194224.1  | 178210.4  | 6961.3 ug/L | 6961.3 ppb | 20:43:32 |
| 2 | Sn 189.927†        | 2316.6    | 2123.5    | 506.31 ug/L | 506.31 ppb | 20:43:52 |
| 2 | Ti 334.940†        | 297989.3  | 275079.2  | 493.27 ug/L | 493.27 ppb | 20:43:32 |
| 2 | Tl 190.801†        | 1282.0    | 1205.4    | 499.19 ug/L | 499.19 ppb | 20:43:52 |
| 2 | U 409.014†         | 16822.2   | 17448.5   | 528.29 ug/L | 528.29 ppb | 20:43:32 |
| 2 | V 292.402†         | 65858.8   | 61782.5   | 512.90 ug/L | 512.90 ppb | 20:43:32 |
| 2 | Zn 213.857†        | 43167.5   | 39202.8   | 496.74 ug/L | 496.74 ppb | 20:43:32 |
| 2 | SiO2†              | 194347.3  | 178324.8  | 14968 ug/L  | 14968 ppb  | 20:44:33 |
| 3 | Sc Radial          | 3446.0    | 3446.0    | 108 %       |            | 20:42:49 |
| 3 | Y RADIAL           | 2819.1    | 2819.1    | 107.3 %     |            | 20:42:49 |
| 3 | Al 396.153Radial†  | 2463.9    | 2353.3    | 5068.1 ug/L | 5068.1 ppb | 20:42:29 |
| 3 | Ca 317.933Radial†  | 1319.1    | 1214.2    | 5073.3 ug/L | 5073.3 ppb | 20:42:49 |
| 3 | Fe 238.204 Radial† | 199.7     | 176.2     | 5087.1 ug/L | 5087.1 ppb | 20:42:49 |
| 3 | K 766.490 Radial†  | 13494.9   | 10522.7   | 5136.3 ug/L | 5136.3 ppb | 20:42:29 |
| 3 | Mg 279.077 IEC†    | 55.8      | 50.2      | 5195.3 ug/L | 5195.3 ppb | 20:42:49 |
| 3 | Na 589.592 Radial† | 17440.7   | 16951.3   | 5362.5 ug/L | 5362.5 ppb | 20:42:29 |
| 3 | Sr 421.552†        | 57882.4   | 53792.2   | 517.99 ug/L | 517.99 ppb | 20:42:29 |
| 3 | Sc 361.383         | 869743.3  | 869743.3  | 109.82 %    |            | 20:43:57 |
| 3 | Y 371.029          | 736746.0  | 736746.0  | 108.72 %    |            | 20:43:57 |
| 3 | Ag 328.068†        | 100000.8  | 90926.8   | 485.21 ug/L | 485.21 ppb | 20:44:02 |
| 3 | As 188.979†        | 892.6     | 831.6     | 491.38 ug/L | 491.38 ppb | 20:44:22 |
| 3 | B 249.677†         | 19279.2   | 17932.4   | 519.63 ug/L | 519.63 ppb | 20:44:02 |
| 3 | Ba 233.527†        | 55148.6   | 50217.1   | 498.46 ug/L | 498.46 ppb | 20:44:02 |
| 3 | Be 313.107†        | 1200762.7 | 1096924.4 | 497.23 ug/L | 497.23 ppb | 20:43:57 |
| 3 | Cd 226.502†        | 34753.2   | 31801.6   | 485.01 ug/L | 485.01 ppb | 20:44:02 |
| 3 | Co 228.616†        | 19487.9   | 17791.1   | 490.92 ug/L | 490.92 ppb | 20:44:02 |
| 3 | Cr 267.716†        | 40015.8   | 36384.5   | 500.19 ug/L | 500.19 ppb | 20:44:02 |
| 3 | Cu 324.752†        | 171526.5  | 149975.4  | 506.50 ug/L | 506.50 ppb | 20:44:02 |
| 3 | Mn 257.610†        | 389830.2  | 354570.1  | 490.68 ug/L | 490.68 ppb | 20:44:02 |
| 3 | Mo 202.031†        | 5918.4    | 5376.1    | 491.44 ug/L | 491.44 ppb | 20:44:22 |
| 3 | Ni 231.604†        | 16863.0   | 15294.4   | 510.96 ug/L | 510.96 ppb | 20:44:02 |
| 3 | P 214.914†         | 950.6     | 701.3     | 464.24 ug/L | 464.24 ppb | 20:44:22 |
| 3 | Pb 220.353†        | 3223.2    | 2978.6    | 489.99 ug/L | 489.99 ppb | 20:44:22 |
| 3 | S 181.975 Axial†   | 2914.6    | 2623.1    | 5009.5 ug/L | 5009.5 ppb | 20:44:22 |
| 3 | Sb 206.836†        | 1338.1    | 1195.7    | 531.43 ug/L | 531.43 ppb | 20:44:22 |
| 3 | Se 196.026†        | 614.1     | 579.8     | 512.54 ug/L | 512.54 ppb | 20:44:22 |
| 3 | Si 251.611†        | 194782.2  | 176887.4  | 6909.7 ug/L | 6909.7 ppb | 20:44:02 |
| 3 | Sn 189.927†        | 2327.6    | 2111.6    | 503.48 ug/L | 503.48 ppb | 20:44:22 |
| 3 | Ti 334.940†        | 298787.7  | 272996.5  | 489.52 ug/L | 489.52 ppb | 20:44:02 |
| 3 | Tl 190.801†        | 1270.2    | 1182.6    | 489.79 ug/L | 489.79 ppb | 20:44:22 |
| 3 | U 409.014†         | 17182.7   | 17618.1   | 533.44 ug/L | 533.44 ppb | 20:44:02 |
| 3 | V 292.402†         | 66057.0   | 61342.0   | 509.19 ug/L | 509.19 ppb | 20:44:02 |
| 3 | Zn 213.857†        | 43206.6   | 38831.4   | 492.02 ug/L | 492.02 ppb | 20:44:02 |
| 3 | SiO2†              | 194956.2  | 177046.9  | 14861 ug/L  | 14861 ppb  | 20:44:39 |

Mean Data: 1202046568|954668|1

| Analyte            | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383         | 865462.5                 | 109.28 %    |        | 0.564    |                    |          | 0.52% |
| Sc Radial          | 3446.0                   | 108 %       |        | 0.1      |                    |          | 0.09% |
| Y 371.029          | 731930.4                 | 108.01 %    |        | 0.661    |                    |          | 0.61% |
| Y RADIAL           | 2821.7                   | 107.4 %     |        | 0.09     |                    |          | 0.08% |
| Ag 328.068†        | 91086.0                  | 486.06 ug/L |        | 1.726    | 486.06 ppb         | 1.726    | 0.36% |
| Al 396.153Radial†  | 2355.1                   | 5072.0 ug/L |        | 4.27     | 5072.0 ppb         | 4.27     | 0.08% |
| As 188.979†        | 841.3                    | 497.05 ug/L |        | 5.492    | 497.05 ppb         | 5.492    | 1.10% |
| B 249.677†         | 17881.0                  | 518.12 ug/L |        | 3.118    | 518.12 ppb         | 3.118    | 0.60% |
| Ba 233.527†        | 50486.1                  | 501.13 ug/L |        | 2.542    | 501.13 ppb         | 2.542    | 0.51% |
| Be 313.107†        | 1096495.8                | 497.04 ug/L |        | 0.273    | 497.04 ppb         | 0.273    | 0.05% |
| Ca 317.933Radial†  | 1213.0                   | 5068.2 ug/L |        | 5.28     | 5068.2 ppb         | 5.28     | 0.10% |
| Cd 226.502†        | 31977.7                  | 487.71 ug/L |        | 2.471    | 487.71 ppb         | 2.471    | 0.51% |
| Co 228.616†        | 17919.2                  | 494.46 ug/L |        | 3.080    | 494.46 ppb         | 3.080    | 0.62% |
| Cr 267.716†        | 36535.8                  | 502.27 ug/L |        | 1.974    | 502.27 ppb         | 1.974    | 0.39% |
| Cu 324.752†        | 149995.6                 | 506.57 ug/L |        | 2.851    | 506.57 ppb         | 2.851    | 0.56% |
| Fe 238.204 Radial† | 175.6                    | 5067.9 ug/L |        | 17.77    | 5067.9 ppb         | 17.77    | 0.35% |
| K 766.490 Radial†  | 10503.7                  | 5127.0 ug/L |        | 11.50    | 5127.0 ppb         | 11.50    | 0.22% |

|                    |          |             |        |            |        |       |
|--------------------|----------|-------------|--------|------------|--------|-------|
| Mg 279.077 IEC†    | 49.5     | 5119.2 ug/L | 139.24 | 5119.2 ppb | 139.24 | 2.72% |
| Mn 257.610†        | 356148.0 | 492.87 ug/L | 2.105  | 492.87 ppb | 2.105  | 0.43% |
| Mo 202.031†        | 5414.4   | 494.94 ug/L | 3.877  | 494.94 ppb | 3.877  | 0.78% |
| Na 589.592 Radial† | 16930.4  | 5355.9 ug/L | 15.15  | 5355.9 ppb | 15.15  | 0.28% |
| Ni 231.604†        | 15382.7  | 513.91 ug/L | 2.554  | 513.91 ppb | 2.554  | 0.50% |
| P 214.914†         | 703.1    | 465.72 ug/L | 1.330  | 465.72 ppb | 1.330  | 0.29% |
| Pb 220.353†        | 2994.9   | 492.68 ug/L | 2.942  | 492.68 ppb | 2.942  | 0.60% |
| S 181.975 Axial†   | 2640.1   | 5041.9 ug/L | 28.01  | 5041.9 ppb | 28.01  | 0.56% |
| Sb 206.836†        | 1198.6   | 532.77 ug/L | 2.291  | 532.77 ppb | 2.291  | 0.43% |
| Se 196.026†        | 582.0    | 514.33 ug/L | 2.551  | 514.33 ppb | 2.551  | 0.50% |
| Si 251.611†        | 177391.7 | 6929.4 ug/L | 27.92  | 6929.4 ppb | 27.92  | 0.40% |
| Sn 189.927†        | 2112.4   | 503.67 ug/L | 2.550  | 503.67 ppb | 2.550  | 0.51% |
| Sr 421.552†        | 53890.2  | 518.93 ug/L | 1.011  | 518.93 ppb | 1.011  | 0.19% |
| Ti 334.940†        | 273788.0 | 490.94 ug/L | 2.034  | 490.94 ppb | 2.034  | 0.41% |
| Tl 190.801†        | 1195.7   | 495.17 ug/L | 4.849  | 495.17 ppb | 4.849  | 0.98% |
| U 409.014†         | 17543.6  | 531.18 ug/L | 2.634  | 531.18 ppb | 2.634  | 0.50% |
| V 292.402†         | 61511.4  | 510.62 ug/L | 1.989  | 510.62 ppb | 1.989  | 0.39% |
| Zn 213.857†        | 39001.5  | 494.18 ug/L | 2.388  | 494.18 ppb | 2.388  | 0.48% |
| SiO2†              | 177197.5 | 14874 ug/L  | 89.0   | 14874 ppb  | 89.0   | 0.60% |

Sequence No.: 15  
 Sample ID: 1202046569|954668|5  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 48  
 Date Collected: 3/10/2010 20:46:50  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202046569|954668|5

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3317.1           | 3317.1                 | 104 %                 |                       | 20:49:03         |
| 1     | Y RADIAL           | 2729.2           | 2729.2                 | 103.9 %               |                       | 20:49:03         |
| 1     | Al 396.153Radial†  | -50.8            | 12.9                   | 28.049 ug/L           | 28.049 ppb            | 20:49:03         |
| 1     | Ca 317.933Radial†  | 22.2             | 8.9                    | 37.331 ug/L           | 37.331 ppb            | 20:49:03         |
| 1     | Fe 238.204 Radial† | 11.5             | 1.6                    | 46.101 ug/L           | 46.101 ppb            | 20:49:03         |
| 1     | K 766.490 Radial†  | 2194.5           | 93.4                   | 45.616 ug/L           | 45.616 ppb            | 20:48:43         |
| 1     | Mg 279.077 IEC†    | 3.6              | 1.7                    | 180.44 ug/L           | 180.44 ppb            | 20:49:03         |
| 1     | Na 589.592 Radial† | -694.6           | 61.6                   | 19.493 ug/L           | 19.493 ppb            | 20:48:43         |
| 1     | Sr 421.552†        | 23.1             | -12.3                  | -0.1185 ug/L          | -0.1185 ppb           | 20:48:43         |
| 1     | Sc 361.383         | 814253.3         | 814253.3               | 102.81 %              |                       | 20:50:00         |
| 1     | Y 371.029          | 694652.6         | 694652.6               | 102.51 %              |                       | 20:50:00         |
| 1     | Ag 328.068†        | 117.8            | -16.7                  | -0.0772 ug/L          | -0.0772 ppb           | 20:50:00         |
| 1     | As 188.979†        | -18.5            | 0.8                    | 0.5071 ug/L           | 0.5071 ppb            | 20:50:20         |
| 1     | B 249.677†         | 1.3              | 378.5                  | 11.007 ug/L           | 11.007 ppb            | 20:50:20         |
| 1     | Ba 233.527†        | 68.8             | 67.2                   | 0.6670 ug/L           | 0.6670 ppb            | 20:50:20         |
| 1     | Be 313.107†        | -3461.0          | 175.7                  | 0.0808 ug/L           | 0.0808 ppb            | 20:50:00         |
| 1     | Cd 226.502†        | -141.5           | 18.6                   | 0.2802 ug/L           | 0.2802 ppb            | 20:50:20         |
| 1     | Co 228.616†        | -34.8            | 12.0                   | 0.3280 ug/L           | 0.3280 ppb            | 20:50:20         |
| 1     | Cr 267.716†        | 113.7            | 57.8                   | 0.7940 ug/L           | 0.7940 ppb            | 20:50:20         |
| 1     | Cu 324.752†        | 6431.8           | 43.7                   | 0.1486 ug/L           | 0.1486 ppb            | 20:50:00         |
| 1     | Mn 257.610†        | 650.4            | 233.8                  | 0.3205 ug/L           | 0.3205 ppb            | 20:50:20         |
| 1     | Mo 202.031†        | 6.0              | -7.2                   | -0.6503 ug/L          | -0.6503 ppb           | 20:50:20         |
| 1     | Ni 231.604†        | 79.9             | 17.1                   | 0.5729 ug/L           | 0.5729 ppb            | 20:50:20         |
| 1     | P 214.914†         | 169.6            | 0.6                    | 0.4534 ug/L           | 0.4534 ppb            | 20:50:20         |
| 1     | Pb 220.353†        | -48.8            | -3.8                   | -0.6196 ug/L          | -0.6196 ppb           | 20:50:20         |
| 1     | S 181.975 Axial†   | 30.2             | -1.4                   | -2.7254 ug/L          | -2.7254 ppb           | 20:50:20         |
| 1     | Sb 206.836†        | 24.2             | 0.8                    | 0.3165 ug/L           | 0.3165 ppb            | 20:50:20         |
| 1     | Se 196.026†        | -18.3            | 2.9                    | 2.6111 ug/L           | 2.6111 ppb            | 20:50:20         |
| 1     | Si 251.611†        | 11364.7          | 10577.5                | 413.56 ug/L           | 413.56 ppb            | 20:50:00         |
| 1     | Sn 189.927†        | 10.0             | 1.9                    | 0.4547 ug/L           | 0.4547 ppb            | 20:50:20         |
| 1     | Ti 334.940†        | -616.3           | 329.0                  | 0.5789 ug/L           | 0.5789 ppb            | 20:50:00         |
| 1     | Tl 190.801†        | -16.3            | 10.1                   | 4.1543 ug/L           | 4.1543 ppb            | 20:50:20         |
| 1     | U 409.014†         | -1930.0          | 94.9                   | 2.8763 ug/L           | 2.8763 ppb            | 20:50:00         |
| 1     | V 292.402†         | -1221.2          | 4.5                    | 0.0289 ug/L           | 0.0289 ppb            | 20:50:00         |
| 1     | Zn 213.857†        | 629.4            | 100.8                  | 1.2781 ug/L           | 1.2781 ppb            | 20:50:20         |
| 1     | SiO2†              | 11496.3          | 10706.6                | 899.52 ug/L           | 899.52 ppb            | 20:51:16         |
| 2     | Sc Radial          | 3305.5           | 3305.5                 | 103 %                 |                       | 20:49:28         |
| 2     | Y RADIAL           | 2709.3           | 2709.3                 | 103.1 %               |                       | 20:49:28         |
| 2     | Al 396.153Radial†  | -60.1            | 3.7                    | 7.9926 ug/L           | 7.9926 ppb            | 20:49:28         |
| 2     | Ca 317.933Radial†  | 16.3             | 3.3                    | 13.765 ug/L           | 13.765 ppb            | 20:49:28         |
| 2     | Fe 238.204 Radial† | 8.0              | -1.7                   | -48.503 ug/L          | -48.503 ppb           | 20:49:28         |
| 2     | K 766.490 Radial†  | 2226.1           | 131.5                  | 64.233 ug/L           | 64.233 ppb            | 20:49:08         |
| 2     | Mg 279.077 IEC†    | 1.7              | -0.0                   | -3.9478 ug/L          | -3.9478 ppb           | 20:49:28         |
| 2     | Na 589.592 Radial† | -660.2           | 92.6                   | 29.295 ug/L           | 29.295 ppb            | 20:49:08         |
| 2     | Sr 421.552†        | 30.6             | -5.0                   | -0.0483 ug/L          | -0.0483 ppb           | 20:49:08         |
| 2     | Sc 361.383         | 816880.8         | 816880.8               | 103.15 %              |                       | 20:50:25         |
| 2     | Y 371.029          | 697309.6         | 697309.6               | 102.90 %              |                       | 20:50:25         |
| 2     | Ag 328.068†        | 177.2            | 40.4                   | 0.1947 ug/L           | 0.1947 ppb            | 20:50:25         |
| 2     | As 188.979†        | -14.6            | 4.6                    | 2.7144 ug/L           | 2.7144 ppb            | 20:50:45         |
| 2     | B 249.677†         | -13.0            | 364.7                  | 10.619 ug/L           | 10.619 ppb            | 20:50:45         |
| 2     | Ba 233.527†        | 58.2             | 56.7                   | 0.5607 ug/L           | 0.5607 ppb            | 20:50:45         |
| 2     | Be 313.107†        | -3529.9          | 119.7                  | 0.0551 ug/L           | 0.0551 ppb            | 20:50:25         |
| 2     | Cd 226.502†        | -143.3           | 17.3                   | 0.2709 ug/L           | 0.2709 ppb            | 20:50:45         |
| 2     | Co 228.616†        | -38.8            | 8.2                    | 0.2272 ug/L           | 0.2272 ppb            | 20:50:45         |
| 2     | Cr 267.716†        | 89.9             | 34.3                   | 0.4663 ug/L           | 0.4663 ppb            | 20:50:45         |
| 2     | Cu 324.752†        | 6427.1           | 19.1                   | 0.0582 ug/L           | 0.0582 ppb            | 20:50:25         |
| 2     | Mn 257.610†        | 640.7            | 222.3                  | 0.3029 ug/L           | 0.3029 ppb            | 20:50:45         |
| 2     | Mo 202.031†        | 15.2             | 1.7                    | 0.1558 ug/L           | 0.1558 ppb            | 20:50:45         |
| 2     | Ni 231.604†        | 74.0             | 11.1                   | 0.3713 ug/L           | 0.3713 ppb            | 20:50:45         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 169.9    | 0.4      | 0.3628 ug/L  | 0.3628 ppb  | 20:50:45 |
| 2 | Pb 220.353†        | -45.5    | -0.4     | -0.0642 ug/L | -0.0642 ppb | 20:50:45 |
| 2 | S 181.975 Axial†   | 29.6     | -2.1     | -4.0856 ug/L | -4.0856 ppb | 20:50:45 |
| 2 | Sb 206.836†        | 24.7     | 1.2      | 0.5292 ug/L  | 0.5292 ppb  | 20:50:45 |
| 2 | Se 196.026†        | -20.0    | 1.3      | 1.0005 ug/L  | 1.0005 ppb  | 20:50:45 |
| 2 | Si 251.611†        | 11377.3  | 10554.2  | 412.63 ug/L  | 412.63 ppb  | 20:50:25 |
| 2 | Sn 189.927†        | 6.4      | -1.6     | -0.3797 ug/L | -0.3797 ppb | 20:50:45 |
| 2 | Ti 334.940†        | -714.0   | 236.1    | 0.4226 ug/L  | 0.4226 ppb  | 20:50:25 |
| 2 | Tl 190.801†        | -21.2    | 5.4      | 2.2118 ug/L  | 2.2118 ppb  | 20:50:45 |
| 2 | U 409.014†         | -1802.9  | 224.2    | 6.8136 ug/L  | 6.8136 ppb  | 20:50:25 |
| 2 | V 292.402†         | -1197.2  | 31.6     | 0.2807 ug/L  | 0.2807 ppb  | 20:50:25 |
| 2 | Zn 213.857†        | 624.2    | 93.7     | 1.2038 ug/L  | 1.2038 ppb  | 20:50:45 |
| 2 | SiO2†              | 11299.5  | 10479.8  | 880.45 ug/L  | 880.45 ppb  | 20:51:21 |
| 3 | Sc Radial          | 3304.2   | 3304.2   | 103 %        |             | 20:49:53 |
| 3 | Y RADIAL           | 2719.0   | 2719.0   | 103.5 %      |             | 20:49:53 |
| 3 | Al 396.153Radial†  | -51.1    | 12.5     | 27.030 ug/L  | 27.030 ppb  | 20:49:53 |
| 3 | Ca 317.933Radial†  | 13.9     | 1.0      | 4.3255 ug/L  | 4.3255 ppb  | 20:49:53 |
| 3 | Fe 238.204 Radial† | 9.0      | -0.7     | -20.739 ug/L | -20.739 ppb | 20:49:53 |
| 3 | K 766.490 Radial†  | 2153.2   | 61.6     | 30.076 ug/L  | 30.076 ppb  | 20:49:33 |
| 3 | Mg 279.077 IEC†    | 0.1      | -1.7     | -170.87 ug/L | -170.87 ppb | 20:49:53 |
| 3 | Na 589.592 Radial† | -566.0   | 183.7    | 58.107 ug/L  | 58.107 ppb  | 20:49:33 |
| 3 | Sr 421.552†        | 57.4     | 21.0     | 0.2026 ug/L  | 0.2026 ppb  | 20:49:33 |
| 3 | Sc 361.383         | 821438.1 | 821438.1 | 103.72 %     |             | 20:50:50 |
| 3 | Y 371.029          | 701680.0 | 701680.0 | 103.55 %     |             | 20:50:50 |
| 3 | Ag 328.068†        | 173.2    | 35.6     | 0.1820 ug/L  | 0.1820 ppb  | 20:50:50 |
| 3 | As 188.979†        | -22.9    | -3.2     | -1.8792 ug/L | -1.8792 ppb | 20:51:10 |
| 3 | B 249.677†         | -7.5     | 370.0    | 10.770 ug/L  | 10.770 ppb  | 20:51:10 |
| 3 | Ba 233.527†        | 61.4     | 59.5     | 0.5901 ug/L  | 0.5901 ppb  | 20:51:10 |
| 3 | Be 313.107†        | -3399.0  | 264.9    | 0.1209 ug/L  | 0.1209 ppb  | 20:50:50 |
| 3 | Cd 226.502†        | -150.8   | 10.9     | 0.1693 ug/L  | 0.1693 ppb  | 20:51:10 |
| 3 | Co 228.616†        | -33.2    | 13.9     | 0.3812 ug/L  | 0.3812 ppb  | 20:51:10 |
| 3 | Cr 267.716†        | 88.4     | 32.4     | 0.4434 ug/L  | 0.4434 ppb  | 20:51:10 |
| 3 | Cu 324.752†        | 6529.3   | 83.1     | 0.2772 ug/L  | 0.2772 ppb  | 20:50:50 |
| 3 | Mn 257.610†        | 642.3    | 220.4    | 0.3098 ug/L  | 0.3098 ppb  | 20:51:10 |
| 3 | Mo 202.031†        | 10.3     | -3.1     | -0.2883 ug/L | -0.2883 ppb | 20:51:10 |
| 3 | Ni 231.604†        | 73.4     | 10.2     | 0.3399 ug/L  | 0.3399 ppb  | 20:51:10 |
| 3 | P 214.914†         | 161.1    | -9.0     | -7.2620 ug/L | -7.2620 ppb | 20:51:10 |
| 3 | Pb 220.353†        | -34.6    | 10.3     | 1.6974 ug/L  | 1.6974 ppb  | 20:51:10 |
| 3 | S 181.975 Axial†   | 24.3     | -7.4     | -14.139 ug/L | -14.139 ppb | 20:51:10 |
| 3 | Sb 206.836†        | 23.5     | -0.1     | -0.0468 ug/L | -0.0468 ppb | 20:51:10 |
| 3 | Se 196.026†        | -21.5    | -0.0     | -0.0516 ug/L | -0.0516 ppb | 20:51:10 |
| 3 | Si 251.611†        | 11418.9  | 10533.1  | 411.81 ug/L  | 411.81 ppb  | 20:50:50 |
| 3 | Sn 189.927†        | 5.5      | -2.5     | -0.5955 ug/L | -0.5955 ppb | 20:51:10 |
| 3 | Ti 334.940†        | -674.6   | 278.0    | 0.5112 ug/L  | 0.5112 ppb  | 20:50:50 |
| 3 | Tl 190.801†        | -21.1    | 5.6      | 2.3128 ug/L  | 2.3128 ppb  | 20:51:10 |
| 3 | U 409.014†         | -1904.8  | 135.6    | 4.1200 ug/L  | 4.1200 ppb  | 20:50:50 |
| 3 | V 292.402†         | -1144.3  | 89.0     | 0.7322 ug/L  | 0.7322 ppb  | 20:50:50 |
| 3 | Zn 213.857†        | 640.2    | 105.8    | 1.3538 ug/L  | 1.3538 ppb  | 20:51:10 |
| 3 | SiO2†              | 11220.2  | 10342.6  | 868.93 ug/L  | 868.93 ppb  | 20:51:26 |

Mean Data: 1202046569|954668|5

| Analyte            | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Conc. Units | Sample Std.Dev. | RSD     |
|--------------------|--------------------------|--------------|--------|----------|-------------|-----------------|---------|
| Sc 361.383         | 817524.1                 | 103.23 %     |        | 0.459    |             |                 | 0.44%   |
| Sc Radial          | 3308.9                   | 103 %        |        | 0.2      |             |                 | 0.21%   |
| Y 371.029          | 697880.8                 | 102.99 %     |        | 0.524    |             |                 | 0.51%   |
| Y RADIAL           | 2719.1                   | 103.5 %      |        | 0.38     |             |                 | 0.37%   |
| Ag 328.068†        | 19.8                     | 0.0998 ug/L  |        | 0.15345  | 0.0998 ppb  | 0.15345         | 153.72% |
| Al 396.153Radial†  | 9.7                      | 21.024 ug/L  |        | 11.2968  | 21.024 ppb  | 11.2968         | 53.73%  |
| As 188.979†        | 0.8                      | 0.4474 ug/L  |        | 2.29739  | 0.4474 ppb  | 2.29739         | 513.46% |
| B 249.677†         | 371.1                    | 10.799 ug/L  |        | 0.1954   | 10.799 ppb  | 0.1954          | 1.81%   |
| Ba 233.527†        | 61.1                     | 0.6059 ug/L  |        | 0.05489  | 0.6059 ppb  | 0.05489         | 9.06%   |
| Be 313.107†        | 186.7                    | 0.0856 ug/L  |        | 0.03318  | 0.0856 ppb  | 0.03318         | 38.76%  |
| Ca 317.933Radial†  | 4.4                      | 18.474 ug/L  |        | 16.9990  | 18.474 ppb  | 16.9990         | 92.02%  |
| Cd 226.502†        | 15.6                     | 0.2401 ug/L  |        | 0.06156  | 0.2401 ppb  | 0.06156         | 25.63%  |
| Co 228.616†        | 11.4                     | 0.3122 ug/L  |        | 0.07824  | 0.3122 ppb  | 0.07824         | 25.06%  |
| Cr 267.716†        | 41.5                     | 0.5679 ug/L  |        | 0.19612  | 0.5679 ppb  | 0.19612         | 34.53%  |
| Cu 324.752†        | 48.6                     | 0.1613 ug/L  |        | 0.11004  | 0.1613 ppb  | 0.11004         | 68.22%  |
| Fe 238.204 Radial† | -0.3                     | -7.7137 ug/L |        | 48.62853 | -7.7137 ppb | 48.62853        | 630.41% |
| K 766.490 Radial†  | 95.5                     | 46.642 ug/L  |        | 17.1016  | 46.642 ppb  | 17.1016         | 36.67%  |



|                    |         |              |           |             |           |         |
|--------------------|---------|--------------|-----------|-------------|-----------|---------|
| Mg 279.077 IEC†    | 0.0     | 1.8725 ug/L  | 175.72763 | 1.8725 ppb  | 175.72763 | >999.9% |
| Mn 257.610†        | 225.5   | 0.3110 ug/L  | 0.00886   | 0.3110 ppb  | 0.00886   | 2.85%   |
| Mo 202.031†        | -2.9    | -0.2610 ug/L | 0.40375   | -0.2610 ppb | 0.40375   | 154.72% |
| Na 589.592 Radial† | 112.6   | 35.632 ug/L  | 20.0718   | 35.632 ppb  | 20.0718   | 56.33%  |
| Ni 231.604†        | 12.8    | 0.4280 ug/L  | 0.12641   | 0.4280 ppb  | 0.12641   | 29.53%  |
| P 214.914†         | -2.6    | -2.1486 ug/L | 4.42852   | -2.1486 ppb | 4.42852   | 206.11% |
| Pb 220.353†        | 2.0     | 0.3379 ug/L  | 1.20971   | 0.3379 ppb  | 1.20971   | 358.06% |
| S 181.975 Axial†   | -3.7    | -6.9833 ug/L | 6.23417   | -6.9833 ppb | 6.23417   | 89.27%  |
| Sb 206.836†        | 0.6     | 0.2663 ug/L  | 0.29129   | 0.2663 ppb  | 0.29129   | 109.39% |
| Se 196.026†        | 1.4     | 1.1867 ug/L  | 1.34107   | 1.1867 ppb  | 1.34107   | 113.01% |
| Si 251.611†        | 10554.9 | 412.67 ug/L  | 0.871     | 412.67 ppb  | 0.871     | 0.21%   |
| Sn 189.927†        | -0.7    | -0.1735 ug/L | 0.55467   | -0.1735 ppb | 0.55467   | 319.69% |
| Sr 421.552†        | 1.3     | 0.0119 ug/L  | 0.16884   | 0.0119 ppb  | 0.16884   | >999.9% |
| Ti 334.940†        | 281.1   | 0.5042 ug/L  | 0.07837   | 0.5042 ppb  | 0.07837   | 15.54%  |
| Tl 190.801†        | 7.0     | 2.8930 ug/L  | 1.09349   | 2.8930 ppb  | 1.09349   | 37.80%  |
| U 409.014†         | 151.6   | 4.6033 ug/L  | 2.01266   | 4.6033 ppb  | 2.01266   | 43.72%  |
| V 292.402†         | 41.7    | 0.3473 ug/L  | 0.35636   | 0.3473 ppb  | 0.35636   | 102.62% |
| Zn 213.857†        | 100.1   | 1.2786 ug/L  | 0.07501   | 1.2786 ppb  | 0.07501   | 5.87%   |
| SiO2†              | 10509.7 | 882.96 ug/L  | 15.448    | 882.96 ppb  | 15.448    | 1.75%   |

Sequence No.: 16  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/10/2010 20:53:37  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCV

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3384.7           | 3384.7                 | 106 %                 |                       | 20:55:49         |
| 1     | Y RADIAL           | 2762.0           | 2762.0                 | 105.1 %               |                       | 20:55:49         |
| 1     | Al 396.153Radial†  | 2291.7           | 2231.7                 | 4805.0 ug/L           | 4805.0 ppb            | 20:55:28         |
| 1     | Ca 317.933Radial†  | 1294.3           | 1212.9                 | 5067.7 ug/L           | 5067.7 ppb            | 20:55:49         |
| 1     | Fe 238.204 Radial† | 192.6            | 172.9                  | 4990.5 ug/L           | 4990.5 ppb            | 20:55:49         |
| 1     | K 766.490 Radial†  | 12683.0          | 9981.3                 | 4870.2 ug/L           | 4870.2 ppb            | 20:55:28         |
| 1     | Mg 279.077 IEC†    | 54.6             | 50.0                   | 5176.2 ug/L           | 5176.2 ppb            | 20:55:49         |
| 1     | Na 589.592 Radial† | 31130.1          | 30205.8                | 9555.5 ug/L           | 9555.5 ppb            | 20:55:28         |
| 1     | Sr 421.552†        | 53889.0          | 50986.0                | 490.96 ug/L           | 490.96 ppb            | 20:55:28         |
| 1     | Sc 361.383         | 855310.1         | 855310.1               | 108.00 %              |                       | 20:56:46         |
| 1     | Y 371.029          | 722593.2         | 722593.2               | 106.63 %              |                       | 20:56:46         |
| 1     | Ag 328.068†        | 99027.4          | 91562.0                | 488.51 ug/L           | 488.51 ppb            | 20:56:51         |
| 1     | As 188.979†        | 890.3            | 843.2                  | 498.01 ug/L           | 498.01 ppb            | 20:57:11         |
| 1     | B 249.677†         | 17431.1          | 16517.3                | 478.45 ug/L           | 478.45 ppb            | 20:56:51         |
| 1     | Ba 233.527†        | 53085.5          | 49154.2                | 487.89 ug/L           | 487.89 ppb            | 20:56:51         |
| 1     | Be 313.107†        | 1171476.4        | 1088257.8              | 493.27 ug/L           | 493.27 ppb            | 20:56:46         |
| 1     | Cd 226.502†        | 34461.9          | 32065.9                | 489.04 ug/L           | 489.04 ppb            | 20:56:51         |
| 1     | Co 228.616†        | 19392.0          | 18001.7                | 496.77 ug/L           | 496.77 ppb            | 20:56:51         |
| 1     | Cr 267.716†        | 38382.8          | 35487.3                | 487.86 ug/L           | 487.86 ppb            | 20:56:51         |
| 1     | Cu 324.752†        | 159608.7         | 141576.0               | 478.15 ug/L           | 478.15 ppb            | 20:56:51         |
| 1     | Mn 257.610†        | 383665.4         | 354852.0               | 491.07 ug/L           | 491.07 ppb            | 20:56:46         |
| 1     | Mo 202.031†        | 5839.1           | 5393.7                 | 493.03 ug/L           | 493.03 ppb            | 20:57:11         |
| 1     | Ni 231.604†        | 16115.7          | 14861.6                | 496.49 ug/L           | 496.49 ppb            | 20:56:51         |
| 1     | P 214.914†         | 3471.9           | 3050.5                 | 2355.6 ug/L           | 2355.6 ppb            | 20:57:11         |
| 1     | Pb 220.353†        | 3216.0           | 3021.4                 | 497.00 ug/L           | 497.00 ppb            | 20:57:11         |
| 1     | S 181.975 Axial†   | 580.0            | 506.3                  | 966.11 ug/L           | 966.11 ppb            | 20:57:11         |
| 1     | Sb 206.836†        | 1253.8           | 1138.2                 | 506.58 ug/L           | 506.58 ppb            | 20:57:11         |
| 1     | Se 196.026†        | 603.8            | 579.8                  | 512.17 ug/L           | 512.17 ppb            | 20:57:11         |
| 1     | Si 251.611†        | 67123.3          | 61676.0                | 2405.3 ug/L           | 2405.3 ppb            | 20:56:51         |
| 1     | Sn 189.927†        | 2235.9           | 2062.5                 | 491.78 ug/L           | 491.78 ppb            | 20:57:11         |
| 1     | Ti 334.940†        | 284624.5         | 264473.4               | 474.25 ug/L           | 474.25 ppb            | 20:56:51         |
| 1     | Tl 190.801†        | 1275.3           | 1206.8                 | 499.63 ug/L           | 499.63 ppb            | 20:57:11         |
| 1     | U 409.014†         | 15384.3          | 16217.0                | 490.92 ug/L           | 490.92 ppb            | 20:56:51         |
| 1     | V 292.402†         | 62443.0          | 59010.6                | 490.07 ug/L           | 490.07 ppb            | 20:56:51         |
| 1     | Zn 213.857†        | 41780.3          | 38174.7                | 483.76 ug/L           | 483.76 ppb            | 20:56:51         |
| 1     | SiO2†              | 68131.5          | 62610.6                | 5246.7 ug/L           | 5246.7 ppb            | 20:58:19         |
| 2     | Sc Radial          | 3374.8           | 3374.8                 | 105 %                 |                       | 20:56:14         |
| 2     | Y RADIAL           | 2766.3           | 2766.3                 | 105.3 %               |                       | 20:56:14         |
| 2     | Al 396.153Radial†  | 2315.0           | 2260.2                 | 4866.7 ug/L           | 4866.7 ppb            | 20:55:54         |
| 2     | Ca 317.933Radial†  | 1284.4           | 1207.2                 | 5043.7 ug/L           | 5043.7 ppb            | 20:56:14         |
| 2     | Fe 238.204 Radial† | 195.8            | 176.5                  | 5094.2 ug/L           | 5094.2 ppb            | 20:56:14         |
| 2     | K 766.490 Radial†  | 12485.9          | 9829.4                 | 4796.0 ug/L           | 4796.0 ppb            | 20:55:54         |
| 2     | Mg 279.077 IEC†    | 54.1             | 49.6                   | 5135.2 ug/L           | 5135.2 ppb            | 20:56:14         |
| 2     | Na 589.592 Radial† | 30824.0          | 30001.5                | 9490.9 ug/L           | 9490.9 ppb            | 20:55:54         |
| 2     | Sr 421.552†        | 53537.0          | 50801.5                | 489.19 ug/L           | 489.19 ppb            | 20:55:54         |
| 2     | Sc 361.383         | 852315.2         | 852315.2               | 107.62 %              |                       | 20:57:17         |
| 2     | Y 371.029          | 721310.1         | 721310.1               | 106.44 %              |                       | 20:57:17         |
| 2     | Ag 328.068†        | 100212.2         | 92985.2                | 496.10 ug/L           | 496.10 ppb            | 20:57:22         |
| 2     | As 188.979†        | 889.8            | 845.7                  | 499.51 ug/L           | 499.51 ppb            | 20:57:42         |
| 2     | B 249.677†         | 17662.2          | 16788.8                | 486.31 ug/L           | 486.31 ppb            | 20:57:22         |
| 2     | Ba 233.527†        | 53482.8          | 49696.1                | 493.28 ug/L           | 493.28 ppb            | 20:57:22         |
| 2     | Be 313.107†        | 1169609.7        | 1090334.8              | 494.23 ug/L           | 494.23 ppb            | 20:57:17         |
| 2     | Cd 226.502†        | 34669.7          | 32371.1                | 493.69 ug/L           | 493.69 ppb            | 20:57:22         |
| 2     | Co 228.616†        | 19561.2          | 18222.0                | 502.83 ug/L           | 502.83 ppb            | 20:57:22         |
| 2     | Cr 267.716†        | 38687.5          | 35895.3                | 493.47 ug/L           | 493.47 ppb            | 20:57:22         |
| 2     | Cu 324.752†        | 161953.3         | 144273.8               | 487.26 ug/L           | 487.26 ppb            | 20:57:22         |
| 2     | Mn 257.610†        | 382262.4         | 354796.6               | 491.00 ug/L           | 491.00 ppb            | 20:57:17         |
| 2     | Mo 202.031†        | 5816.8           | 5391.9                 | 492.88 ug/L           | 492.88 ppb            | 20:57:42         |
| 2     | Ni 231.604†        | 16230.7          | 15020.9                | 501.81 ug/L           | 501.81 ppb            | 20:57:22         |

|   |                    |           |           |             |            |          |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914†         | 3437.3    | 3029.6    | 2336.9 ug/L | 2336.9 ppb | 20:57:42 |
| 2 | Pb 220.353†        | 3200.1    | 3017.2    | 496.30 ug/L | 496.30 ppb | 20:57:42 |
| 2 | S 181.975 Axial†   | 572.3     | 501.0     | 956.06 ug/L | 956.06 ppb | 20:57:42 |
| 2 | Sb 206.836†        | 1253.9    | 1142.4    | 508.38 ug/L | 508.38 ppb | 20:57:42 |
| 2 | Se 196.026†        | 604.7     | 582.6     | 514.83 ug/L | 514.83 ppb | 20:57:42 |
| 2 | Si 251.611†        | 67757.5   | 62483.7   | 2436.9 ug/L | 2436.9 ppb | 20:57:22 |
| 2 | Sn 189.927†        | 2227.5    | 2061.9    | 491.65 ug/L | 491.65 ppb | 20:57:42 |
| 2 | Ti 334.940†        | 287712.8  | 268269.0  | 481.05 ug/L | 481.05 ppb | 20:57:22 |
| 2 | Tl 190.801†        | 1266.2    | 1202.5    | 497.88 ug/L | 497.88 ppb | 20:57:42 |
| 2 | U 409.014†         | 15722.1   | 16580.9   | 501.95 ug/L | 501.95 ppb | 20:57:22 |
| 2 | V 292.402†         | 63147.5   | 59868.4   | 497.09 ug/L | 497.09 ppb | 20:57:22 |
| 2 | Zn 213.857†        | 42160.7   | 38664.0   | 489.96 ug/L | 489.96 ppb | 20:57:22 |
| 2 | SiO2†              | 68615.7   | 63282.2   | 5303.2 ug/L | 5303.2 ppb | 20:58:24 |
| 3 | Sc Radial          | 3377.3    | 3377.3    | 105 %       |            | 20:56:39 |
| 3 | Y RADIAL           | 2755.5    | 2755.5    | 104.9 %     |            | 20:56:39 |
| 3 | Al 396.153Radial†  | 2296.4    | 2241.0    | 4825.1 ug/L | 4825.1 ppb | 20:56:19 |
| 3 | Ca 317.933Radial†  | 1292.3    | 1213.7    | 5071.1 ug/L | 5071.1 ppb | 20:56:39 |
| 3 | Fe 238.204 Radial† | 192.0     | 172.7     | 4985.0 ug/L | 4985.0 ppb | 20:56:39 |
| 3 | K 766.490 Radial†  | 12611.2   | 9939.3    | 4849.7 ug/L | 4849.7 ppb | 20:56:19 |
| 3 | Mg 279.077 IEC†    | 56.5      | 51.9      | 5369.7 ug/L | 5369.7 ppb | 20:56:39 |
| 3 | Na 589.592 Radial† | 30800.9   | 29957.7   | 9477.0 ug/L | 9477.0 ppb | 20:56:19 |
| 3 | Sr 421.552†        | 53399.1   | 50632.6   | 487.56 ug/L | 487.56 ppb | 20:56:19 |
| 3 | Sc 361.383         | 854165.3  | 854165.3  | 107.85 %    |            | 20:57:48 |
| 3 | Y 371.029          | 723249.1  | 723249.1  | 106.73 %    |            | 20:57:48 |
| 3 | Ag 328.068†        | 100157.7  | 92732.9   | 494.73 ug/L | 494.73 ppb | 20:57:53 |
| 3 | As 188.979†        | 891.3     | 845.2     | 499.25 ug/L | 499.25 ppb | 20:58:13 |
| 3 | B 249.677†         | 17653.1   | 16744.9   | 485.05 ug/L | 485.05 ppb | 20:57:53 |
| 3 | Ba 233.527†        | 53553.7   | 49654.2   | 492.86 ug/L | 492.86 ppb | 20:57:53 |
| 3 | Be 313.107†        | 1171824.3 | 1090034.1 | 494.09 ug/L | 494.09 ppb | 20:57:48 |
| 3 | Cd 226.502†        | 34718.5   | 32346.6   | 493.33 ug/L | 493.33 ppb | 20:57:53 |
| 3 | Co 228.616†        | 19624.7   | 18241.6   | 503.37 ug/L | 503.37 ppb | 20:57:53 |
| 3 | Cr 267.716†        | 38722.9   | 35850.3   | 492.85 ug/L | 492.85 ppb | 20:57:53 |
| 3 | Cu 324.752†        | 161744.7  | 143754.5  | 485.50 ug/L | 485.50 ppb | 20:57:53 |
| 3 | Mn 257.610†        | 382526.6  | 354272.2  | 490.26 ug/L | 490.26 ppb | 20:57:48 |
| 3 | Mo 202.031†        | 5818.1    | 5381.4    | 491.91 ug/L | 491.91 ppb | 20:58:13 |
| 3 | Ni 231.604†        | 16273.2   | 15027.6   | 502.03 ug/L | 502.03 ppb | 20:57:53 |
| 3 | P 214.914†         | 3448.4    | 3032.9    | 2340.0 ug/L | 2340.0 ppb | 20:58:13 |
| 3 | Pb 220.353†        | 3196.3    | 3007.3    | 494.67 ug/L | 494.67 ppb | 20:58:13 |
| 3 | S 181.975 Axial†   | 582.0     | 508.8     | 971.04 ug/L | 971.04 ppb | 20:58:13 |
| 3 | Sb 206.836†        | 1248.3    | 1134.6    | 504.98 ug/L | 504.98 ppb | 20:58:13 |
| 3 | Se 196.026†        | 604.7     | 581.4     | 513.49 ug/L | 513.49 ppb | 20:58:13 |
| 3 | Si 251.611†        | 67851.5   | 62434.5   | 2434.9 ug/L | 2434.9 ppb | 20:57:53 |
| 3 | Sn 189.927†        | 2220.9    | 2051.4    | 489.15 ug/L | 489.15 ppb | 20:58:13 |
| 3 | Ti 334.940†        | 287821.2  | 267790.5  | 480.18 ug/L | 480.18 ppb | 20:57:53 |
| 3 | Tl 190.801†        | 1264.4    | 1198.3    | 496.15 ug/L | 496.15 ppb | 20:58:13 |
| 3 | U 409.014†         | 15588.8   | 16425.6   | 497.25 ug/L | 497.25 ppb | 20:57:53 |
| 3 | V 292.402†         | 63138.7   | 59733.2   | 495.98 ug/L | 495.98 ppb | 20:57:53 |
| 3 | Zn 213.857†        | 42249.5   | 38661.5   | 489.95 ug/L | 489.95 ppb | 20:57:53 |
| 3 | SiO2†              | 68401.6   | 62945.6   | 5274.9 ug/L | 5274.9 ppb | 20:58:29 |

## Mean Data: CCV

| Analyte   | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD   |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383  | 853930.2                 | 107.82 %           | 0.191    |                    |          | 0.18% |
| Sc Radial   | 3379.0                   | 105 %              | 0.2      |                    |          | 0.15% |
| Y 371.029   | 722384.1                 | 106.60 %           | 0.146    |                    |          | 0.14% |
| Y RADIAL  | 2761.3                   | 105.1 %            | 0.21     |                    |          | 0.20% |
| Ag 328.068†   | 92426.7                  | 493.11 ug/L        | 4.049    | 493.11 ppb         | 4.049    | 0.82% |
| QC value within limits for Ag 328.068 Recovery = 98.62%       |                          |                    |          |                    |          |       |
| Al 396.153Radial†   | 2244.3                   | 4832.3 ug/L        | 31.49    | 4832.3 ppb         | 31.49    | 0.65% |
| QC value within limits for Al 396.153Radial Recovery = 96.65% |                          |                    |          |                    |          |       |
| As 188.979†   | 844.7                    | 498.92 ug/L        | 0.802    | 498.92 ppb         | 0.802    | 0.16% |
| QC value within limits for As 188.979 Recovery = 99.78%       |                          |                    |          |                    |          |       |
| B 249.677†  | 16683.7                  | 483.27 ug/L        | 4.225    | 483.27 ppb         | 4.225    | 0.87% |
| QC value within limits for B 249.677 Recovery = 96.65%        |                          |                    |          |                    |          |       |
| Ba 233.527†   | 49501.5                  | 491.34 ug/L        | 2.994    | 491.34 ppb         | 2.994    | 0.61% |
| QC value within limits for Ba 233.527 Recovery = 98.27%       |                          |                    |          |                    |          |       |
| Be 313.107†   | 1089542.2                | 493.86 ug/L        | 0.516    | 493.86 ppb         | 0.516    | 0.10% |
| QC value within limits for Be 313.107 Recovery = 98.77%       |                          |                    |          |                    |          |       |
| Ca 317.933Radial†   | 1211.3                   | 5060.8 ug/L        | 14.93    | 5060.8 ppb         | 14.93    | 0.30% |

QC value within limits for Ca 317.933 Radial Recovery = 101.22%

|   |          |             |        |            |        |       |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502†   | 32261.2  | 492.02 ug/L | 2.587  | 492.02 ppb | 2.587  | 0.53% |
| QC value within limits for Cd 226.502 Recovery = 98.40%         |          |             |        |            |        |       |
| Co 228.616†   | 18155.1  | 500.99 ug/L | 3.667  | 500.99 ppb | 3.667  | 0.73% |
| QC value within limits for Co 228.616 Recovery = 100.20%        |          |             |        |            |        |       |
| Cr 267.716†   | 35744.3  | 491.40 ug/L | 3.076  | 491.40 ppb | 3.076  | 0.63% |
| QC value within limits for Cr 267.716 Recovery = 98.28%         |          |             |        |            |        |       |
| Cu 324.752†   | 143201.4 | 483.64 ug/L | 4.834  | 483.64 ppb | 4.834  | 1.00% |
| QC value within limits for Cu 324.752 Recovery = 96.73%         |          |             |        |            |        |       |
| Fe 238.204 Radial†  | 174.0    | 5023.2 ug/L | 61.55  | 5023.2 ppb | 61.55  | 1.23% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.46% |          |             |        |            |        |       |
| K 766.490 Radial†   | 9916.7   | 4838.6 ug/L | 38.31  | 4838.6 ppb | 38.31  | 0.79% |
| QC value within limits for K 766.490 Radial Recovery = 96.77%   |          |             |        |            |        |       |
| Mg 279.077 IEC†   | 50.5     | 5227.0 ug/L | 125.24 | 5227.0 ppb | 125.24 | 2.40% |
| QC value within limits for Mg 279.077 IEC Recovery = 104.54%    |          |             |        |            |        |       |
| Mn 257.610†   | 354640.3 | 490.77 ug/L | 0.450  | 490.77 ppb | 0.450  | 0.09% |
| QC value within limits for Mn 257.610 Recovery = 98.15%         |          |             |        |            |        |       |
| Mo 202.031†   | 5389.0   | 492.61 ug/L | 0.610  | 492.61 ppb | 0.610  | 0.12% |
| QC value within limits for Mo 202.031 Recovery = 98.52%         |          |             |        |            |        |       |
| Na 589.592 Radial†  | 30055.0  | 9507.8 ug/L | 41.88  | 9507.8 ppb | 41.88  | 0.44% |
| QC value within limits for Na 589.592 Radial Recovery = 95.08%  |          |             |        |            |        |       |
| Ni 231.604†   | 14970.0  | 500.11 ug/L | 3.138  | 500.11 ppb | 3.138  | 0.63% |
| QC value within limits for Ni 231.604 Recovery = 100.02%        |          |             |        |            |        |       |
| P 214.914†  | 3037.7   | 2344.2 ug/L | 9.99   | 2344.2 ppb | 9.99   | 0.43% |
| QC value within limits for P 214.914 Recovery = 93.77%          |          |             |        |            |        |       |
| Pb 220.353†   | 3015.3   | 495.99 ug/L | 1.195  | 495.99 ppb | 1.195  | 0.24% |
| QC value within limits for Pb 220.353 Recovery = 99.20%         |          |             |        |            |        |       |
| S 181.975 Axial†  | 505.4    | 964.40 ug/L | 7.631  | 964.40 ppb | 7.631  | 0.79% |
| QC value within limits for S 181.975 Axial Recovery = 96.44%    |          |             |        |            |        |       |
| Sb 206.836†   | 1138.4   | 506.65 ug/L | 1.702  | 506.65 ppb | 1.702  | 0.34% |
| QC value within limits for Sb 206.836 Recovery = 101.33%        |          |             |        |            |        |       |
| Se 196.026†   | 581.3    | 513.50 ug/L | 1.328  | 513.50 ppb | 1.328  | 0.26% |
| QC value within limits for Se 196.026 Recovery = 102.70%        |          |             |        |            |        |       |
| Si 251.611†   | 62198.0  | 2425.7 ug/L | 17.71  | 2425.7 ppb | 17.71  | 0.73% |
| QC value within limits for Si 251.611 Recovery = 97.03%         |          |             |        |            |        |       |
| Sn 189.927†   | 2058.6   | 490.86 ug/L | 1.482  | 490.86 ppb | 1.482  | 0.30% |
| QC value within limits for Sn 189.927 Recovery = 98.17%         |          |             |        |            |        |       |
| Sr 421.552†   | 50806.7  | 489.24 ug/L | 1.702  | 489.24 ppb | 1.702  | 0.35% |
| QC value within limits for Sr 421.552 Recovery = 97.85%         |          |             |        |            |        |       |
| Ti 334.940†   | 266844.3 | 478.50 ug/L | 3.701  | 478.50 ppb | 3.701  | 0.77% |
| QC value within limits for Ti 334.940 Recovery = 95.70%         |          |             |        |            |        |       |
| Tl 190.801†   | 1202.6   | 497.89 ug/L | 1.742  | 497.89 ppb | 1.742  | 0.35% |
| QC value within limits for Tl 190.801 Recovery = 99.58%         |          |             |        |            |        |       |
| U 409.014†  | 16407.8  | 496.71 ug/L | 5.535  | 496.71 ppb | 5.535  | 1.11% |
| QC value within limits for U 409.014 Recovery = 99.34%          |          |             |        |            |        |       |
| V 292.402†  | 59537.4  | 494.38 ug/L | 3.775  | 494.38 ppb | 3.775  | 0.76% |
| QC value within limits for V 292.402 Recovery = 98.88%          |          |             |        |            |        |       |
| Zn 213.857†   | 38500.1  | 487.89 ug/L | 3.574  | 487.89 ppb | 3.574  | 0.73% |
| QC value within limits for Zn 213.857 Recovery = 97.58%         |          |             |        |            |        |       |
| SiO2†   | 62946.1  | 5274.9 ug/L | 28.21  | 5274.9 ppb | 28.21  | 0.53% |
| QC value within limits for SiO2 Recovery = 98.64%               |          |             |        |            |        |       |

All analyte(s) passed QC.

Sequence No.: 17  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 3/10/2010 21:00:39  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

| Repl# | Analyte            | Net<br>Intensity | Corrected<br>Intensity | Calib.<br>Conc. Units | Sample<br>Conc. Units | Analysis<br>Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1     | Sc Radial          | 3239.9           | 3239.9                 | 101 %                 |                       | 21:02:50         |
| 1     | Y RADIAL           | 2650.2           | 2650.2                 | 100.9 %               |                       | 21:02:50         |
| 1     | Al 396.153Radial†  | -57.7            | 5.0                    | 10.754 ug/L           | 10.754 ppb            | 21:02:50         |
| 1     | Ca 317.933Radial†  | 14.2             | 1.6                    | 6.6290 ug/L           | 6.6290 ppb            | 21:02:50         |
| 1     | Fe 238.204 Radial† | 8.3              | -1.3                   | -37.610 ug/L          | -37.610 ppb           | 21:02:50         |
| 1     | K 766.490 Radial†  | 2101.3           | 51.7                   | 25.277 ug/L           | 25.277 ppb            | 21:02:30         |
| 1     | Mg 279.077 IEC†    | 0.1              | -1.7                   | -171.28 ug/L          | -171.28 ppb           | 21:02:50         |
| 1     | Na 589.592 Radial† | -755.7           | -14.8                  | -4.6972 ug/L          | -4.6972 ppb           | 21:02:30         |
| 1     | Sr 421.552†        | 39.3             | 4.3                    | 0.0410 ug/L           | 0.0410 ppb            | 21:02:30         |
| 1     | Sc 361.383         | 795522.1         | 795522.1               | 100.45 %              |                       | 21:03:47         |
| 1     | Y 371.029          | 679550.9         | 679550.9               | 100.28 %              |                       | 21:03:47         |
| 1     | Ag 328.068†        | 38.8             | -92.7                  | -0.4977 ug/L          | -0.4977 ppb           | 21:03:47         |
| 1     | As 188.979†        | -22.4            | -3.5                   | -2.0655 ug/L          | -2.0655 ppb           | 21:04:07         |
| 1     | B 249.677†         | -172.2           | 205.8                  | 5.9941 ug/L           | 5.9941 ppb            | 21:04:07         |
| 1     | Ba 233.527†        | 41.1             | 41.2                   | 0.4069 ug/L           | 0.4069 ppb            | 21:04:07         |
| 1     | Be 313.107†        | -3423.5          | 133.7                  | 0.0605 ug/L           | 0.0605 ppb            | 21:03:47         |
| 1     | Cd 226.502†        | -139.8           | 17.1                   | 0.2635 ug/L           | 0.2635 ppb            | 21:04:07         |
| 1     | Co 228.616†        | -39.0            | 7.1                    | 0.1966 ug/L           | 0.1966 ppb            | 21:04:07         |
| 1     | Cr 267.716†        | 57.8             | 4.7                    | 0.0651 ug/L           | 0.0651 ppb            | 21:04:07         |
| 1     | Cu 324.752†        | 6268.2           | 28.2                   | 0.0962 ug/L           | 0.0962 ppb            | 21:03:47         |
| 1     | Mn 257.610†        | 436.1            | 35.3                   | 0.0521 ug/L           | 0.0521 ppb            | 21:04:07         |
| 1     | Mo 202.031†        | 14.4             | 1.3                    | 0.1132 ug/L           | 0.1132 ppb            | 21:04:07         |
| 1     | Ni 231.604†        | 80.9             | 19.9                   | 0.6644 ug/L           | 0.6644 ppb            | 21:04:07         |
| 1     | P 214.914†         | 163.2            | -1.8                   | -1.4536 ug/L          | -1.4536 ppb           | 21:04:07         |
| 1     | Pb 220.353†        | -35.8            | 8.0                    | 1.3208 ug/L           | 1.3208 ppb            | 21:04:07         |
| 1     | S 181.975 Axial†   | 32.5             | 1.5                    | 2.9067 ug/L           | 2.9067 ppb            | 21:04:07         |
| 1     | Sb 206.836†        | 32.4             | 9.6                    | 4.1260 ug/L           | 4.1260 ppb            | 21:04:07         |
| 1     | Se 196.026†        | -20.8            | 0.0                    | -0.0836 ug/L          | -0.0836 ppb           | 21:04:07         |
| 1     | Si 251.611†        | 497.6            | 19.3                   | 0.7534 ug/L           | 0.7534 ppb            | 21:04:07         |
| 1     | Sn 189.927†        | 11.8             | 3.9                    | 0.9332 ug/L           | 0.9332 ppb            | 21:04:07         |
| 1     | Ti 334.940†        | -914.4           | 18.1                   | 0.0497 ug/L           | 0.0497 ppb            | 21:03:47         |
| 1     | Tl 190.801†        | -16.1            | 10.0                   | 4.1030 ug/L           | 4.1030 ppb            | 21:04:07         |
| 1     | U 409.014†         | -2165.4          | -183.7                 | -5.5751 ug/L          | -5.5751 ppb           | 21:03:47         |
| 1     | V 292.402†         | -1170.8          | 26.7                   | 0.2116 ug/L           | 0.2116 ppb            | 21:03:47         |
| 1     | Zn 213.857†        | 624.7            | 110.5                  | 1.4143 ug/L           | 1.4143 ppb            | 21:04:07         |
| 1     | SiO2†              | 498.6            | 21.4                   | 1.7923 ug/L           | 1.7923 ppb            | 21:05:18         |
| 2     | Sc Radial          | 3221.0           | 3221.0                 | 101 %                 |                       | 21:03:15         |
| 2     | Y RADIAL           | 2631.0           | 2631.0                 | 100.1 %               |                       | 21:03:15         |
| 2     | Al 396.153Radial†  | -54.7            | 7.6                    | 16.373 ug/L           | 16.373 ppb            | 21:03:15         |
| 2     | Ca 317.933Radial†  | 12.7             | 0.1                    | 0.5551 ug/L           | 0.5551 ppb            | 21:03:15         |
| 2     | Fe 238.204 Radial† | 6.5              | -3.0                   | -86.233 ug/L          | -86.233 ppb           | 21:03:15         |
| 2     | K 766.490 Radial†  | 2167.3           | 129.6                  | 63.309 ug/L           | 63.309 ppb            | 21:02:55         |
| 2     | Mg 279.077 IEC†    | 2.0              | 0.3                    | 26.581 ug/L           | 26.581 ppb            | 21:03:15         |
| 2     | Na 589.592 Radial† | -745.6           | -9.1                   | -2.8890 ug/L          | -2.8890 ppb           | 21:02:55         |
| 2     | Sr 421.552†        | 13.0             | -21.7                  | -0.2087 ug/L          | -0.2087 ppb           | 21:02:55         |
| 2     | Sc 361.383         | 809505.8         | 809505.8               | 102.21 %              |                       | 21:04:12         |
| 2     | Y 371.029          | 692070.0         | 692070.0               | 102.13 %              |                       | 21:04:12         |
| 2     | Ag 328.068†        | 217.6            | 81.6                   | 0.3994 ug/L           | 0.3994 ppb            | 21:04:12         |
| 2     | As 188.979†        | -23.3            | -4.0                   | -2.3629 ug/L          | -2.3629 ppb           | 21:04:33         |
| 2     | B 249.677†         | -187.4           | 193.9                  | 5.6551 ug/L           | 5.6551 ppb            | 21:04:33         |
| 2     | Ba 233.527†        | 41.5             | 40.9                   | 0.4012 ug/L           | 0.4012 ppb            | 21:04:33         |
| 2     | Be 313.107†        | -3473.2          | 144.0                  | 0.0657 ug/L           | 0.0657 ppb            | 21:04:12         |
| 2     | Cd 226.502†        | -138.3           | 21.0                   | 0.3300 ug/L           | 0.3300 ppb            | 21:04:33         |
| 2     | Co 228.616†        | -23.1            | 23.3                   | 0.6422 ug/L           | 0.6422 ppb            | 21:04:33         |
| 2     | Cr 267.716†        | 86.7             | 32.0                   | 0.4326 ug/L           | 0.4326 ppb            | 21:04:33         |
| 2     | Cu 324.752†        | 6371.5           | 21.5                   | 0.0650 ug/L           | 0.0650 ppb            | 21:04:12         |
| 2     | Mn 257.610†        | 473.4            | 64.3                   | 0.0793 ug/L           | 0.0793 ppb            | 21:04:33         |
| 2     | Mo 202.031†        | 10.9             | -2.4                   | -0.2228 ug/L          | -0.2228 ppb           | 21:04:33         |
| 2     | Ni 231.604†        | 75.8             | 13.6                   | 0.4532 ug/L           | 0.4532 ppb            | 21:04:33         |

|   |                    |          |          |              |             |          |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914†         | 161.7    | -6.2     | -4.8699 ug/L | -4.8699 ppb | 21:04:33 |
| 2 | Pb 220.353†        | -30.8    | 13.5     | 2.2310 ug/L  | 2.2310 ppb  | 21:04:33 |
| 2 | S 181.975 Axial†   | 26.3     | -5.1     | -9.7597 ug/L | -9.7597 ppb | 21:04:33 |
| 2 | Sb 206.836†        | 31.4     | 8.0      | 3.4493 ug/L  | 3.4493 ppb  | 21:04:33 |
| 2 | Se 196.026†        | -17.2    | 3.9      | 3.0863 ug/L  | 3.0863 ppb  | 21:04:33 |
| 2 | Si 251.611†        | 502.3    | 15.3     | 0.5996 ug/L  | 0.5996 ppb  | 21:04:33 |
| 2 | Sn 189.927†        | 16.3     | 8.2      | 1.9474 ug/L  | 1.9474 ppb  | 21:04:33 |
| 2 | Ti 334.940†        | -812.3   | 133.7    | 0.2352 ug/L  | 0.2352 ppb  | 21:04:12 |
| 2 | Tl 190.801†        | -22.1    | 4.4      | 1.8009 ug/L  | 1.8009 ppb  | 21:04:33 |
| 2 | U 409.014†         | -1833.2  | 178.6    | 5.4338 ug/L  | 5.4338 ppb  | 21:04:12 |
| 2 | V 292.402†         | -1279.5  | -59.5    | -0.4678 ug/L | -0.4678 ppb | 21:04:12 |
| 2 | Zn 213.857†        | 600.4    | 76.0     | 0.9824 ug/L  | 0.9824 ppb  | 21:04:33 |
| 2 | SiO2†              | 498.3    | 12.5     | 1.0531 ug/L  | 1.0531 ppb  | 21:05:38 |
| 3 | Sc Radial          | 3210.5   | 3210.5   | 100 %        |             | 21:03:40 |
| 3 | Y RADIAL           | 2632.6   | 2632.6   | 100.2 %      |             | 21:03:40 |
| 3 | Al 396.153Radial†  | -64.5    | -2.3     | -5.0316 ug/L | -5.0316 ppb | 21:03:40 |
| 3 | Ca 317.933Radial†  | 16.2     | 3.7      | 15.269 ug/L  | 15.269 ppb  | 21:03:40 |
| 3 | Fe 238.204 Radial† | 8.4      | -1.1     | -31.735 ug/L | -31.735 ppb | 21:03:40 |
| 3 | K 766.490 Radial†  | 2081.0   | 50.5     | 24.680 ug/L  | 24.680 ppb  | 21:03:20 |
| 3 | Mg 279.077 IEC†    | 1.2      | -0.5     | -56.023 ug/L | -56.023 ppb | 21:03:40 |
| 3 | Na 589.592 Radial† | -773.8   | -39.8    | -12.592 ug/L | -12.592 ppb | 21:03:20 |
| 3 | Sr 421.552†        | 32.6     | -2.1     | -0.0201 ug/L | -0.0201 ppb | 21:03:20 |
| 3 | Sc 361.383         | 804868.9 | 804868.9 | 101.63 %     |             | 21:04:38 |
| 3 | Y 371.029          | 688268.7 | 688268.7 | 101.57 %     |             | 21:04:38 |
| 3 | Ag 328.068†        | 250.8    | 115.4    | 0.5978 ug/L  | 0.5978 ppb  | 21:04:38 |
| 3 | As 188.979†        | -19.9    | -0.7     | -0.4314 ug/L | -0.4314 ppb | 21:04:58 |
| 3 | B 249.677†         | -195.1   | 185.3    | 5.3973 ug/L  | 5.3973 ppb  | 21:04:58 |
| 3 | Ba 233.527†        | 69.1     | 68.3     | 0.6753 ug/L  | 0.6753 ppb  | 21:04:58 |
| 3 | Be 313.107†        | -3515.5  | 82.7     | 0.0377 ug/L  | 0.0377 ppb  | 21:04:38 |
| 3 | Cd 226.502†        | -141.2   | 17.3     | 0.2682 ug/L  | 0.2682 ppb  | 21:04:58 |
| 3 | Co 228.616†        | -31.7    | 14.7     | 0.4043 ug/L  | 0.4043 ppb  | 21:04:58 |
| 3 | Cr 267.716†        | 89.6     | 35.4     | 0.4820 ug/L  | 0.4820 ppb  | 21:04:58 |
| 3 | Cu 324.752†        | 6308.5   | -4.6     | -0.0200 ug/L | -0.0200 ppb | 21:04:38 |
| 3 | Mn 257.610†        | 479.0    | 72.5     | 0.0994 ug/L  | 0.0994 ppb  | 21:04:58 |
| 3 | Mo 202.031†        | 5.0      | -8.1     | -0.7463 ug/L | -0.7463 ppb | 21:04:58 |
| 3 | Ni 231.604†        | 66.6     | 4.9      | 0.1635 ug/L  | 0.1635 ppb  | 21:04:58 |
| 3 | P 214.914†         | 166.7    | -0.3     | -0.1871 ug/L | -0.1871 ppb | 21:04:58 |
| 3 | Pb 220.353†        | -45.1    | -0.7     | -0.1169 ug/L | -0.1169 ppb | 21:04:58 |
| 3 | S 181.975 Axial†   | 32.0     | 0.7      | 1.2706 ug/L  | 1.2706 ppb  | 21:04:58 |
| 3 | Sb 206.836†        | 26.0     | 2.8      | 1.1791 ug/L  | 1.1791 ppb  | 21:04:58 |
| 3 | Se 196.026†        | -19.4    | 1.6      | 1.2791 ug/L  | 1.2791 ppb  | 21:04:58 |
| 3 | Si 251.611†        | 497.1    | 13.0     | 0.5167 ug/L  | 0.5167 ppb  | 21:04:58 |
| 3 | Sn 189.927†        | 3.5      | -4.4     | -1.0330 ug/L | -1.0330 ppb | 21:04:58 |
| 3 | Ti 334.940†        | -880.8   | 61.8     | 0.1150 ug/L  | 0.1150 ppb  | 21:04:38 |
| 3 | Tl 190.801†        | -21.7    | 4.6      | 1.9108 ug/L  | 1.9108 ppb  | 21:04:58 |
| 3 | U 409.014†         | -1835.6  | 165.9    | 5.0423 ug/L  | 5.0423 ppb  | 21:04:38 |
| 3 | V 292.402†         | -1214.4  | -2.6     | -0.0192 ug/L | -0.0192 ppb | 21:04:38 |
| 3 | Zn 213.857†        | 609.7    | 88.5     | 1.1362 ug/L  | 1.1362 ppb  | 21:04:58 |
| 3 | SiO2†              | 484.0    | 1.2      | 0.1248 ug/L  | 0.1248 ppb  | 21:05:58 |

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Mean Data: CCB

| Analyte   | Mean Corrected Intensity | Conc. Units  | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD     |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383  | 803298.9                 | 101.43 %     |        | 0.899    |                    |          | 0.89%   |
| Sc Radial   | 3223.8                   | 101 %        |        | 0.5      |                    |          | 0.46%   |
| Y 371.029   | 686629.9                 | 101.33 %     |        | 0.947    |                    |          | 0.93%   |
| Y RADIAL  | 2638.0                   | 100.4 %      |        | 0.41     |                    |          | 0.40%   |
| Ag 328.068†   | 34.8                     | 0.1665 ug/L  |        | 0.58375  | 0.1665 ppb         | 0.58375  | 350.61% |
| QC value within limits for Ag 328.068 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Al 396.153Radial†   | 3.4                      | 7.3653 ug/L  |        | 11.09762 | 7.3653 ppb         | 11.09762 | 150.67% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated |                          |              |        |          |                    |          |         |
| As 188.979†   | -2.7                     | -1.6200 ug/L |        | 1.03998  | -1.6200 ppb        | 1.03998  | 64.20%  |
| QC value within limits for As 188.979 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| B 249.677†  | 195.0                    | 5.6821 ug/L  |        | 0.29932  | 5.6821 ppb         | 0.29932  | 5.27%   |
| QC value within limits for B 249.677 Recovery = Not calculated        |                          |              |        |          |                    |          |         |
| Ba 233.527†   | 50.1                     | 0.4945 ug/L  |        | 0.15661  | 0.4945 ppb         | 0.15661  | 31.67%  |
| QC value within limits for Ba 233.527 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Be 313.107†   | 120.2                    | 0.0546 ug/L  |        | 0.01491  | 0.0546 ppb         | 0.01491  | 27.29%  |
| QC value within limits for Be 313.107 Recovery = Not calculated       |                          |              |        |          |                    |          |         |
| Ca 317.933Radial†   | 1.8                      | 7.4845 ug/L  |        | 7.39438  | 7.4845 ppb         | 7.39438  | 98.80%  |

|  |                 |       |              |         |             |         |         |  |  |
|--|-----------------|-------|--------------|---------|-------------|---------|---------|--|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| Cd   | 226.502†        | 18.4  | 0.2872 ug/L  | 0.03710 | 0.2872 ppb  | 0.03710 | 12.92%  |  |  |
| QC value within limits for Cd 226.502 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Co   | 228.616†        | 15.0  | 0.4144 ug/L  | 0.22299 | 0.4144 ppb  | 0.22299 | 53.82%  |  |  |
| QC value within limits for Co 228.616 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Cr   | 267.716†        | 24.0  | 0.3265 ug/L  | 0.22776 | 0.3265 ppb  | 0.22776 | 69.75%  |  |  |
| QC value within limits for Cr 267.716 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Cu   | 324.752†        | 15.0  | 0.0471 ug/L  | 0.06011 | 0.0471 ppb  | 0.06011 | 127.67% |  |  |
| QC value within limits for Cu 324.752 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Fe   | 238.204 Radial† | -1.8  | -51.859 ug/L | 29.9126 | -51.859 ppb | 29.9126 | 57.68%  |  |  |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| K  | 766.490 Radial† | 77.3  | 37.755 ug/L  | 22.1324 | 37.755 ppb  | 22.1324 | 58.62%  |  |  |
| QC value within limits for K 766.490 Radial Recovery = Not calculated  |                 |       |              |         |             |         |         |  |  |
| Mg   | 279.077 IEC†    | -0.6  | -66.907 ug/L | 99.3790 | -66.907 ppb | 99.3790 | 148.53% |  |  |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated    |                 |       |              |         |             |         |         |  |  |
| Mn   | 257.610†        | 57.3  | 0.0769 ug/L  | 0.02371 | 0.0769 ppb  | 0.02371 | 30.82%  |  |  |
| QC value within limits for Mn 257.610 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Mo   | 202.031†        | -3.1  | -0.2853 ug/L | 0.43314 | -0.2853 ppb | 0.43314 | 151.83% |  |  |
| QC value within limits for Mo 202.031 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Na   | 589.592 Radial† | -21.3 | -6.7259 ug/L | 5.15960 | -6.7259 ppb | 5.15960 | 76.71%  |  |  |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated |                 |       |              |         |             |         |         |  |  |
| Ni   | 231.604†        | 12.8  | 0.4271 ug/L  | 0.25148 | 0.4271 ppb  | 0.25148 | 58.89%  |  |  |
| QC value within limits for Ni 231.604 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| P  | 214.914†        | -2.8  | -2.1702 ug/L | 2.42226 | -2.1702 ppb | 2.42226 | 111.61% |  |  |
| QC value within limits for P 214.914 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| Pb   | 220.353†        | 6.9   | 1.1450 ug/L  | 1.18377 | 1.1450 ppb  | 1.18377 | 103.39% |  |  |
| QC value within limits for Pb 220.353 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| S  | 181.975 Axial†  | -1.0  | -1.8608 ug/L | 6.88937 | -1.8608 ppb | 6.88937 | 370.24% |  |  |
| QC value within limits for S 181.975 Axial Recovery = Not calculated   |                 |       |              |         |             |         |         |  |  |
| Sb   | 206.836†        | 6.8   | 2.9181 ug/L  | 1.54357 | 2.9181 ppb  | 1.54357 | 52.90%  |  |  |
| QC value within limits for Sb 206.836 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Se   | 196.026†        | 1.8   | 1.4273 ug/L  | 1.59011 | 1.4273 ppb  | 1.59011 | 111.41% |  |  |
| QC value within limits for Se 196.026 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Si   | 251.611†        | 15.9  | 0.6232 ug/L  | 0.12013 | 0.6232 ppb  | 0.12013 | 19.27%  |  |  |
| QC value within limits for Si 251.611 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Sn   | 189.927†        | 2.6   | 0.6159 ug/L  | 1.51532 | 0.6159 ppb  | 1.51532 | 246.04% |  |  |
| QC value within limits for Sn 189.927 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Sr   | 421.552†        | -6.5  | -0.0626 ug/L | 0.13012 | -0.0626 ppb | 0.13012 | 207.90% |  |  |
| QC value within limits for Sr 421.552 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Ti   | 334.940†        | 71.2  | 0.1333 ug/L  | 0.09407 | 0.1333 ppb  | 0.09407 | 70.57%  |  |  |
| QC value within limits for Ti 334.940 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| Tl   | 190.801†        | 6.3   | 2.6049 ug/L  | 1.29853 | 2.6049 ppb  | 1.29853 | 49.85%  |  |  |
| QC value within limits for Tl 190.801 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| U  | 409.014†        | 53.6  | 1.6337 ug/L  | 6.24600 | 1.6337 ppb  | 6.24600 | 382.33% |  |  |
| QC value within limits for U 409.014 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| V  | 292.402†        | -11.8 | -0.0918 ug/L | 0.34544 | -0.0918 ppb | 0.34544 | 376.31% |  |  |
| QC value within limits for V 292.402 Recovery = Not calculated         |                 |       |              |         |             |         |         |  |  |
| Zn   | 213.857†        | 91.7  | 1.1776 ug/L  | 0.21890 | 1.1776 ppb  | 0.21890 | 18.59%  |  |  |
| QC value within limits for Zn 213.857 Recovery = Not calculated        |                 |       |              |         |             |         |         |  |  |
| SiO2†  |                 | 11.7  | 0.9901 ug/L  | 0.83553 | 0.9901 ppb  | 0.83553 | 84.39%  |  |  |
| QC value within limits for SiO2 Recovery = Not calculated              |                 |       |              |         |             |         |         |  |  |

All analyte(s) passed QC.

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Saturday, March 13, 2010 11:40:30

### Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.721

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

### Summary

| Analyte | Mass  | Meas. Intens. Mean | Net Intens. Mean | Net Intens. SD | Net Intens. RSD |
|---------|-------|--------------------|------------------|----------------|-----------------|
| Be      | 9.0   | 4520.1             | 4520.115         | 54.893         | 1.2             |
| Mg      | 24.0  | 55289.0            | 55288.987        | 306.807        | 0.6             |
| Co      | 58.9  | 87540.8            | 87540.816        | 778.664        | 0.9             |
| Rh      | 102.9 | 177270.7           | 177270.741       | 1364.254       | 0.8             |
| In      | 114.9 | 235704.2           | 235704.214       | 1312.845       | 0.6             |
| Pb      | 208.0 | 251183.7           | 251183.732       | 2027.422       | 0.8             |
| [> Ba   | 137.9 | 234485.8           | 234485.829       | 1203.459       | 0.5             |
| [ Ba++  | 69.0  | 3313.8             | 0.014            | 0.000          | 2.1             |
| [> Ce   | 139.9 | 285648.4           | 285648.387       | 1073.313       | 0.4             |
| [ CeO   | 155.9 | 6640.8             | 0.023            | 0.000          | 1.4             |
| Bkgd    | 220.0 | 14.4               | 14.400           | 2.837          | 19.7            |

### Current Optimization File Data

| Current Value | Description             |
|---------------|-------------------------|
| 0.87          | Nebulizer Gas Flow      |
| 7.25          | Lens Voltage            |
| 1450.00       | ICP RF Power            |
| -1750.00      | Analog Stage Voltage    |
| 1250.00       | Pulse Stage Voltage     |
| 275.00        | Discriminator Threshold |
| -6.00         | AC Rod Offset           |

### Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be      | 9    | 13         | 6.8       | 5178.3            |
| Co      | 59   | 13         | 7.5       | 85693.6           |
| In      | 115  | 13         | 8.8       | 231500.3          |



## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

| Analyte | Exact Mass | Meas. Mass | Mass DAC | Res. DAC | Meas. Pk. Width |
|---------|------------|------------|----------|----------|-----------------|
| He      | 3.0        | 3.0        | 579      | 2050     | 0.728           |
| Be      | 9.0        | 9.0        | 2041     | 2075     | 0.664           |
| Mg      | 24.0       | 24.0       | 5673     | 2080     | 0.619           |
| Mg      | 25.0       | 25.0       | 5949     | 2080     | 0.670           |
| Mg      | 26.0       | 26.0       | 6144     | 2080     | 0.644           |
| Co      | 58.9       | 59.0       | 14191    | 2110     | 0.643           |
| Rh      | 102.9      | 102.9      | 24879    | 2160     | 0.659           |
| In      | 114.9      | 114.9      | 27793    | 2180     | 0.664           |
| Ce      | 139.9      | 139.9      | 33865    | 2200     | 0.660           |
| Pb      | 206.0      | 206.0      | 49948    | 2295     | 0.623           |
| Pb      | 207.0      | 207.0      | 50171    | 2240     | 0.649           |
| Pb      | 208.0      | 208.0      | 50451    | 2265     | 0.724           |
| U       | 238.1      | 238.1      | 57731    | 2275     | 0.763           |

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, March 14, 2010 03:27:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\Blank.309

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    |            | ug/L        |           | 21                 |                  |
| [> | Sc      | 45   |            | ug/L        |           | 481052             |                  |
| [  | Mn      | 55   |            | ug/L        |           | 943                |                  |
| [  | Cd      | 111  |            | ug/L        |           | 18                 |                  |
|    | Cd      | 114  |            | ug/L        |           | 58                 |                  |
| [> | In      | 115  |            | ug/L        |           | 187292             |                  |
|    | Sb      | 121  |            | ug/L        |           | 203                |                  |
| [  | Sb      | 123  |            | ug/L        |           | 162                |                  |
| [> | Lu      | 175  |            | ug/L        |           | 349684             |                  |
|    | Tl      | 205  |            | ug/L        |           | 800                |                  |
|    | Pb      | 208  |            | ug/L        |           | 609                |                  |
| [  | U       | 238  |            | ug/L        |           | 712                |                  |

Sample ID: Blank

Report Date/Time: Sunday, March 14, 2010 03:28:26

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Simple Linear     |                         |
| Cd      | 111Simple Linear    |                         |
| Cd      | 114Simple Linear    |                         |
| In      | 115Simple Linear    | 0.9999                  |
| Sb      | 121Simple Linear    |                         |
| Sb      | 123Simple Linear    |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero |                         |
| Pb      | 208Simple Linear    |                         |
| U       | 238Simple Linear    |                         |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   |                    |               |                |                             |
| [ | Mn      | 55   |                   |                    |               |                |                             |
|   | Cd      | 111  |                   |                    |               |                |                             |
|   | Cd      | 114  |                   |                    |               |                |                             |
| > | In      | 115  |                   |                    |               |                |                             |
|   | Sb      | 121  |                   |                    |               |                |                             |
| [ | Sb      | 123  |                   |                    |               |                |                             |
| > | Lu      | 175  |                   |                    |               |                |                             |
|   | Tl      | 205  |                   |                    |               |                |                             |
|   | Pb      | 208  |                   |                    |               |                |                             |
| [ | U       | 238  |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, March 14, 2010 03:31:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\Standard 1.310

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 10.000     | ug/L        | 1.264     | 3971               | 0.009            |
| >  | Sc      | 45   |            | ug/L        |           | 461097             | 461096.533       |
| [  | Mn      | 55   | 10.000     | ug/L        | 0.821     | 69264              | 0.148            |
| [  | Cd      | 111  | 10.000     | ug/L        | 1.276     | 10814              | 0.061            |
|    | Cd      | 114  |            | ug/L        |           | 25186              | 0.142            |
| >  | In      | 115  |            | ug/L        |           | 177250             | 177250.308       |
|    | Sb      | 121  | 10.000     | ug/L        | 2.874     | 36326              | 0.204            |
| [  | Sb      | 123  |            | ug/L        |           | 28063              | 0.157            |
| [> | Lu      | 175  |            | ug/L        |           | 331618             | 331617.806       |
|    | Tl      | 205  | 10.000     | ug/L        | 0.828     | 152509             | 0.458            |
|    | Pb      | 208  | 10.000     | ug/L        | 2.086     | 261649             | 0.787            |
| [  | U       | 238  | 10.000     | ug/L        | 1.019     | 364891             | 1.098            |

Sample ID: Standard 1

Report Date/Time: Sunday, March 14, 2010 03:32:22

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 1.0000                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 1.0000                  |
| Pb      | 208Linear Thru Zero | 1.0000                  |
| U       | 238Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [  | Be      | 9    |                   |                    |               |                |                |              |
| >  | Sc      | 45   |                   |                    |               |                |                |              |
| [  | Mn      | 55   |                   |                    |               |                |                |              |
| [  | Cd      | 111  |                   |                    |               |                |                |              |
|    | Cd      | 114  |                   |                    |               |                |                |              |
| >  | In      | 115  |                   |                    |               |                |                |              |
|    | Sb      | 121  |                   |                    |               |                |                |              |
| [  | Sb      | 123  |                   |                    |               |                |                |              |
| [> | Lu      | 175  |                   |                    |               |                |                |              |
|    | Tl      | 205  |                   |                    |               |                |                |              |
|    | Pb      | 208  |                   |                    |               |                |                |              |
| [  | U       | 238  |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, March 14, 2010 03:35:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\Standard 2.311

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 99.958     | ug/L        | 1.783     | 40986              | 0.082            |
| [> | Sc      | 45   |            | ug/L        |           | 498349             | 498349.492       |
| [  | Mn      | 55   | 99.897     | ug/L        | 1.499     | 670303             | 1.343            |
| [  | Cd      | 111  | 99.988     | ug/L        | 1.122     | 115397             | 0.602            |
|    | Cd      | 114  |            | ug/L        |           | 267117             | 1.393            |
| [> | In      | 115  |            | ug/L        |           | 191695             | 191695.030       |
|    | Sb      | 121  | 99.982     | ug/L        | 1.097     | 384050             | 2.002            |
| [  | Sb      | 123  |            | ug/L        |           | 298061             | 1.554            |
| [> | Lu      | 175  |            | ug/L        |           | 353189             | 353189.209       |
|    | Tl      | 205  | 99.846     | ug/L        | 2.239     | 1399731            | 3.961            |
|    | Pb      | 208  | 99.885     | ug/L        | 1.938     | 2492744            | 7.056            |
| [  | U       | 238  | 99.792     | ug/L        | 1.328     | 3205916            | 9.075            |

Sample ID: Standard 2

Report Date/Time: Sunday, March 14, 2010 03:36:19

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |               |                             |
| > | Sc      | 45   |                   |                    |               |               |                             |
| [ | Mn      | 55   |                   |                    |               |               |                             |
| [ | Cd      | 111  |                   |                    |               |               |                             |
|   | Cd      | 114  |                   |                    |               |               |                             |
| > | In      | 115  |                   |                    |               |               |                             |
|   | Sb      | 121  |                   |                    |               |               |                             |
| [ | Sb      | 123  |                   |                    |               |               |                             |
| > | Lu      | 175  |                   |                    |               |               |                             |
|   | Tl      | 205  |                   |                    |               |               |                             |
|   | Pb      | 208  |                   |                    |               |               |                             |
| [ | U       | 238  |                   |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, March 14, 2010 03:39:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 1.312

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 49.752     | ug/L        | 2.373     | 21712              | 0.041            |
| [> Sc   | 45   |            | ug/L        |           | 529988             | 529988.293       |
| [ Mn    | 55   | 50.724     | ug/L        | 1.107     | 362505             | 0.682            |
| [ Cd    | 111  | 50.450     | ug/L        | 1.291     | 62253              | 0.304            |
| Cd      | 114  |            | ug/L        |           | 145448             | 0.709            |
| [> In   | 115  |            | ug/L        |           | 204944             | 204944.075       |
| Sb      | 121  | 52.282     | ug/L        | 1.727     | 214792             | 1.047            |
| [ Sb    | 123  |            | ug/L        |           | 167802             | 0.818            |
| [> Lu   | 175  |            | ug/L        |           | 373682             | 373681.810       |
| Tl      | 205  | 50.669     | ug/L        | 1.876     | 752041             | 2.010            |
| Pb      | 208  | 51.844     | ug/L        | 0.832     | 1369188            | 3.662            |
| [ U     | 238  | 52.016     | ug/L        | 0.633     | 1768473            | 4.730            |

Sample ID: QC Std 1

Report Date/Time: Sunday, March 14, 2010 03:40:16

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    | 99.505            |                    |               |                |                |              |
| > | Sc      | 45   |                   |                    | 110.2         |                |                |              |
| [ | Mn      | 55   | 101.447           |                    |               |                |                |              |
| [ | Cd      | 111  | 100.899           |                    |               |                |                |              |
|   | Cd      | 114  |                   |                    |               |                |                |              |
| > | In      | 115  |                   |                    | 109.4         |                |                |              |
|   | Sb      | 121  | 104.563           |                    |               |                |                |              |
| [ | Sb      | 123  |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   |                    | 106.9         |                |                |              |
|   | Tl      | 205  | 101.338           |                    |               |                |                |              |
|   | Pb      | 208  | 103.687           |                    |               |                |                |              |
| [ | U       | 238  | 104.031           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, March 14, 2010 03:43:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\analyzer.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 2.313

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | -0.004     | ug/L        | 107.481   | 22                 | -0.000           |
| [> | Sc      | 45   |            | ug/L        |           | 541603             | 541602.995       |
| [  | Mn      | 55   | -0.002     | ug/L        | 86.475    | 1044               | -0.000           |
| [  | Cd      | 111  | 0.013      | ug/L        | 39.338    | 37                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 63                 | -0.000           |
| [> | In      | 115  |            | ug/L        |           | 208966             | 208965.953       |
|    | Sb      | 121  | 0.196      | ug/L        | 4.060     | 1046               | 0.004            |
| [  | Sb      | 123  |            | ug/L        |           | 825                | 0.003            |
| [> | Lu      | 175  |            | ug/L        |           | 381233             | 381232.951       |
|    | Tl      | 205  | 0.265      | ug/L        | 11.937    | 4874               | 0.011            |
|    | Pb      | 208  | 0.003      | ug/L        | 25.650    | 741                | 0.000            |
| [  | U       | 238  | 0.002      | ug/L        | 90.188    | 831                | 0.000            |

Sample ID: QC Std 2

Report Date/Time: Sunday, March 14, 2010 03:44:18

Page 1

## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |                  |                |                             |
| > | Sc      | 45   |                   |                    | 112.6            |                |                             |
| [ | Mn      | 55   |                   |                    |                  |                |                             |
| [ | Cd      | 111  |                   |                    |                  |                |                             |
|   | Cd      | 114  |                   |                    |                  |                |                             |
| > | In      | 115  |                   |                    | 111.6            |                |                             |
|   | Sb      | 121  |                   |                    |                  |                |                             |
| [ | Sb      | 123  |                   |                    |                  |                |                             |
| > | Lu      | 175  |                   |                    | 109.0            |                |                             |
|   | Tl      | 205  |                   |                    |                  |                |                             |
|   | Pb      | 208  |                   |                    |                  |                |                             |
| [ | U       | 238  |                   |                    |                  |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, March 14, 2010 03:47:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 3.314

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 0.583      | ug/L        | 11.418    | 269                | 0.000            |
| [> Sc   | 45   |            | ug/L        |           | 514385             | 514385.204       |
| [ Mn    | 55   | 6.767      | ug/L        | 1.155     | 47809              | 0.091            |
| [ Cd    | 111  | 1.198      | ug/L        | 2.968     | 1449               | 0.007            |
| Cd      | 114  |            | ug/L        |           | 3198               | 0.016            |
| [> In   | 115  |            | ug/L        |           | 198176             | 198175.517       |
| Sb      | 121  | 3.524      | ug/L        | 0.338     | 14199              | 0.071            |
| [ Sb    | 123  |            | ug/L        |           | 11005              | 0.055            |
| [> Lu   | 175  |            | ug/L        |           | 359478             | 359478.204       |
| Tl      | 205  | 1.338      | ug/L        | 2.543     | 19900              | 0.053            |
| Pb      | 208  | 2.437      | ug/L        | 1.654     | 62502              | 0.172            |
| [ U     | 238  | 0.292      | ug/L        | 0.767     | 10288              | 0.027            |

Sample ID: QC Std 3

Report Date/Time: Sunday, March 14, 2010 03:48:16

Page 1

## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [  | Be      | 9    | 116.628           |                    |               |               |                             |
| [> | Sc      | 45   |                   | 106.9              |               |               |                             |
| [  | Mn      | 55   | 135.335           |                    |               |               |                             |
| [  | Cd      | 111  | 119.839           |                    |               |               |                             |
| [  | Cd      | 114  |                   |                    |               |               |                             |
| [> | In      | 115  |                   | 105.8              |               |               |                             |
| [  | Sb      | 121  | 117.456           |                    |               |               |                             |
| [  | Sb      | 123  |                   |                    |               |               |                             |
| [> | Lu      | 175  |                   | 102.8              |               |               |                             |
| [  | Tl      | 205  | 133.819           |                    |               |               |                             |
| [  | Pb      | 208  | 121.849           |                    |               |               |                             |
| [  | U       | 238  | 146.164           |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
| QC Std 3         | Mn      | 55   | CRDL is out of limits |
| QC Std 3         | Tl      | 205  | CRDL is out of limits |
| QC Std 3         | U       | 238  | CRDL is out of limits |

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, March 14, 2010 03:51:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 4.315

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 0.049      | ug/L        | 28.205    | 44                 | 0.000            |
| >  | Sc      | 45   |            | ug/L        |           | 522058             | 522057.823       |
| [  | Mn      | 55   | 5.706      | ug/L        | 1.113     | 41077              | 0.077            |
| [  | Cd      | 111  | 0.450      | ug/L        | 5.694     | 561                | 0.003            |
|    | Cd      | 114  |            | ug/L        |           | 7065               | 0.035            |
| >  | In      | 115  |            | ug/L        |           | 199933             | 199932.725       |
|    | Sb      | 121  | 0.109      | ug/L        | 2.048     | 652                | 0.002            |
| [  | Sb      | 123  |            | ug/L        |           | 487                | 0.002            |
| [> | Lu      | 175  |            | ug/L        |           | 366587             | 366587.355       |
|    | Tl      | 205  | 0.041      | ug/L        | 8.045     | 1429               | 0.002            |
|    | Pb      | 208  | 0.210      | ug/L        | 2.231     | 6077               | 0.015            |
| [  | U       | 238  | -0.018     | ug/L        | 2.955     | 158                | -0.002           |

Sample ID: QC Std 4

Report Date/Time: Sunday, March 14, 2010 03:52:14

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   |                    | 108.5         |                |                |              |
| [ | Mn      | 55   | 98.376            |                    |               |                |                |              |
| [ | Cd      | 111  | 101.245           |                    |               |                |                |              |
|   | Cd      | 114  |                   |                    |               |                |                |              |
| > | In      | 115  |                   |                    | 106.7         |                |                |              |
|   | Sb      | 121  |                   |                    |               |                |                |              |
| [ | Sb      | 123  |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   |                    | 104.8         |                |                |              |
|   | Tl      | 205  |                   |                    |               |                |                |              |
|   | Pb      | 208  | 111.122           |                    |               |                |                |              |
| [ | U       | 238  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, March 14, 2010 03:55:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 5.316

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 18.370     | ug/L        | 1.189     | 7807               | 0.015            |
| > | Sc      | 45   |            | ug/L        |           | 515212             | 515212.434       |
| [ | Mn      | 55   | 26.582     | ug/L        | 0.616     | 185165             | 0.357            |
| [ | Cd      | 111  | 19.770     | ug/L        | 2.054     | 24078              | 0.119            |
|   | Cd      | 114  |            | ug/L        |           | 62877              | 0.311            |
| > | In      | 115  |            | ug/L        |           | 202222             | 202222.176       |
|   | Sb      | 121  | 21.451     | ug/L        | 0.964     | 87077              | 0.430            |
| [ | Sb      | 123  |            | ug/L        |           | 67687              | 0.334            |
| > | Lu      | 175  |            | ug/L        |           | 368484             | 368483.688       |
|   | Tl      | 205  | 20.473     | ug/L        | 1.831     | 300156             | 0.812            |
|   | Pb      | 208  | 20.560     | ug/L        | 1.440     | 535861             | 1.452            |
| [ | U       | 238  | 22.897     | ug/L        | 0.775     | 768057             | 2.082            |

Sample ID: QC Std 5

Report Date/Time: Sunday, March 14, 2010 03:56:13

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |



### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    | 91.849            |                    |               |                |                |              |
| > | Sc      | 45   |                   | 107.1              |               |                |                |              |
| [ | Mn      | 55   | 103.032           |                    |               |                |                |              |
| [ | Cd      | 111  | 96.704            |                    |               |                |                |              |
|   | Cd      | 114  |                   |                    |               |                |                |              |
| > | In      | 115  |                   | 108.0              |               |                |                |              |
|   | Sb      | 121  | 107.253           |                    |               |                |                |              |
| [ | Sb      | 123  |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   | 105.4              |               |                |                |              |
|   | Tl      | 205  | 102.367           |                    |               |                |                |              |
|   | Pb      | 208  | 101.837           |                    |               |                |                |              |
| [ | U       | 238  | 114.487           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 14, 2010 03:59:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 6.317

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 46.825     | ug/L        | 1.053     | 21536              | 0.039            |
| > | Sc      | 45   |            | ug/L        |           | 558525             | 558524.745       |
| [ | Mn      | 55   | 49.275     | ug/L        | 0.834     | 371163             | 0.663            |
| [ | Cd      | 111  | 48.399     | ug/L        | 0.503     | 63454              | 0.291            |
|   | Cd      | 114  |            | ug/L        |           | 148557             | 0.682            |
| > | In      | 115  |            | ug/L        |           | 217745             | 217744.927       |
|   | Sb      | 121  | 49.500     | ug/L        | 0.266     | 216081             | 0.991            |
| [ | Sb      | 123  |            | ug/L        |           | 168420             | 0.773            |
| > | Lu      | 175  |            | ug/L        |           | 397024             | 397024.173       |
|   | Tl      | 205  | 48.819     | ug/L        | 0.934     | 769816             | 1.937            |
|   | Pb      | 208  | 48.934     | ug/L        | 0.496     | 1373146            | 3.457            |
| [ | U       | 238  | 48.616     | ug/L        | 0.744     | 1756162            | 4.421            |

Sample ID: QC Std 6

Report Date/Time: Sunday, March 14, 2010 04:00:13

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [  | Be      | 9    | 93.650            |                    |               |               |                             |
| >  | Sc      | 45   |                   | 116.1              |               |               |                             |
|    | Mn      | 55   | 98.550            |                    |               |               |                             |
| [  | Cd      | 111  | 96.799            |                    |               |               |                             |
|    | Cd      | 114  |                   |                    |               |               |                             |
| >  | In      | 115  |                   | 116.3              |               |               |                             |
|    | Sb      | 121  | 99.000            |                    |               |               |                             |
|    | Sb      | 123  |                   |                    |               |               |                             |
| [> | Lu      | 175  |                   | 113.5              |               |               |                             |
|    | Tl      | 205  | 97.639            |                    |               |               |                             |
|    | Pb      | 208  | 97.868            |                    |               |               |                             |
|    | U       | 238  | 97.233            |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 14, 2010 04:03:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 7.318

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 0.000      | ug/L        | 32748.304 | 24                 | 0.000            |
| >  | Sc      | 45   |            | ug/L        |           | 557121             | 557120.809       |
| [  | Mn      | 55   | 0.002      | ug/L        | 167.261   | 1109               | 0.000            |
| [  | Cd      | 111  | 0.008      | ug/L        | 136.602   | 31                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 72                 | 0.000            |
| >  | In      | 115  |            | ug/L        |           | 215678             | 215678.291       |
|    | Sb      | 121  | 0.094      | ug/L        | 5.680     | 640                | 0.002            |
| [  | Sb      | 123  |            | ug/L        |           | 493                | 0.001            |
| [> | Lu      | 175  |            | ug/L        |           | 390976             | 390976.221       |
|    | Tl      | 205  | 0.216      | ug/L        | 11.331    | 4250               | 0.009            |
|    | Pb      | 208  | 0.001      | ug/L        | 5.818     | 720                | 0.000            |
| [  | U       | 238  | 0.001      | ug/L        | 33.523    | 845                | 0.000            |

Sample ID: QC Std 7

Report Date/Time: Sunday, March 14, 2010 04:04:14

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   | 115.8              |               |                |                |              |
| [ | Mn      | 55   |                   |                    |               |                |                |              |
| [ | Cd      | 111  |                   |                    |               |                |                |              |
|   | Cd      | 114  |                   |                    |               |                |                |              |
| > | In      | 115  |                   | 115.2              |               |                |                |              |
|   | Sb      | 121  |                   |                    |               |                |                |              |
| [ | Sb      | 123  |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   | 111.8              |               |                |                |              |
|   | Tl      | 205  |                   |                    |               |                |                |              |
|   | Pb      | 208  |                   |                    |               |                |                |              |
| [ | U       | 238  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 14, 2010 04:35:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 8.326

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 48.833     | ug/L        | 2.498     | 21353              | 0.040            |
| > | Sc      | 45   |            | ug/L        |           | 531078             | 531078.034       |
| [ | Mn      | 55   | 50.879     | ug/L        | 1.028     | 364362             | 0.684            |
| [ | Cd      | 111  | 51.506     | ug/L        | 1.444     | 62363              | 0.310            |
|   | Cd      | 114  |            | ug/L        |           | 145248             | 0.722            |
| > | In      | 115  |            | ug/L        |           | 201101             | 201100.973       |
|   | Sb      | 121  | 53.060     | ug/L        | 1.357     | 213897             | 1.063            |
| [ | Sb      | 123  |            | ug/L        |           | 165993             | 0.825            |
| > | Lu      | 175  |            | ug/L        |           | 366526             | 366526.083       |
|   | Tl      | 205  | 51.697     | ug/L        | 2.306     | 752509             | 2.051            |
|   | Pb      | 208  | 52.355     | ug/L        | 1.430     | 1356206            | 3.699            |
| [ | U       | 238  | 51.914     | ug/L        | 1.684     | 1731083            | 4.721            |

Sample ID: QC Std 8

Report Date/Time: Sunday, March 14, 2010 04:36:41

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate | Rel. % Difference |
|----|---------|------|-------------------|--------------------|------------------|----------------|-----------|-------------------|
| [  | Be      | 9    | 97.666            |                    |                  |                |           |                   |
| >  | Sc      | 45   |                   |                    | 110.4            |                |           |                   |
| L  | Mn      | 55   | 101.758           |                    |                  |                |           |                   |
| [  | Cd      | 111  | 103.013           |                    |                  |                |           |                   |
|    | Cd      | 114  |                   |                    |                  |                |           |                   |
| >  | In      | 115  |                   |                    | 107.4            |                |           |                   |
|    | Sb      | 121  | 106.121           |                    |                  |                |           |                   |
| L  | Sb      | 123  |                   |                    |                  |                |           |                   |
| [> | Lu      | 175  |                   |                    | 104.8            |                |           |                   |
|    | Tl      | 205  | 103.394           |                    |                  |                |           |                   |
|    | Pb      | 208  | 104.710           |                    |                  |                |           |                   |
| L  | U       | 238  | 103.827           |                    |                  |                |           |                   |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 14, 2010 04:39:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 9.327

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 0.000      | ug/L        | 13562.941 | 24                 | 0.000            |
| >  | Sc      | 45   |            | ug/L        |           | 548850             | 548849.748       |
| [  | Mn      | 55   | 0.008      | ug/L        | 91.389    | 1134               | 0.000            |
| [  | Cd      | 111  | 0.006      | ug/L        | 64.574    | 28                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 68                 | 0.000            |
| >  | In      | 115  |            | ug/L        |           | 212272             | 212272.193       |
|    | Sb      | 121  | 0.089      | ug/L        | 5.215     | 609                | 0.002            |
| [  | Sb      | 123  |            | ug/L        |           | 485                | 0.001            |
| [> | Lu      | 175  |            | ug/L        |           | 384279             | 384278.534       |
|    | Tl      | 205  | 0.520      | ug/L        | 2.499     | 8809               | 0.021            |
|    | Pb      | 208  | 0.002      | ug/L        | 21.349    | 727                | 0.000            |
| [  | U       | 238  | 0.001      | ug/L        | 108.026   | 801                | 0.000            |

Sample ID: QC Std 9

Report Date/Time: Sunday, March 14, 2010 04:40:42

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   | 114.1              |               |                |                             |
| [ | Mn      | 55   |                   |                    |               |                |                             |
|   | Cd      | 111  |                   |                    |               |                |                             |
|   | Cd      | 114  |                   |                    |               |                |                             |
| > | In      | 115  |                   | 113.3              |               |                |                             |
|   | Sb      | 121  |                   |                    |               |                |                             |
| [ | Sb      | 123  |                   |                    |               |                |                             |
| > | Lu      | 175  |                   | 109.9              |               |                |                             |
|   | Tl      | 205  |                   |                    |               |                |                             |
|   | Pb      | 208  |                   |                    |               |                |                             |
| [ | U       | 238  |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046570

Sample Date/Time: Sunday, March 14, 2010 04:43:41

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\anal er.mth

Dataset File: C:\elandata\Dataset\100313\1202046570.328

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | -0.012     | ug/L        | 65.355    | 19                 | -0.000           |
| [> | Sc      | 45   |            | ug/L        |           | 547548             | 547547.856       |
| [  | Mn      | 55   | 0.206      | ug/L        | 1.204     | 2587               | 0.003            |
| [  | Cd      | 111  | 0.009      | ug/L        | 12.876    | 30                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 33                 | -0.000           |
| [> | In      | 115  |            | ug/L        |           | 196278             | 196277.706       |
|    | Sb      | 121  | 0.045      | ug/L        | 19.890    | 390                | 0.001            |
| [  | Sb      | 123  |            | ug/L        |           | 302                | 0.001            |
| [> | Lu      | 175  |            | ug/L        |           | 350575             | 350575.270       |
|    | Tl      | 205  | 0.226      | ug/L        | 7.828     | 3946               | 0.009            |
|    | Pb      | 208  | -0.009     | ug/L        | 9.071     | 376                | -0.001           |
| [  | U       | 238  | -0.004     | ug/L        | 21.140    | 584                | -0.000           |

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Sample ID: 1202046570

Report Date/Time: Sunday, March 14, 2010 04:44:40

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   |                    | 113.8         |                |                             |
|   | Mn      | 55   |                   |                    |               |                |                             |
| [ | Cd      | 111  |                   |                    |               |                |                             |
|   | Cd      | 114  |                   |                    |               |                |                             |
| > | In      | 115  |                   |                    | 104.8         |                |                             |
|   | Sb      | 121  |                   |                    |               |                |                             |
|   | Sb      | 123  |                   |                    |               |                |                             |
| > | Lu      | 175  |                   |                    | 100.3         |                |                             |
|   | Tl      | 205  |                   |                    |               |                |                             |
|   | Pb      | 208  |                   |                    |               |                |                             |
|   | U       | 238  |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202046571

Sample Date/Time: Sunday, March 14, 2010 04:47:39

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 954670|1|ba|

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\1202046571.329

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | 46.531     | ug/L        | 0.445     | 20718              | 0.038            |
| [> Sc   | 45   |            | ug/L        |           | 540708             | 540707.858       |
| [ Mn    | 55   | 51.256     | ug/L        | 0.769     | 373684             | 0.689            |
| [ Cd    | 111  | 49.525     | ug/L        | 0.294     | 59703              | 0.298            |
| Cd      | 114  |            | ug/L        |           | 140792             | 0.703            |
| [> In   | 115  |            | ug/L        |           | 200213             | 200213.487       |
| Sb      | 121  | 53.164     | ug/L        | 0.957     | 213374             | 1.065            |
| [ Sb    | 123  |            | ug/L        |           | 166330             | 0.830            |
| [> Lu   | 175  |            | ug/L        |           | 359875             | 359875.423       |
| Tl      | 205  | 44.879     | ug/L        | 3.085     | 641629             | 1.780            |
| Pb      | 208  | 49.676     | ug/L        | 1.968     | 1263318            | 3.509            |
| [ U     | 238  | 49.761     | ug/L        | 1.602     | 1629063            | 4.525            |

Sample ID: 1202046571

Report Date/Time: Sunday, March 14, 2010 04:48:39

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |               |                             |
| > | Sc      | 45   |                   |                    |               |               | 112.4                       |
|   | Mn      | 55   |                   |                    |               |               |                             |
| [ | Cd      | 111  |                   |                    |               |               |                             |
|   | Cd      | 114  |                   |                    |               |               |                             |
| > | In      | 115  |                   |                    |               |               | 106.9                       |
|   | Sb      | 121  |                   |                    |               |               |                             |
|   | Sb      | 123  |                   |                    |               |               |                             |
| > | Lu      | 175  |                   |                    |               |               | 102.9                       |
|   | Tl      | 205  |                   |                    |               |               |                             |
|   | Pb      | 208  |                   |                    |               |               |                             |
|   | U       | 238  |                   |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 14, 2010 05:07:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 8.334

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 47.806     | ug/L        | 1.004     | 20808              | 0.039            |
| [> | Sc      | 45   |            | ug/L        |           | 528572             | 528571.631       |
| [  | Mn      | 55   | 49.502     | ug/L        | 0.501     | 352870             | 0.666            |
| [  | Cd      | 111  | 48.487     | ug/L        | 1.433     | 60108              | 0.292            |
|    | Cd      | 114  |            | ug/L        |           | 141535             | 0.687            |
| [> | In      | 115  |            | ug/L        |           | 205888             | 205888.386       |
|    | Sb      | 121  | 49.637     | ug/L        | 1.707     | 204878             | 0.994            |
| [  | Sb      | 123  |            | ug/L        |           | 159053             | 0.772            |
| [> | Lu      | 175  |            | ug/L        |           | 371021             | 371021.080       |
|    | Tl      | 205  | 48.325     | ug/L        | 1.784     | 712177             | 1.917            |
|    | Pb      | 208  | 50.953     | ug/L        | 0.505     | 1336188            | 3.600            |
| [  | U       | 238  | 50.719     | ug/L        | 0.547     | 1712068            | 4.613            |

Sample ID: QC Std 8

Report Date/Time: Sunday, March 14, 2010 05:08:35

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [ | Be      | 9    | 95.612            |                    |               |               |                             |
| > | Sc      | 45   |                   | 109.9              |               |               |                             |
| [ | Mn      | 55   | 99.004            |                    |               |               |                             |
| [ | Cd      | 111  | 96.974            |                    |               |               |                             |
|   | Cd      | 114  |                   |                    |               |               |                             |
| > | In      | 115  |                   | 109.9              |               |               |                             |
|   | Sb      | 121  | 99.274            |                    |               |               |                             |
| [ | Sb      | 123  |                   |                    |               |               |                             |
| > | Lu      | 175  |                   | 106.1              |               |               |                             |
|   | Tl      | 205  | 96.649            |                    |               |               |                             |
|   | Pb      | 208  | 101.906           |                    |               |               |                             |
| [ | U       | 238  | 101.439           |                    |               |               |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 14, 2010 05:11:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 9.335

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | -0.002     | ug/L        | 715.301   | 22                 | -0.000           |
| [> Sc   | 45   |            | ug/L        |           | 529373             | 529373.160       |
| [ Mn    | 55   | 0.005      | ug/L        | 64.155    | 1072               | 0.000            |
| [ Cd    | 111  | 0.008      | ug/L        | 42.758    | 30                 | 0.000            |
| [ Cd    | 114  |            | ug/L        |           | 70                 | 0.000            |
| [> In   | 115  |            | ug/L        |           | 202533             | 202533.063       |
| [ Sb    | 121  | 0.093      | ug/L        | 8.383     | 595                | 0.002            |
| [ Sb    | 123  |            | ug/L        |           | 457                | 0.001            |
| [> Lu   | 175  |            | ug/L        |           | 372172             | 372171.756       |
| [ Tl    | 205  | 0.399      | ug/L        | 3.466     | 6748               | 0.016            |
| [ Pb    | 208  | 0.001      | ug/L        | 19.883    | 672                | 0.000            |
| [ U     | 238  | 0.001      | ug/L        | 91.518    | 790                | 0.000            |

Sample ID: QC Std 9

Report Date/Time: Sunday, March 14, 2010 05:12:36

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |



### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   |                    | 110.0         |                |                             |
|   | Mn      | 55   |                   |                    |               |                |                             |
| [ | Cd      | 111  |                   |                    |               |                |                             |
|   | Cd      | 114  |                   |                    |               |                |                             |
| > | In      | 115  |                   |                    | 108.1         |                |                             |
|   | Sb      | 121  |                   |                    |               |                |                             |
|   | Sb      | 123  |                   |                    |               |                |                             |
| > | Lu      | 175  |                   |                    | 106.4         |                |                             |
|   | Tl      | 205  |                   |                    |               |                |                             |
|   | Pb      | 208  |                   |                    |               |                |                             |
|   | U       | 238  |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type   Analyte                      Mass   Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 247192001

Sample Date/Time: Sunday, March 14, 2010 05:19:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\247192001.337

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 0.004      | ug/L        | 169.952   | 25                 | 0.000            |
| > | Sc      | 45   |            | ug/L        |           | 524784             | 524784.028       |
| [ | Mn      | 55   | 0.999      | ug/L        | 0.070     | 8075               | 0.013            |
| [ | Cd      | 111  | 0.002      | ug/L        | 144.632   | 21                 | 0.000            |
|   | Cd      | 114  |            | ug/L        |           | 39                 | -0.000           |
| > | In      | 115  |            | ug/L        |           | 190007             | 190006.657       |
|   | Sb      | 121  | -0.001     | ug/L        | 374.961   | 200                | -0.000           |
| [ | Sb      | 123  |            | ug/L        |           | 147                | -0.000           |
| > | Lu      | 175  |            | ug/L        |           | 334168             | 334167.686       |
|   | Tl      | 205  | 0.055      | ug/L        | 2.497     | 1492               | 0.002            |
|   | Pb      | 208  | 0.059      | ug/L        | 3.524     | 1979               | 0.004            |
| [ | U       | 238  | -0.010     | ug/L        | 8.936     | 388                | -0.001           |

Sample ID: 247192001

Report Date/Time: Sunday, March 14, 2010 05:20:33

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |               |                |              |
| > | Sc      | 45   |                   |                    | 109.1         |               |                |              |
| [ | Mn      | 55   |                   |                    |               |               |                |              |
| [ | Cd      | 111  |                   |                    |               |               |                |              |
|   | Cd      | 114  |                   |                    |               |               |                |              |
| > | In      | 115  |                   |                    | 101.4         |               |                |              |
|   | Sb      | 121  |                   |                    |               |               |                |              |
| [ | Sb      | 123  |                   |                    |               |               |                |              |
| > | Lu      | 175  |                   |                    | 95.6          |               |                |              |
|   | Tl      | 205  |                   |                    |               |               |                |              |
|   | Pb      | 208  |                   |                    |               |               |                |              |
| [ | U       | 238  |                   |                    |               |               |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046572

Sample Date/Time: Sunday, March 14, 2010 05:23:32

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\1202046572.338

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | -0.005     | ug/L        | 518.317   | 21                 | -0.000           |
| [> | Sc      | 45   |            | ug/L        |           | 516092             | 516092.184       |
| [  | Mn      | 55   | 1.002      | ug/L        | 1.177     | 7963               | 0.013            |
| [  | Cd      | 111  | 0.001      | ug/L        | 877.123   | 20                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 38                 | -0.000           |
| [> | In      | 115  |            | ug/L        |           | 186408             | 186408.027       |
|    | Sb      | 121  | -0.020     | ug/L        | 25.567    | 129                | -0.000           |
| [  | Sb      | 123  |            | ug/L        |           | 100                | -0.000           |
| [> | Lu      | 175  |            | ug/L        |           | 327053             | 327052.725       |
|    | Tl      | 205  | 0.038      | ug/L        | 12.596    | 1246               | 0.002            |
|    | Pb      | 208  | 0.064      | ug/L        | 2.755     | 2039               | 0.004            |
| [  | U       | 238  | -0.017     | ug/L        | 2.024     | 156                | -0.002           |

Sample ID: 1202046572

Report Date/Time: Sunday, March 14, 2010 05:24:32

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [  | Be      | 9    |                   |                    |               |               |                |              |
| [> | Sc      | 45   |                   |                    | 107.3         |               |                |              |
| [  | Mn      | 55   |                   |                    |               |               |                |              |
| [  | Cd      | 111  |                   |                    |               |               |                |              |
|    | Cd      | 114  |                   |                    |               |               |                |              |
| [> | In      | 115  |                   |                    | 99.5          |               |                |              |
|    | Sb      | 121  |                   |                    |               |               |                |              |
| [  | Sb      | 123  |                   |                    |               |               |                |              |
| [> | Lu      | 175  |                   |                    | 93.5          |               |                |              |
|    | Tl      | 205  |                   |                    |               |               |                |              |
|    | Pb      | 208  |                   |                    |               |               |                |              |
| [  | U       | 238  |                   |                    |               |               |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046573

Sample Date/Time: Sunday, March 14, 2010 05:27:31

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\1202046573.339

### Concentration Results

|   | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|------------|-------------|-----------|--------------------|------------------|
| [ | Be      | 9    | 48.002     | ug/L        | 3.501     | 19925              | 0.039            |
| > | Sc      | 45   |            | ug/L        |           | 504417             | 504416.833       |
| [ | Mn      | 55   | 51.565     | ug/L        | 2.135     | 350605             | 0.693            |
| [ | Cd      | 111  | 10.725     | ug/L        | 3.048     | 11709              | 0.065            |
|   | Cd      | 114  |            | ug/L        |           | 26829              | 0.148            |
| > | In      | 115  |            | ug/L        |           | 181188             | 181187.799       |
|   | Sb      | 121  | 207.942    | ug/L        | 3.428     | 754197             | 4.164            |
| [ | Sb      | 123  |            | ug/L        |           | 597994             | 3.302            |
| > | Lu      | 175  |            | ug/L        |           | 315904             | 315904.090       |
|   | Tl      | 205  | 81.070     | ug/L        | 2.732     | 1016995            | 3.216            |
|   | Pb      | 208  | 42.289     | ug/L        | 3.179     | 943897             | 2.987            |
| [ | U       | 238  | 53.884     | ug/L        | 2.461     | 1548167            | 4.900            |

Sample ID: 1202046573

Report Date/Time: Sunday, March 14, 2010 05:28:32

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [ | Be      | 9    |                   |                    |               |                |                |              |
| > | Sc      | 45   |                   |                    | 104.9         |                |                |              |
| [ | Mn      | 55   |                   |                    |               |                |                |              |
| [ | Cd      | 111  |                   |                    |               |                |                |              |
|   | Cd      | 114  |                   |                    |               |                |                |              |
| > | In      | 115  |                   |                    | 96.7          |                |                |              |
|   | Sb      | 121  |                   |                    |               |                |                |              |
| [ | Sb      | 123  |                   |                    |               |                |                |              |
| > | Lu      | 175  |                   |                    | 90.3          |                |                |              |
|   | Tl      | 205  |                   |                    |               |                |                |              |
|   | Pb      | 208  |                   |                    |               |                |                |              |
| [ | U       | 238  |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046574

Sample Date/Time: Sunday, March 14, 2010 05:31:31

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 954670[5]ba]

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\1202046574.340

### Concentration Results

| Analyte | Mass | Conc.  | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|--------|------|-------------|-----------|--------------------|------------------|
| [ Be    | 9    | -0.013 | ug/L | 84.781      | 17        | -0.000             |                  |
| [> Sc   | 45   |        | ug/L |             | 510171    | 510170.810         |                  |
| [ Mn    | 55   | 0.216  | ug/L | 5.137       | 2483      | 0.003              |                  |
| [ Cd    | 111  | -0.001 | ug/L | 735.040     | 18        | -0.000             |                  |
| [ Cd    | 114  |        | ug/L |             | 37        | -0.000             |                  |
| [> In   | 115  |        | ug/L |             | 192346    | 192345.800         |                  |
| [ Sb    | 121  | -0.005 | ug/L | 172.958     | 190       | -0.000             |                  |
| [ Sb    | 123  |        | ug/L |             | 156       | -0.000             |                  |
| [> Lu   | 175  |        | ug/L |             | 345236    | 345235.962         |                  |
| [ Tl    | 205  | 1.831  | ug/L | 4.474       | 25865     | 0.073              |                  |
| [ Pb    | 208  | 0.004  | ug/L | 23.980      | 694       | 0.000              |                  |
| [ U     | 238  | -0.017 | ug/L | 1.478       | 164       | -0.002             |                  |

Sample ID: 1202046574

Report Date/Time: Sunday, March 14, 2010 05:32:32

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate | Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------|-------------------|
| [ | Be      | 9    |                   |                    |               |                |           |                   |
| > | Sc      | 45   |                   |                    | 106.1         |                |           |                   |
| [ | Mn      | 55   |                   |                    |               |                |           |                   |
| [ | Cd      | 111  |                   |                    |               |                |           |                   |
|   | Cd      | 114  |                   |                    |               |                |           |                   |
| > | In      | 115  |                   |                    | 102.7         |                |           |                   |
|   | Sb      | 121  |                   |                    |               |                |           |                   |
| [ | Sb      | 123  |                   |                    |               |                |           |                   |
| > | Lu      | 175  |                   |                    | 98.7          |                |           |                   |
|   | Tl      | 205  |                   |                    |               |                |           |                   |
|   | Pb      | 208  |                   |                    |               |                |           |                   |
| [ | U       | 238  |                   |                    |               |                |           |                   |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 14, 2010 05:35:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 6.341

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | 48.155     | ug/L        | 0.863     | 20026              | 0.040            |
| [> | Sc      | 45   |            | ug/L        |           | 505061             | 505060.598       |
| [  | Mn      | 55   | 49.414     | ug/L        | 0.983     | 336551             | 0.664            |
| [  | Cd      | 111  | 48.324     | ug/L        | 0.426     | 57416              | 0.291            |
|    | Cd      | 114  |            | ug/L        |           | 134194             | 0.680            |
| [> | In      | 115  |            | ug/L        |           | 197336             | 197336.449       |
|    | Sb      | 121  | 49.191     | ug/L        | 0.390     | 194605             | 0.985            |
| [  | Sb      | 123  |            | ug/L        |           | 151572             | 0.767            |
| [> | Lu      | 175  |            | ug/L        |           | 359437             | 359436.815       |
|    | Tl      | 205  | 47.374     | ug/L        | 0.965     | 676342             | 1.879            |
|    | Pb      | 208  | 50.234     | ug/L        | 1.332     | 1276145            | 3.549            |
| [  | U       | 238  | 50.812     | ug/L        | 0.547     | 1661610            | 4.621            |

Sample ID: QC Std 6

Report Date/Time: Sunday, March 14, 2010 05:36:31

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [  | Be      | 9    | 96.311            |                    |               |               |                |              |
| >  | Sc      | 45   |                   |                    | 105.0         |               |                |              |
| [  | Mn      | 55   | 98.827            |                    |               |               |                |              |
| [  | Cd      | 111  | 96.648            |                    |               |               |                |              |
|    | Cd      | 114  |                   |                    |               |               |                |              |
| >  | In      | 115  |                   |                    | 105.4         |               |                |              |
|    | Sb      | 121  | 98.382            |                    |               |               |                |              |
| [  | Sb      | 123  |                   |                    |               |               |                |              |
| [> | Lu      | 175  |                   |                    | 102.8         |               |                |              |
|    | Tl      | 205  | 94.748            |                    |               |               |                |              |
|    | Pb      | 208  | 100.468           |                    |               |               |                |              |
| [  | U       | 238  | 101.624           |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 14, 2010 05:39:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl er.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 7.342

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [  | Be      | 9    | -0.001     | ug/L        | 144.518   | 21                 | -0.000           |
| [> | Sc      | 45   |            | ug/L        |           | 502918             | 502917.682       |
| [  | Mn      | 55   | 0.013      | ug/L        | 22.018    | 1074               | 0.000            |
| [  | Cd      | 111  | 0.012      | ug/L        | 111.995   | 34                 | 0.000            |
|    | Cd      | 114  |            | ug/L        |           | 66                 | 0.000            |
| [> | In      | 115  |            | ug/L        |           | 193160             | 193159.552       |
|    | Sb      | 121  | 0.099      | ug/L        | 12.698    | 592                | 0.002            |
| [  | Sb      | 123  |            | ug/L        |           | 445                | 0.001            |
| [> | Lu      | 175  |            | ug/L        |           | 357487             | 357486.558       |
|    | Tl      | 205  | 0.989      | ug/L        | 5.631     | 14835              | 0.039            |
|    | Pb      | 208  | 0.002      | ug/L        | 42.926    | 684                | 0.000            |
| [  | U       | 238  | 0.001      | ug/L        | 75.794    | 772                | 0.000            |

Sample ID: QC Std 7

Report Date/Time: Sunday, March 14, 2010 05:40:33

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## Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Be      | 9Linear Thru Zero   | 1.0000                  |
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 0.9999                  |
| Cd      | 111Linear Thru Zero | 1.0000                  |
| Cd      | 114Linear Thru Zero |                         |
| In      | 115Linear Thru Zero |                         |
| Sb      | 121Linear Thru Zero | 1.0000                  |
| Sb      | 123Linear Thru Zero |                         |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 0.9999                  |
| Pb      | 208Linear Thru Zero | 0.9999                  |
| U       | 238Linear Thru Zero | 0.9998                  |

### QC Calculated Values

|   | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [ | Be      | 9    |                   |                    |               |                |                             |
| > | Sc      | 45   |                   |                    |               |                | 104.5                       |
| [ | Mn      | 55   |                   |                    |               |                |                             |
| [ | Cd      | 111  |                   |                    |               |                |                             |
|   | Cd      | 114  |                   |                    |               |                |                             |
| > | In      | 115  |                   |                    |               |                | 103.1                       |
|   | Sb      | 121  |                   |                    |               |                |                             |
| [ | Sb      | 123  |                   |                    |               |                |                             |
| > | Lu      | 175  |                   |                    |               |                | 102.2                       |
|   | Tl      | 205  |                   |                    |               |                |                             |
|   | Pb      | 208  |                   |                    |               |                |                             |
| [ | U       | 238  |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, March 14, 2010 09:09:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and ti.mth

Dataset File: C:\elandata\Dataset\100313\Blank.391

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 497780             |                  |
| [  | Mn      | 55   |            | ug/L        |           | 910                |                  |
| [> | Lu      | 175  |            | ug/L        |           | 367254             |                  |
| [  | Ti      | 205  |            | ug/L        |           | 3250               |                  |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero |                         |
| Lu      | 175  | Linear Thru Zero |                         |
| Ti      | 205  | Linear Thru Zero |                         |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Sc      | 45   |                   |                    |               |                |                             |
| [  | Mn      | 55   |                   |                    |               |                |                             |
| [> | Lu      | 175  |                   |                    |               |                |                             |
| [  | Ti      | 205  |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Sunday, March 14, 2010 09:10:07

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## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, March 14, 2010 09:12:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\Standard 1.392

### Concentration Results

|    | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc 45        |            | ug/L        |           | 478144             | 478144.419       |
| [  | Mn 55        | 10.000     | ug/L        | 2.421     | 71057              | 0.147            |
| [> | Lu 175       |            | ug/L        |           | 348821             | 348821.225       |
| [  | Tl 205       | 10.000     | ug/L        | 2.050     | 162500             | 0.457            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 1.0000                  |
| Lu      | 175Linear Thru Zero |                         |
| Tl      | 205Linear Thru Zero | 1.0000                  |

### QC Calculated Values

|    | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Sc 45        |                   |                    |               |                |                             |
| [  | Mn 55        |                   |                    |               |                |                             |
| [> | Lu 175       |                   |                    |               |                |                             |
| [  | Tl 205       |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Sunday, March 14, 2010 09:12:19

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## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, March 14, 2010 09:14:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and ti.mth

Dataset File: C:\elandata\Dataset\100313\Standard 2.393

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 475325             | 475325.265       |
| [  | Mn      | 55   | 99.914     | ug/L        | 1.934     | 642528             | 1.350            |
| [> | Lu      | 175  |            | ug/L        |           | 351143             | 351142.623       |
| [  | Tl      | 205  | 99.841     | ug/L        | 2.959     | 1385331            | 3.937            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Sc      | 45   |                   |                    |               |                |                             |
| [  | Mn      | 55   |                   |                    |               |                |                             |
| [> | Lu      | 175  |                   |                    |               |                |                             |
| [  | Tl      | 205  |                   |                    |               |                |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, March 14, 2010 09:16:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and ti.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 1.394

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 508619             | 508618.627       |
| [  | Mn      | 55   | 49.773     | ug/L        | 1.384     | 342990             | 0.673            |
| [> | Lu      | 175  |            | ug/L        |           | 372842             | 372842.413       |
| [  | Ti      | 205  | 49.794     | ug/L        | 1.958     | 735346             | 1.964            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Ti      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   | 102.2              |               |                |                |              |
| [  | Mn      | 55   | 99.546            |                    |               |                |                |              |
| [> | Lu      | 175  |                   | 101.5              |               |                |                |              |
| [  | Ti      | 205  | 99.588            |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Sunday, March 14, 2010 09:16:47

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## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, March 14, 2010 09:18:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 2.395

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 512635             | 512635.451       |
| [  | Mn      | 55   | 0.005      | ug/L        | 62.468    | 971                | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 373631             | 373631.312       |
| [  | Tl      | 205  | 0.575      | ug/L        | 3.747     | 11776              | 0.023            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 103.0         |                |                |              |
| [  | Mn      | 55   |                   |                    |               |                |                |              |
| [> | Lu      | 175  |                   |                    | 101.7         |                |                |              |
| [  | Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Sunday, March 14, 2010 09:19:05

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## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, March 14, 2010 09:21:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 3.396

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 525141             | 525141.462       |
| [  | Mn      | 55   | 5.239      | ug/L        | 1.528     | 38131              | 0.071            |
| [> | Lu      | 175  |            | ug/L        |           | 387915             | 387915.388       |
| [  | Tl      | 205  | 1.211      | ug/L        | 0.703     | 21959              | 0.048            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 105.5         |                |                |              |
| [  | Mn      | 55   | 104.777           |                    |               |                |                |              |
| [> | Lu      | 175  |                   |                    | 105.6         |                |                |              |
| [  | Tl      | 205  | 121.113           |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, March 14, 2010 09:23:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 4.397

### Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Sc   | 45   |            | ug/L        |           | 471518             | 471517.922       |
| [ Mn    | 55   | 5.786      | ug/L        | 3.744     | 37707              | 0.078            |
| [> Lu   | 175  |            | ug/L        |           | 352439             | 352439.101       |
| [ TI    | 205  | 0.017      | ug/L        | 45.994    | 3355               | 0.001            |

### Calibration

| Analyte | MassCurve Type      | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Sc      | 45Linear Thru Zero  |                         |
| Mn      | 55Linear Thru Zero  | 1.0000                  |
| Lu      | 175Linear Thru Zero |                         |
| TI      | 205Linear Thru Zero | 0.9999                  |

### QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> Sc   | 45   |                   | 94.7               |               |                |                |              |
| [ Mn    | 55   | 99.751            |                    |               |                |                |              |
| [> Lu   | 175  |                   | 96.0               |               |                |                |              |
| [ TI    | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, March 14, 2010 09:25:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and ti.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 5.398

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 469356             | 469356.159       |
| [  | Mn      | 55   | 26.608     | ug/L        | 2.808     | 169609             | 0.360            |
| [> | Lu      | 175  |            | ug/L        |           | 348634             | 348634.360       |
| [  | Tl      | 205  | 19.826     | ug/L        | 0.887     | 275664             | 0.782            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 94.3             |                |                |              |
| [  | Mn      | 55   | 103.131           |                    |                  |                |                |              |
| [> | Lu      | 175  |                   |                    | 94.9             |                |                |              |
| [  | Tl      | 205  | 99.132            |                    |                  |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 14, 2010 09:27:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 6.399

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 506620             | 506619.821       |
| [  | Mn      | 55   | 48.436     | ug/L        | 3.404     | 332431             | 0.655            |
| [> | Lu      | 175  |            | ug/L        |           | 371191             | 371190.815       |
| [  | Tl      | 205  | 47.100     | ug/L        | 3.142     | 692530             | 1.857            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 101.8         |               |                |              |
| [  | Mn      | 55   | 96.872            |                    |               |               |                |              |
| [> | Lu      | 175  |                   |                    | 101.1         |               |                |              |
| [  | Tl      | 205  | 94.201            |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 14, 2010 09:30:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 7.400

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 529760             | 529759.739       |
| [  | Mn      | 55   | 0.012      | ug/L        | 28.768    | 1051               | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 373721             | 373720.607       |
| [  | Tl      | 205  | 0.528      | ug/L        | 1.245     | 11091              | 0.021            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Sc      | 45   |                   | 106.4              |               |                |                             |
| [  | Mn      | 55   |                   |                    |               |                |                             |
| [> | Lu      | 175  |                   | 101.8              |               |                |                             |
| [  | Tl      | 205  |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046570

Sample Date/Time: Sunday, March 14, 2010 09:32:23

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\1202046570.401

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 505547             | 505546.992       |
| [  | Mn      | 55   | 0.173      | ug/L        | 1.199     | 2106               | 0.002            |
| [> | Lu      | 175  |            | ug/L        |           | 344379             | 344379.062       |
| [  | Tl      | 205  | 0.097      | ug/L        | 1.468     | 4366               | 0.004            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Sc      | 45   |                   | 101.6              |               |                |                             |
| [  | Mn      | 55   |                   |                    |               |                |                             |
| [> | Lu      | 175  |                   | 93.8               |               |                |                             |
| [  | Tl      | 205  |                   |                    |               |                |                             |

### QC Out Of Limits

Measurement Type: Analyte      Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046571

Sample Date/Time: Sunday, March 14, 2010 09:34:37

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\1202046571.402

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 509509             | 509508.513       |
| [  | Mn      | 55   | 51.099     | ug/L        | 1.568     | 352751             | 0.690            |
| [> | Lu      | 175  |            | ug/L        |           | 354322             | 354321.992       |
| [  | Tl      | 205  | 45.013     | ug/L        | 1.090     | 632006             | 1.775            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   | 102.4              |               |                |                |              |
| [  | Mn      | 55   |                   |                    |               |                |                |              |
| [> | Lu      | 175  |                   | 96.5               |               |                |                |              |
| [  | Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, March 14, 2010 09:45:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 8.407

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 520332             | 520332.212       |
| [  | Mn      | 55   | 49.155     | ug/L        | 0.196     | 346561             | 0.664            |
| [> | Lu      | 175  |            | ug/L        |           | 372713             | 372713.140       |
| [  | Tl      | 205  | 46.333     | ug/L        | 1.759     | 684206             | 1.827            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 104.5         |                |                |              |
| [  | Mn      | 55   | 98.310            |                    |               |                |                |              |
| [> | Lu      | 175  |                   |                    | 101.5         |                |                |              |
| [  | Tl      | 205  | 92.667            |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, March 14, 2010 09:46:13

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## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, March 14, 2010 09:48:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 9.408

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 532919             | 532919.279       |
| [  | Mn      | 55   | 0.017      | ug/L        | 13.295    | 1094               | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 373756             | 373755.942       |
| [  | Tl      | 205  | 0.697      | ug/L        | 10.854    | 13588              | 0.027            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 107.1         |               |                |              |
| [  | Mn      | 55   |                   |                    |               |               |                |              |
| [> | Lu      | 175  |                   |                    | 101.8         |               |                |              |
| [  | Tl      | 205  |                   |                    |               |               |                |              |

### QC Out Of Limits

Measurement Type: Analyte      Mass: Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, March 14, 2010 09:48:31

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## ICPMS#5 - Summary Report

Sample ID: 247192001

Sample Date/Time: Sunday, March 14, 2010 09:52:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\247192001.410

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 511282             | 511281.691       |
| [  | Mn      | 55   | 0.965      | ug/L        | 1.986     | 7598               | 0.013            |
| [> | Lu      | 175  |            | ug/L        |           | 339148             | 339147.620       |
| [  | Tl      | 205  | -0.039     | ug/L        | 8.504     | 2480               | -0.002           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 102.7         |                |                |              |
| [  | Mn      | 55   |                   |                    |               |                |                |              |
| [> | Lu      | 175  |                   |                    | 92.3          |                |                |              |
| [  | Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247192001

Report Date/Time: Sunday, March 14, 2010 09:53:01

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## ICPMS#5 - Summary Report

Sample ID: 1202046572

Sample Date/Time: Sunday, March 14, 2010 09:55:00

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 954670|1|baj

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\1202046572.411

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 497320             | 497320.168       |
| [  | Mn      | 55   | 0.972      | ug/L        | 2.325     | 7440               | 0.013            |
| [> | Lu      | 175  |            | ug/L        |           | 336336             | 336336.405       |
| [  | Tl      | 205  | -0.081     | ug/L        | 15.123    | 1896               | -0.003           |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 99.9             |                |                |              |
| [  | Mn      | 55   |                   |                    |                  |                |                |              |
| [> | Lu      | 175  |                   |                    | 91.6             |                |                |              |
| [  | Tl      | 205  |                   |                    |                  |                |                |              |

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202046572

Report Date/Time: Sunday, March 14, 2010 09:55:17

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## ICPMS#5 - Summary Report

Sample ID: 1202046573

Sample Date/Time: Sunday, March 14, 2010 09:57:16

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 954670|1|ba|

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\1202046573.412

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 513759             | 513759.387       |
| [  | Mn      | 55   | 50.087     | ug/L        | 3.456     | 348586             | 0.677            |
| [> | Lu      | 175  |            | ug/L        |           | 345713             | 345713.042       |
| [  | Tl      | 205  | 74.632     | ug/L        | 1.267     | 1020420            | 2.943            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Sc      | 45   |                   | 103.2              |               |                |                |              |
| [  | Mn      | 55   |                   |                    |               |                |                |              |
| [> | Lu      | 175  |                   | 94.1               |               |                |                |              |
| [  | Tl      | 205  |                   |                    |               |                |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202046574

Sample Date/Time: Sunday, March 14, 2010 09:59:32

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 954670|5|ba|

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\1202046574.413

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 535796             | 535795.969       |
| [  | Mn      | 55   | 0.205      | ug/L        | 1.201     | 2464               | 0.003            |
| [> | Lu      | 175  |            | ug/L        |           | 361177             | 361177.030       |
| [  | Tl      | 205  | 2.461      | ug/L        | 2.117     | 38247              | 0.097            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Sc      | 45   |                   | 107.6              |                  |                |                             |
| [  | Mn      | 55   |                   |                    |                  |                |                             |
| [> | Lu      | 175  |                   | 98.3               |                  |                |                             |
| [  | Tl      | 205  |                   |                    |                  |                |                             |

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, March 14, 2010 10:01:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 6.414

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 530479             | 530478.721       |
| [  | Mn      | 55   | 48.154     | ug/L        | 2.705     | 346136             | 0.651            |
| [> | Lu      | 175  |            | ug/L        |           | 381680             | 381679.850       |
| [  | Tl      | 205  | 43.612     | ug/L        | 1.006     | 659739             | 1.720            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [> | Sc      | 45   |                   | 106.6              |               |               |                             |
| [  | Mn      | 55   | 96.308            |                    |               |               |                             |
| [> | Lu      | 175  |                   | 103.9              |               |               |                             |
| [  | Tl      | 205  | 87.223            |                    |               |               |                             |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message          |
|------------------|---------|------|--------------------------------|
| QC Std 6         | Tl      | 205  | CCV is out of limits (+/- 10%) |

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, March 14, 2010 10:04:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\mn and tl.mth

Dataset File: C:\elandata\Dataset\100313\QC Std 7.415

### Concentration Results

|    | Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> | Sc      | 45   |            | ug/L        |           | 529136             | 529136.392       |
| [  | Mn      | 55   | 0.019      | ug/L        | 20.726    | 1100               | 0.000            |
| [> | Lu      | 175  |            | ug/L        |           | 371799             | 371799.262       |
| [  | Tl      | 205  | 1.604      | ug/L        | 1.791     | 26802              | 0.063            |

### Calibration

| Analyte | Mass | Curve Type       | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Sc      | 45   | Linear Thru Zero |                         |
| Mn      | 55   | Linear Thru Zero | 1.0000                  |
| Lu      | 175  | Linear Thru Zero |                         |
| Tl      | 205  | Linear Thru Zero | 0.9999                  |

### QC Calculated Values

|    | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|---------|------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [> | Sc      | 45   |                   |                    | 106.3         |               |                |              |
| [  | Mn      | 55   |                   |                    |               |               |                |              |
| [> | Lu      | 175  |                   |                    | 101.2         |               |                |              |
| [  | Tl      | 205  |                   |                    |               |               |                |              |

### QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message          |
|------------------|---------|------|--------------------------------|
| QC Std 7         | Tl      | 205  | CCB is out of limits (+/- PQL) |

### QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Sunday, March 14, 2010 10:04:24

Page 1

Method Name: WATER  
 Method Description: 7470A, 245.2, ILM04 ANALYST JXL  
 Element: Hg

Date: 02/25/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 022510W1.SIF Results Data Set Name: 022510W1

Element: Hg Seq. No.: 36 AS Loc.: 1 Date: 02/25/2010  
 Sample ID: Calib Blank

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0015            | 0.0015         | 10:54:34 | No             |
| 2      |                    |                 | 0.0014            | 0.0014         | 10:55:09 | No             |
| Mean:  |                    |                 | 0.0015            |                |          |                |
| SD :   |                    |                 | 0.0001            |                |          |                |
| %RSD:  |                    |                 | 5.3762            |                |          |                |

Auto-zero performed.

Element: Hg Seq. No.: 37 AS Loc.: 2 Date: 02/25/2010  
 Sample ID: S0.2

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0011            | 0.0026         | 10:56:32 | No             |
| 2      |                    |                 | 0.0011            | 0.0026         | 10:57:07 | No             |
| Mean:  |                    |                 | 0.0011            |                |          |                |
| SD :   |                    |                 | 0.0000            |                |          |                |
| %RSD:  |                    |                 | 2.3514            |                |          |                |

[Hg] Standard number 1 applied. [0.200]  
 Correlation Coefficient: 1.00000 Slope: 0.00551  
 Intercept : 0.00000

Element: Hg Seq. No.: 38 AS Loc.: 3 Date: 02/25/2010  
 Sample ID: S0.5

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0035            | 0.0049         | 10:58:31 | No             |
| 2      |                    |                 | 0.0033            | 0.0048         | 10:59:06 | No             |
| Mean:  |                    |                 | 0.0034            |                |          |                |
| SD :   |                    |                 | 0.0001            |                |          |                |
| %RSD:  |                    |                 | 3.7263            |                |          |                |

[Hg] Standard number 2 applied. [0.500]  
 Correlation Coefficient: 0.99653 Slope: 0.00682  
 Intercept : -0.00010

Element: Hg Seq. No.: 39 AS Loc.: 4 Date: 02/25/2010  
 Sample ID: S2.0

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0133            | 0.0148         | 11:00:31 | No             |
| 2      |                    |                 | 0.0133            | 0.0148         | 11:01:05 | No             |
| Mean:  |                    |                 | 0.0133            |                |          |                |
| SD :   |                    |                 | 0.0000            |                |          |                |
| %RSD:  |                    |                 | 0.2404            |                |          |                |

[Hg] Standard number 3 applied. [2.000]



Correlation Coefficient: 0.99980  
Intercept : -0.00007

Slope: 0.00670

=====

Element: Hg Seq. No.: 40 AS Loc.: 5 Date: 02/25/2010  
Sample ID: S5.0

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0332            | 0.0346         | 11:02:31 | No             |
| 2      |                    |                 | 0.0330            | 0.0345         | 11:03:06 | No             |
| Mean:  |                    |                 | 0.0331            |                |          |                |
| SD :   |                    |                 | 0.0001            |                |          |                |
| %RSD:  |                    |                 | 0.2985            |                |          |                |

[Hg] Standard number 4 applied. [5.000]  
Correlation Coefficient: 0.99996  
Intercept : -0.00004

Slope: 0.00663

=====

Element: Hg Seq. No.: 41 AS Loc.: 6 Date: 02/25/2010  
Sample ID: S10

-----

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | Blncorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      |                    |                 | 0.0658            | 0.0673         | 11:04:33 | No             |
| 2      |                    |                 | 0.0657            | 0.0672         | 11:05:07 | No             |
| Mean:  |                    |                 | 0.0658            |                |          |                |
| SD :   |                    |                 | 0.0001            |                |          |                |
| %RSD:  |                    |                 |                   |                |          |                |

[Hg] Standard number 5 applied. [10.00]  
Correlation Coefficient: 0.99998  
Intercept : 0.00002

Slope: 0.00658

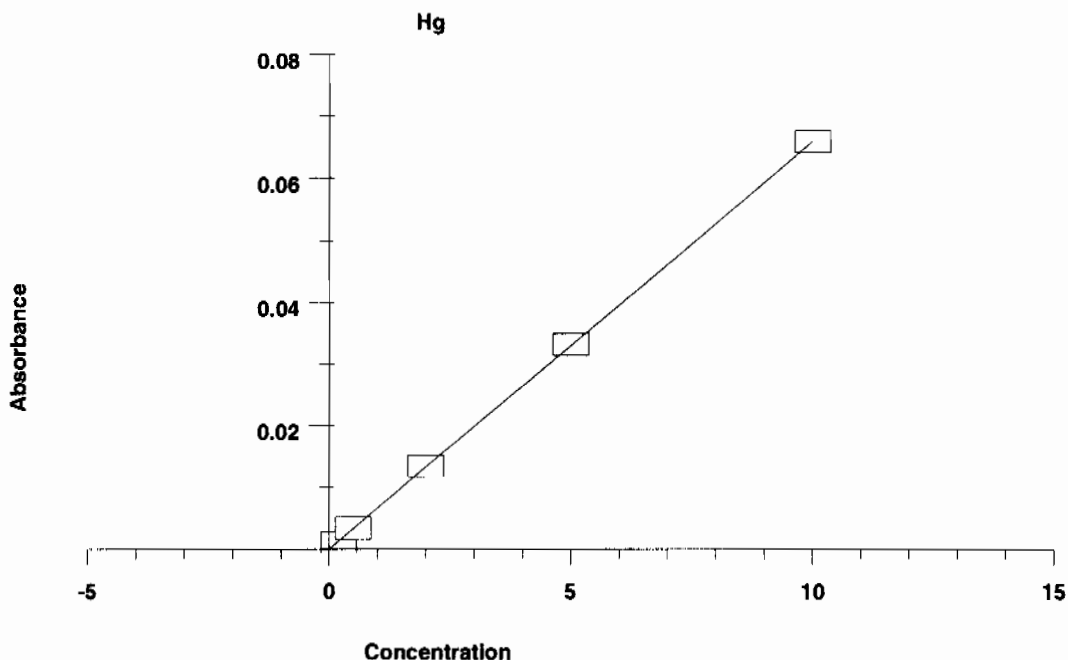
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Calibration data for Hg

| Standard ID | Mean Signal<br>(Pk Height) | Entered<br>Concentration<br>(µg/L) | Calculated<br>Concentration<br>(µg/L) | Standard<br>Deviation | %RSD |
|-------------|----------------------------|------------------------------------|---------------------------------------|-----------------------|------|
| Calib Blank | 0.0015                     | ---                                | ----                                  | ----                  | ---- |
| S0.2        | 0.0011                     | 0.200                              | 0.165                                 | 0.0000                | 2.4  |
| S0.5        | 0.0034                     | 0.500                              | 0.510                                 | 0.0001                | 3.7  |
| S2.0        | 0.0133                     | 2.000                              | 2.019                                 | 0.0000                | 0.2  |
| S5.0        | 0.0331                     | 5.000                              | 5.024                                 | 0.0001                | 0.3  |
| S10         | 0.0658                     | 10.000                             | 9.984                                 | 0.0001                | ---- |

Correlation Coefficient: 0.99998 Slope: 0.00658 Intercept: 0.0000

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=====  
 Element: Hg Seq. No.: 42 AS Loc.: 9 Date: 02/25/2010  
 Sample ID: ICV

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 5.138              | 5.138             | 0.0338             | 0.0353         | 11:06:35 | No             |
| 2      | 5.110              | 5.110             | 0.0337             | 0.0351         | 11:07:09 | No             |
| Mean:  | 5.124              | 5.124             | 0.0338             |                |          |                |
| SD :   | 0.0203             | 0.0203            | 0.0001             |                |          |                |
| %RSD:  | 0.4                | 0.4               | 0.3959             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 43 AS Loc.: 10 Date: 02/25/2010  
 Sample ID: ICB

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.006              | 0.006             | 0.0001             | 0.0015         | 11:08:31 | No             |
| 2      | -0.010             | -0.010            | 0.0000             | 0.0014         | 11:09:06 | No             |
| Mean:  | -0.002             | -0.002            | 0.0000             |                |          |                |
| SD :   | 0.0111             | 0.0111            | 0.0001             |                |          |                |
| %RSD:  | 647.6              | 647.6             | 1145.2686          |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 44 AS Loc.: 11 Date: 02/25/2010  
 Sample ID: CRDL

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.258              | 0.258             | 0.0017             | 0.0032         | 11:10:28 | No             |
| 2      | 0.257              | 0.257             | 0.0017             | 0.0032         | 11:11:03 | No             |
| Mean:  | 0.257              | 0.257             | 0.0017             |                |          |                |
| SD :   | 0.0012             | 0.0012            | 0.0000             |                |          |                |
| %RSD:  | 0.4                | 0.4               | 0.4436             |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 45 AS Loc.: 7 Date: 02/25/2010

Sample ID: CCV

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 4.949              | 4.949           | 0.0326             | 0.0341         | 11:12:28 | No             |
| 2      | 4.924              | 4.924           | 0.0324             | 0.0339         | 11:13:03 | No             |
| Mean:  | 4.937              | 4.937           | 0.0325             |                |          |                |
| SD :   | 0.0175             | 0.0175          | 0.0001             |                |          |                |
| %RSD:  | 0.4                | 0.4             | 0.3545             |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 46 AS Loc.: 8 Date: 02/25/2010

Sample ID: CCB

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.044              | 0.044           | 0.0003             | 0.0018         | 11:14:31 | No             |
| 2      | 0.017              | 0.017           | 0.0001             | 0.0016         | 11:15:06 | No             |
| Mean:  | 0.031              | 0.031           | 0.0002             |                |          |                |
| SD :   | 0.0186             | 0.0186          | 0.0001             |                |          |                |
| %RSD:  | 60.9               | 60.9            | 56.0211            |                |          |                |

QC value within specified limits.

=====

Element: Hg Seq. No.: 47 AS Loc.: 22 Date: 02/25/2010

Sample ID: 1202051914|i||956984|MB

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.040              | 0.040           | 0.0003             | 0.0018         | 11:16:31 | No             |
| 2      | 0.002              | 0.002           | 0.0000             | 0.0015         | 11:17:06 | No             |
| Mean:  | 0.021              | 0.021           | 0.0002             |                |          |                |
| SD :   | 0.0270             | 0.0270          | 0.0002             |                |          |                |
| %RSD:  | 129.8              | 129.8           | 114.9934           |                |          |                |

=====

Element: Hg Seq. No.: 48 AS Loc.: 23 Date: 02/25/2010

Sample ID: 1202051915|i||LCS

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 2.109              | 2.109           | 0.0139             | 0.0154         | 11:18:30 | No             |
| 2      | 2.117              | 2.117           | 0.0140             | 0.0154         | 11:19:05 | No             |
| Mean:  | 2.113              | 2.113           | 0.0139             |                |          |                |
| SD :   | 0.0053             | 0.0053          | 0.0000             |                |          |                |
| %RSD:  | 0.3                | 0.3             | 0.2514             |                |          |                |

=====

Element: Hg Seq. No.: 49 AS Loc.: 24 Date: 02/25/2010

Sample ID: 247850001|i||

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| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.041              | 0.041           | 0.0003             | 0.0018         | 11:20:29 | No             |
| 2      | 0.023              | 0.023           | 0.0002             | 0.0016         | 11:21:04 | No             |
| Mean:  | 0.032              | 0.032           | 0.0002             |                |          |                |
| SD :   | 0.0127             | 0.0127          | 0.0001             |                |          |                |
| %RSD:  | 40.1               | 40.1            | 36.9422            |                |          |                |

=====

Element: Hg Seq. No.: 50 AS Loc.: 25 Date: 02/25/2010

Sample ID: 1202051916|i|||DUP

%RSD: 67.0 67.0 31.8435

=====  
 Element: Hg Seq. No.: 56 AS Loc.: 31 Date: 02/25/2010  
 Sample ID: 247850005|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.477              | 0.477           | 0.0032             | 0.0046         | 11:34:35 | No             |
| 2      | 0.440              | 0.440           | 0.0029             | 0.0044         | 11:35:10 | No             |
| Mean:  | 0.459              | 0.459           | 0.0030             |                |          |                |
| SD :   | 0.0260             | 0.0260          | 0.0002             |                |          |                |
| %RSD:  | 5.7                | 5.7             | 5.6376             |                |          |                |

=====  
 Element: Hg Seq. No.: 57 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 5.027              | 5.027           | 0.0331             | 0.0346         | 11:36:37 | No             |
| 2      | 5.029              | 5.029           | 0.0331             | 0.0346         | 11:37:11 | No             |
| Mean:  | 5.028              | 5.028           | 0.0331             |                |          |                |
| SD :   | 0.0012             | 0.0012          | 0.0000             |                |          |                |
| %RSD:  |                    |                 |                    |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 58 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.027              | 0.027           | 0.0002             | 0.0017         | 11:38:39 | No             |
| 2      | 0.004              | 0.004           | 0.0000             | 0.0015         | 11:39:14 | No             |
| Mean:  | 0.015              | 0.015           | 0.0001             |                |          |                |
| SD :   | 0.0162             | 0.0162          | 0.0001             |                |          |                |
| %RSD:  | 105.3              | 105.3           | 89.6157            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 59 AS Loc.: 32 Date: 02/25/2010  
 Sample ID: 247850006|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | 0.452              | 0.452           | 0.0030             | 0.0045         | 11:40:38 | No             |
| 2      | 0.437              | 0.437           | 0.0029             | 0.0044         | 11:41:13 | No             |
| Mean:  | 0.444              | 0.444           | 0.0029             |                |          |                |
| SD :   | 0.0107             | 0.0107          | 0.0001             |                |          |                |
| %RSD:  | 2.4                | 2.4             | 2.3869             |                |          |                |

=====  
 Element: Hg Seq. No.: 60 AS Loc.: 33 Date: 02/25/2010  
 Sample ID: 247850007|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.004             | -0.004          | 0.0000             | 0.0015         | 11:42:33 | No             |
| 2      | -0.009             | -0.009          | 0.0000             | 0.0014         | 11:43:07 | No             |
| Mean:  | -0.006             | -0.006          | 0.0000             |                |          |                |
| SD :   | 0.0034             | 0.0034          | 0.0000             |                |          |                |
| %RSD:  | 52.8               | 52.8            | 91.2736            |                |          |                |

=====  
 Element: Hg Seq. No.: 61 AS Loc.: 34 Date: 02/25/2010  
 Sample ID: 247850008|i|||

%RSD: 64.2 64.2 73.9600

=====  
 Element: Hg Seq. No.: 67 AS Loc.: 40 Date: 02/25/2010  
 Sample ID: 246883001|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.007              | 0.007             | 0.0001             | 0.0015         | 11:56:13 | No             |
| 2      | -0.011             | -0.011            | -0.0001            | 0.0014         | 11:56:48 | No             |
| Mean:  | -0.002             | -0.002            | 0.0000             |                |          |                |
| SD :   | 0.0131             | 0.0131            | 0.0001             |                |          |                |
| %RSD:  | 702.5              | 702.5             | 1607.0531          |                |          |                |

=====  
 Element: Hg Seq. No.: 68 AS Loc.: 41 Date: 02/25/2010  
 Sample ID: 246883002|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.014              | 0.014             | 0.0001             | 0.0016         | 11:58:12 | No             |
| 2      | 0.010              | 0.010             | 0.0001             | 0.0016         | 11:58:47 | No             |
| Mean:  | 0.012              | 0.012             | 0.0001             |                |          |                |
| SD :   | 0.0033             | 0.0033            | 0.0000             |                |          |                |
| %RSD:  | 27.1               | 27.1              | 22.1377            |                |          |                |

=====  
 Element: Hg Seq. No.: 69 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 5.321              | 5.321             | 0.0351             | 0.0365         | 12:00:13 | No             |
| 2      | 5.286              | 5.286             | 0.0348             | 0.0363         | 12:00:47 | No             |
| Mean:  | 5.304              | 5.304             | 0.0349             |                |          |                |
| SD :   | 0.0249             | 0.0249            | 0.0002             |                |          |                |
| %RSD:  | 0.5                | 0.5               | 0.4690             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 70 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.033              | 0.033             | 0.0002             | 0.0017         | 12:02:15 | No             |
| 2      | 0.037              | 0.037             | 0.0003             | 0.0017         | 12:02:50 | No             |
| Mean:  | 0.035              | 0.035             | 0.0002             |                |          |                |
| SD :   | 0.0030             | 0.0030            | 0.0000             |                |          |                |
| %RSD:  | 8.6                | 8.6               | 8.0146             |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 71 AS Loc.: 42 Date: 02/25/2010  
 Sample ID: 246883003|i|||

| Repl # | SampleConc<br>µg/L | StdndConc<br>µg/L | BlndCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1      | 0.015              | 0.015             | 0.0001             | 0.0016         | 12:04:16 | No             |
| 2      | 0.019              | 0.019             | 0.0001             | 0.0016         | 12:04:51 | No             |
| Mean:  | 0.017              | 0.017             | 0.0001             |                |          |                |
| SD :   | 0.0024             | 0.0024            | 0.0000             |                |          |                |
| %RSD:  | 14.0               | 14.0              | 12.0684            |                |          |                |

=====  
 Element: Hg Seq. No.: 72 AS Loc.: 43 Date: 02/25/2010  
 Sample ID: 246883004|i|||

%RSD: 36.0 36.0 20.1861

=====  
 Element: Hg Seq. No.: 78 AS Loc.: 49 Date: 02/25/2010  
 Sample ID: 247039002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.027              | 0.027           | 0.0002            | 0.0017         | 12:18:12 | No             |
| 2      | 0.010              | 0.010           | 0.0001            | 0.0016         | 12:18:47 | No             |
| Mean:  | 0.018              | 0.018           | 0.0001            |                |          |                |
| SD :   | 0.0119             | 0.0119          | 0.0001            |                |          |                |
| %RSD:  | 64.7               | 64.7            | 56.4602           |                |          |                |

=====  
 Element: Hg Seq. No.: 79 AS Loc.: 50 Date: 02/25/2010  
 Sample ID: 247039003|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.015              | 0.015           | 0.0001            | 0.0016         | 12:20:07 | No             |
| 2      | 0.005              | 0.005           | 0.0001            | 0.0015         | 12:20:42 | No             |
| Mean:  | 0.010              | 0.010           | 0.0001            |                |          |                |
| SD :   | 0.0068             | 0.0068          | 0.0000            |                |          |                |
| %RSD:  | 68.3               | 68.3            | 53.8421           |                |          |                |

=====  
 Element: Hg Seq. No.: 80 AS Loc.: 51 Date: 02/25/2010  
 Sample ID: 247039004|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.002              | 0.002           | 0.0000            | 0.0015         | 12:22:03 | No             |
| 2      | -0.014             | -0.014          | -0.0001           | 0.0014         | 12:22:39 | No             |
| Mean:  | -0.006             | -0.006          | 0.0000            |                |          |                |
| SD :   | 0.0115             | 0.0115          | 0.0001            |                |          |                |
| %RSD:  | 192.3              | 192.3           | 348.5142          |                |          |                |

=====  
 Element: Hg Seq. No.: 81 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.031              | 5.031           | 0.0331            | 0.0346         | 12:24:03 | No             |
| 2      | 5.034              | 5.034           | 0.0332            | 0.0346         | 12:24:38 | No             |
| Mean:  | 5.032              | 5.032           | 0.0332            |                |          |                |
| SD :   | 0.0018             | 0.0018          | 0.0000            |                |          |                |
| %RSD:  |                    |                 |                   |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 82 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.029              | 0.029           | 0.0002            | 0.0017         | 12:26:06 | No             |
| 2      | 0.016              | 0.016           | 0.0001            | 0.0016         | 12:26:41 | No             |
| Mean:  | 0.022              | 0.022           | 0.0002            |                |          |                |
| SD :   | 0.0087             | 0.0087          | 0.0001            |                |          |                |
| %RSD:  | 39.1               | 39.1            | 34.9168           |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 83 AS Loc.: 52 Date: 02/25/2010  
 Sample ID: 247098001|i|||

%RSD: 78.9 78.9 64.7392

=====  
 Element: Hg Seq. No.: 89 AS Loc.: 58 Date: 02/25/2010  
 Sample ID: 247098004|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.006              | 0.006           | 0.0001            | 0.0015         | 12:39:55 | No             |
| 2      | -0.002             | -0.002          | 0.0000            | 0.0015         | 12:40:30 | No             |
| Mean:  | 0.002              | 0.002           | 0.0000            |                |          |                |
| SD :   | 0.0058             | 0.0058          | 0.0000            |                |          |                |
| %RSD:  | 251.8              | 251.8           | 116.7255          |                |          |                |

=====  
 Element: Hg Seq. No.: 90 AS Loc.: 59 Date: 02/25/2010  
 Sample ID: 1202052034|i||957034|MB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 0.027              | 0.027           | 0.0002            | 0.0017         | 12:41:55 | No             |
| 2      | -0.003             | -0.003          | 0.0000            | 0.0015         | 12:42:30 | No             |
| Mean:  | 0.012              | 0.012           | 0.0001            |                |          |                |
| SD :   | 0.0209             | 0.0209          | 0.0001            |                |          |                |
| %RSD:  | 176.4              | 176.4           | 143.7482          |                |          |                |

=====  
 Element: Hg Seq. No.: 91 AS Loc.: 60 Date: 02/25/2010  
 Sample ID: 1202052035|i||LCS

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.345              | 2.345           | 0.0155            | 0.0169         | 12:43:56 | No             |
| 2      | 2.330              | 2.330           | 0.0154            | 0.0168         | 12:44:31 | No             |
| Mean:  | 2.338              | 2.338           | 0.0154            |                |          |                |
| SD :   | 0.0108             | 0.0108          | 0.0001            |                |          |                |
| %RSD:  | 0.5                | 0.5             | 0.4613            |                |          |                |

=====  
 Element: Hg Seq. No.: 92 AS Loc.: 61 Date: 02/25/2010  
 Sample ID: 247182001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.004             | -0.004          | 0.0000            | 0.0015         | 12:45:57 | No             |
| 2      | -0.003             | -0.003          | 0.0000            | 0.0015         | 12:46:31 | No             |
| Mean:  | -0.003             | -0.003          | 0.0000            |                |          |                |
| SD :   | 0.0009             | 0.0009          | 0.0000            |                |          |                |
| %RSD:  | 27.6               | 27.6            | 131.6391          |                |          |                |

=====  
 Element: Hg Seq. No.: 93 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 5.071              | 5.071           | 0.0334            | 0.0349         | 12:47:58 | No             |
| 2      | 5.094              | 5.094           | 0.0336            | 0.0350         | 12:48:32 | No             |
| Mean:  | 5.083              | 5.083           | 0.0335            |                |          |                |
| SD :   | 0.0159             | 0.0159          | 0.0001            |                |          |                |
| %RSD:  | 0.3                | 0.3             | 0.3128            |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 94 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.006             | -0.006          | 0.0000             | 0.0015         | 12:50:00 | No             |
| 2      | -0.002             | -0.002          | 0.0000             | 0.0015         | 12:50:35 | No             |
| Mean:  | -0.004             | -0.004          | 0.0000             |                |          |                |
| SD :   | 0.0023             | 0.0023          | 0.0000             |                |          |                |
| %RSD:  | 57.3               | 57.3            | 177.8653           |                |          |                |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 95 AS Loc.: 62 Date: 02/25/2010  
 Sample ID: 247192001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.038             | -0.038          | -0.0002            | 0.0012         | 12:52:02 | No             |
| 2      | -0.039             | -0.039          | -0.0002            | 0.0012         | 12:52:37 | No             |
| Mean:  | -0.039             | -0.039          | -0.0002            |                |          |                |
| SD :   | 0.0013             | 0.0013          | 0.0000             |                |          |                |
| %RSD:  | 3.2                | 3.2             | 3.4875             |                |          |                |

=====  
 Element: Hg Seq. No.: 96 AS Loc.: 63 Date: 02/25/2010  
 Sample ID: 247250001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.041             | -0.041          | -0.0003            | 0.0012         | 12:54:00 | No             |
| 2      | -0.057             | -0.057          | -0.0004            | 0.0011         | 12:54:35 | No             |
| Mean:  | -0.049             | -0.049          | -0.0003            |                |          |                |
| SD :   | 0.0115             | 0.0115          | 0.0001             |                |          |                |
| %RSD:  | 23.5               | 23.5            | 24.8640            |                |          |                |

=====  
 Element: Hg Seq. No.: 97 AS Loc.: 64 Date: 02/25/2010  
 Sample ID: 247250002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.036             | -0.036          | -0.0002            | 0.0013         | 12:55:55 | No             |
| 2      | -0.051             | -0.051          | -0.0003            | 0.0012         | 12:56:30 | No             |
| Mean:  | -0.043             | -0.043          | -0.0003            |                |          |                |
| SD :   | 0.0105             | 0.0105          | 0.0001             |                |          |                |
| %RSD:  | 24.2               | 24.2            | 25.8362            |                |          |                |

=====  
 Element: Hg Seq. No.: 98 AS Loc.: 65 Date: 02/25/2010  
 Sample ID: 247256001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.042             | -0.042          | -0.0003            | 0.0012         | 12:57:49 | No             |
| 2      | -0.056             | -0.056          | -0.0004            | 0.0011         | 12:58:25 | No             |
| Mean:  | -0.049             | -0.049          | -0.0003            |                |          |                |
| SD :   | 0.0103             | 0.0103          | 0.0001             |                |          |                |
| %RSD:  | 21.0               | 21.0            | 22.2172            |                |          |                |

=====  
 Element: Hg Seq. No.: 99 AS Loc.: 66 Date: 02/25/2010  
 Sample ID: 247256002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlncCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|--------------------|----------------|----------|----------------|
| 1      | -0.027             | -0.027          | -0.0002            | 0.0013         | 12:59:46 | No             |
| 2      | -0.038             | -0.038          | -0.0002            | 0.0012         | 13:00:21 | No             |
| Mean:  | -0.032             | -0.032          | -0.0002            |                |          |                |
| SD :   | 0.0077             | 0.0077          | 0.0001             |                |          |                |



%RSD: 23.7 23.7 25.8136

=====  
 Element: Hg Seq. No.: 100 AS Loc.: 67 Date: 02/25/2010  
 Sample ID: 247322001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.008             | -0.008          | 0.0000            | 0.0014         | 13:01:42 | No             |
| 2      | -0.016             | -0.016          | -0.0001           | 0.0014         | 13:02:16 | No             |
| Mean:  | -0.012             | -0.012          | -0.0001           |                |          |                |
| SD :   | 0.0051             | 0.0051          | 0.0000            |                |          |                |
| %RSD:  | 42.3               | 42.3            | 54.3606           |                |          |                |

=====  
 Element: Hg Seq. No.: 101 AS Loc.: 68 Date: 02/25/2010  
 Sample ID: 247322002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.040             | -0.040          | -0.0002           | 0.0012         | 13:03:37 | No             |
| 2      | -0.016             | -0.016          | -0.0001           | 0.0014         | 13:04:11 | No             |
| Mean:  | -0.028             | -0.028          | -0.0002           |                |          |                |
| SD :   | 0.0170             | 0.0170          | 0.0001            |                |          |                |
| %RSD:  | 61.5               | 61.5            | 68.0719           |                |          |                |

=====  
 Element: Hg Seq. No.: 102 AS Loc.: 69 Date: 02/25/2010  
 Sample ID: 247335001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.046             | -0.046          | -0.0003           | 0.0012         | 13:05:33 | No             |
| 2      | -0.033             | -0.033          | -0.0002           | 0.0013         | 13:06:08 | No             |
| Mean:  | -0.039             | -0.039          | -0.0002           |                |          |                |
| SD :   | 0.0094             | 0.0094          | 0.0001            |                |          |                |
| %RSD:  | 23.8               | 23.8            | 25.4861           |                |          |                |

=====  
 Element: Hg Seq. No.: 103 AS Loc.: 70 Date: 02/25/2010  
 Sample ID: 247339001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.063             | -0.063          | -0.0004           | 0.0011         | 13:07:30 | No             |
| 2      | -0.074             | -0.074          | -0.0005           | 0.0010         | 13:08:05 | No             |
| Mean:  | -0.068             | -0.068          | -0.0004           |                |          |                |
| SD :   | 0.0077             | 0.0077          | 0.0001            |                |          |                |
| %RSD:  | 11.3               | 11.3            | 11.7966           |                |          |                |

=====  
 Element: Hg Seq. No.: 104 AS Loc.: 71 Date: 02/25/2010  
 Sample ID: 247339002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.066             | -0.066          | -0.0004           | 0.0011         | 13:09:28 | No             |
| 2      | -0.070             | -0.070          | -0.0004           | 0.0010         | 13:10:03 | No             |
| Mean:  | -0.068             | -0.068          | -0.0004           |                |          |                |
| SD :   | 0.0029             | 0.0029          | 0.0000            |                |          |                |
| %RSD:  | 4.2                | 4.2             | 4.3655            |                |          |                |

=====  
 Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl | SampleConc | StdConc | BlkCorr | Peak | Time | Peak |
|------|------------|---------|---------|------|------|------|
|------|------------|---------|---------|------|------|------|

| #     | µg/L   | µg/L   | Signal | Height |          | Stored |
|-------|--------|--------|--------|--------|----------|--------|
| 1     | 5.211  | 5.211  | 0.0343 | 0.0358 | 13:11:29 | No     |
| 2     | 5.179  | 5.179  | 0.0341 | 0.0356 | 13:12:04 | No     |
| Mean: | 5.195  | 5.195  | 0.0342 |        |          |        |
| SD :  | 0.0223 | 0.0223 | 0.0001 |        |          |        |
| %RSD: | 0.4    | 0.4    | 0.4289 |        |          |        |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc µg/L | StdConc µg/L | Blncorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.046          | -0.046       | -0.0003        | 0.0012      | 13:13:32 | No          |
| 2      | -0.053          | -0.053       | -0.0003        | 0.0011      | 13:14:07 | No          |
| Mean:  | -0.050          | -0.050       | -0.0003        |             |          |             |
| SD :   | 0.0052          | 0.0052       | 0.0000         |             |          |             |
| %RSD:  | 10.6            | 10.6         | 11.1757        |             |          |             |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 107 AS Loc.: 72 Date: 02/25/2010  
 Sample ID: 247350001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | Blncorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.061          | -0.061       | -0.0004        | 0.0011      | 13:15:32 | No          |
| 2      | -0.057          | -0.057       | -0.0004        | 0.0011      | 13:16:06 | No          |
| Mean:  | -0.059          | -0.059       | -0.0004        |             |          |             |
| SD :   | 0.0028          | 0.0028       | 0.0000         |             |          |             |
| %RSD:  | 4.8             | 4.8          | 5.0087         |             |          |             |

=====  
 Element: Hg Seq. No.: 108 AS Loc.: 73 Date: 02/25/2010  
 Sample ID: 247424001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | Blncorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.039          | -0.039       | -0.0002        | 0.0012      | 13:17:30 | No          |
| 2      | -0.037          | -0.037       | -0.0002        | 0.0013      | 13:18:05 | No          |
| Mean:  | -0.038          | -0.038       | -0.0002        |             |          |             |
| SD :   | 0.0016          | 0.0016       | 0.0000         |             |          |             |
| %RSD:  | 4.2             | 4.2          | 4.5125         |             |          |             |

=====  
 Element: Hg Seq. No.: 109 AS Loc.: 74 Date: 02/25/2010  
 Sample ID: 247458001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | Blncorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.037          | -0.037       | -0.0002        | 0.0013      | 13:19:29 | No          |
| 2      | -0.043          | -0.043       | -0.0003        | 0.0012      | 13:20:03 | No          |
| Mean:  | -0.040          | -0.040       | -0.0002        |             |          |             |
| SD :   | 0.0042          | 0.0042       | 0.0000         |             |          |             |
| %RSD:  | 10.4            | 10.4         | 11.1477        |             |          |             |

=====  
 Element: Hg Seq. No.: 110 AS Loc.: 75 Date: 02/25/2010  
 Sample ID: 247540001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | Blncorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.039          | -0.039       | -0.0002        | 0.0012      | 13:21:27 | No          |
| 2      | -0.061          | -0.061       | -0.0004        | 0.0011      | 13:22:02 | No          |
| Mean:  | -0.050          | -0.050       | -0.0003        |             |          |             |
| SD :   | 0.0156          | 0.0156       | 0.0001         |             |          |             |

%RSD: 31.2 31.2 32.9893

=====  
 Element: Hg Seq. No.: 111 AS Loc.: 76 Date: 02/25/2010  
 Sample ID: 247548001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.048             | -0.048          | -0.0003           | 0.0012         | 13:23:29 | No             |
| 2      | -0.042             | -0.042          | -0.0003           | 0.0012         | 13:24:04 | No             |
| Mean:  | -0.045             | -0.045          | -0.0003           |                |          |                |
| SD :   | 0.0045             | 0.0045          | 0.0000            |                |          |                |
| %RSD:  | 9.9                | 9.9             | 10.4989           |                |          |                |

=====  
 Element: Hg Seq. No.: 112 AS Loc.: 77 Date: 02/25/2010  
 Sample ID: 1202052036|i|||DUP

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.062             | -0.062          | -0.0004           | 0.0011         | 13:25:30 | No             |
| 2      | -0.063             | -0.063          | -0.0004           | 0.0011         | 13:26:05 | No             |
| Mean:  | -0.062             | -0.062          | -0.0004           |                |          |                |
| SD :   | 0.0003             | 0.0003          | 0.0000            |                |          |                |
| %RSD:  | 0.5                | 0.5             | 0.5072            |                |          |                |

=====  
 Element: Hg Seq. No.: 113 AS Loc.: 78 Date: 02/25/2010  
 Sample ID: 1202052037|i|||MS

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | 2.257              | 2.257           | 0.0149            | 0.0164         | 13:27:27 | No             |
| 2      | 2.246              | 2.246           | 0.0148            | 0.0163         | 13:28:02 | No             |
| Mean:  | 2.252              | 2.252           | 0.0148            |                |          |                |
| SD :   | 0.0078             | 0.0078          | 0.0001            |                |          |                |
| %RSD:  | 0.3                | 0.3             | 0.3455            |                |          |                |

=====  
 Element: Hg Seq. No.: 114 AS Loc.: 79 Date: 02/25/2010  
 Sample ID: 1202052041|i|5|SDILT

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.109             | -0.109          | -0.0007           | 0.0008         | 13:29:21 | No             |
| 2      | -0.095             | -0.095          | -0.0006           | 0.0009         | 13:29:56 | No             |
| Mean:  | -0.102             | -0.102          | -0.0007           |                |          |                |
| SD :   | 0.0094             | 0.0094          | 0.0001            |                |          |                |
| %RSD:  | 9.3                | 9.3             | 9.5254            |                |          |                |

=====  
 Element: Hg Seq. No.: 115 AS Loc.: 80 Date: 02/25/2010  
 Sample ID: 247548002|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time     | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1      | -0.073             | -0.073          | -0.0005           | 0.0010         | 13:31:16 | No             |
| 2      | -0.037             | -0.037          | -0.0002           | 0.0013         | 13:31:50 | No             |
| Mean:  | -0.055             | -0.055          | -0.0003           |                |          |                |
| SD :   | 0.0256             | 0.0256          | 0.0002            |                |          |                |
| %RSD:  | 46.6               | 46.6            | 48.9887           |                |          |                |

=====  
 Element: Hg Seq. No.: 116 AS Loc.: 81 Date: 02/25/2010  
 Sample ID: 247559001|i|||

| Repl # | SampleConc<br>µg/L | StdConc<br>µg/L | BlkCorr<br>Signal | Peak<br>Height | Time | Peak<br>Stored |
|--------|--------------------|-----------------|-------------------|----------------|------|----------------|
|--------|--------------------|-----------------|-------------------|----------------|------|----------------|

| #     | µg/L   | µg/L   | Signal  | Height |          | Stored |
|-------|--------|--------|---------|--------|----------|--------|
| 1     | -0.055 | -0.055 | -0.0003 | 0.0011 | 13:33:10 | No     |
| 2     | -0.060 | -0.060 | -0.0004 | 0.0011 | 13:33:46 | No     |
| Mean: | -0.057 | -0.057 | -0.0004 |        |          |        |
| SD :  | 0.0031 | 0.0031 | 0.0000  |        |          |        |
| %RSD: | 5.4    | 5.4    | 5.6309  |        |          |        |

=====  
 Element: Hg Seq. No.: 117 AS Loc.: 7 Date: 02/25/2010  
 Sample ID: CCV

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | 5.524           | 5.524        | 0.0364         | 0.0379      | 13:35:10 | No          |
| 2      | 5.556           | 5.556        | 0.0366         | 0.0381      | 13:35:45 | No          |
| Mean:  | 5.540           | 5.540        | 0.0365         |             |          |             |
| SD :   | 0.0221          | 0.0221       | 0.0001         |             |          |             |
| %RSD:  | 0.4             | 0.4          | 0.3993         |             |          |             |

QC failed, value greater than upper limit for Hg.  
 Current analysis method being continued.

=====  
 Element: Hg Seq. No.: 118 AS Loc.: 8 Date: 02/25/2010  
 Sample ID: CCB

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | 0.005           | 0.005        | 0.0000         | 0.0015      | 13:37:13 | No          |
| 2      | -0.142          | -0.142       | -0.0009        | 0.0006      | 13:37:48 | No          |
| Mean:  | -0.069          | -0.069       | -0.0004        |             |          |             |
| SD :   | 0.1036          | 0.1036       | 0.0007         |             |          |             |
| %RSD:  | 151.1           | 151.1        | 157.2977       |             |          |             |

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 119 AS Loc.: 82 Date: 02/25/2010  
 Sample ID: 247560001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | -0.012          | -0.012       | -0.0001        | 0.0014      | 13:39:12 | No          |
| 2      | 0.012           | 0.012        | 0.0001         | 0.0016      | 13:39:47 | No          |
| Mean:  | 0.000           | 0.000        | 0.0000         |             |          |             |
| SD :   | 0.0172          | 0.0172       | 0.0001         |             |          |             |
| %RSD:  | 7437            | 7437         | 589.4619       |             |          |             |

=====  
 Element: Hg Seq. No.: 120 AS Loc.: 83 Date: 02/25/2010  
 Sample ID: 247567001|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | 0.007           | 0.007        | 0.0001         | 0.0015      | 13:41:09 | No          |
| 2      | -0.006          | -0.006       | 0.0000         | 0.0015      | 13:41:44 | No          |
| Mean:  | 0.000           | 0.000        | 0.0000         |             |          |             |
| SD :   | 0.0087          | 0.0087       | 0.0001         |             |          |             |
| %RSD:  | 2194            | 2194         | 281.1419       |             |          |             |

=====  
 Element: Hg Seq. No.: 121 AS Loc.: 84 Date: 02/25/2010  
 Sample ID: 1202049850|i||956966|TB

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time     | Peak Stored |
|--------|-----------------|--------------|----------------|-------------|----------|-------------|
| 1      | 0.020           | 0.020        | 0.0001         | 0.0016      | 13:43:06 | No          |
| 2      | 0.028           | 0.028        | 0.0002         | 0.0017      | 13:43:41 | No          |
| Mean:  | 0.024           | 0.024        | 0.0002         |             |          |             |

# Miscellaneous

# Prep Logbook

## Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

**Batch ID:** 957032.0  
**Analyst:** Tara Griffin  
**Method:** SW846 7470A Prep  
**Lab SOP:** GL-MA-E-010 REV# 23  
**Instrument:** No analytical instrument

**Verified by:**

| Type | Sample Id  | Description                                      | Serial Number | Spike Amount | Spike Units |
|------|------------|--|---------------|--------------|-------------|
| LCS  | 1202052035 | Mercury working intermediate standard for LCS/MS | WHG100224-13  | .2           | mL          |
| MS   | 1202052037 | Mercury working intermediate standard for LCS/MS | WHG100224-13  | .2           | mL          |

| Sample ID                    | Run Date             | Matrix | Initial Volume (mL) | Final Volume (mL) | Prep Factor (mL/mL) | pH Check |
|------------------------------|----------------------|--------|---------------------|-------------------|---------------------|----------|
| 1202052034 MB                | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 1202052035 LCS               | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247182001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247192001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247250001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247250002                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247256001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247256002                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247322001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247322002                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247335001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247339001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247339002                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247350001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247424001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247458001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247540001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247548001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 1202052036 DUP (247548001)   | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 1202052037 MS (247548001)    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 1202052041 SDILT (247548001) | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247548002                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247559001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247560001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |
| 247567001                    | 24-FEB-2010 12:10:00 | Water  | 20                  | 20                | 1                   | <2       |

| Reagent/Solvent Lot ID | Description                             | Amount | Comments:            |
|------------------------|---|--------|----------------------|
|                        | Analytical Logbook version 1 11-04-2002 |        | GEL Laboratories LLC |

# Prep Logbook

**Batch ID:** 957032.0  
**Analyst:** Tara Griffin  
**Method:** SW846 7470A Prep  
**Lab SOP:** GL-MA-E-010 REV# 23  
**Instrument:** No analytical instrument

Verified by:

| Type | Sample Id  | Description                                      | Serial Number | Spike Amount | Spike Units |
|------|------------|--|---------------|--------------|-------------|
| LCS  | 1202052035 | Mercury working intermediate standard for LCS/MS | WHG100224-13  | .2           | mL          |
| MS   | 1202052037 | Mercury working intermediate standard for LCS/MS | WHG100224-13  | .2           | mL          |

| Sample ID     | Run Date                               | Matrix | Initial Volume (mL) | Final Volume (mL) | Prep Factor (mL/mL) | pH Check |
|---------------|--|--------|---------------------|-------------------|---------------------|----------|
| 1176183       | Sulfuric Acid, Concentrated            | 1 mL   |                     |                   |                     |          |
| 1255532-C     | Hg reducing agent                      | 1 mL   |                     |                   |                     |          |
| 1261483-C     | 5% Potassium Persulfate                | 1.5 mL |                     |                   |                     |          |
| 1274391-1     | NITRIC ACID                            | .5 mL  |                     |                   |                     |          |
| 1274397-C     | 5% KMnO4 solution                      | 3 mL   |                     |                   |                     |          |
| WHG100224-01a | Mercury Working 1st Source CAL 0.2/CRA | 20 uL  |                     |                   |                     |          |
| WHG100224-02  | Mercury Working 1st Source CAL 0.5     | 50 uL  |                     |                   |                     |          |
| WHG100224-03  | Mercury Working 1st Source CAL 2.0     | 200 uL |                     |                   |                     |          |
| WHG100224-04  | Mercury Working 1st Source CAL 5.0/CCV | 500 uL |                     |                   |                     |          |
| WHG100224-05  | Mercury Working 1st Source CAL 10.0    | 1 mL   |                     |                   |                     |          |
| WHG100224-06  | Mercury Working 2nd Source 5.0/KCV     | 500 uL |                     |                   |                     |          |

Digestion Start Date: 24-FEB-10 12:10

Digestion End Date: 24-FEB-10 14:10

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

|             |                          |              |  |      |            |                     |               |              |             |
|-------------|--------------------------|--------------|--|------|------------|---------------------|---------------|--------------|-------------|
| Batch ID:   | 954667.0                 | Verified by: |  | Type | Sample Id  | Description         | Serial Number | Spike Amount | Spike Units |
| Analyst:    | Anthony Green            |              |  | LCS  | 1202046566 | Metals Spike Mix I  | U1100205-01   | .25          | mL          |
| Method:     | SW846 3005A              |              |  | LCS  | 1202046566 | Metals Spike Mix II | U1100205-06   | .25          | mL          |
| Lab SOP:    | GL-MA-E-006 REV# 9       |              |  | MS   | 1202046568 | Metals Spike Mix I  | U1100205-01   | .25          | mL          |
| Instrument: | Metals Manual Instrument |              |  | MS   | 1202046568 | Metals Spike Mix II | U1100205-06   | .25          | mL          |

| Sample ID                    | Run Date             | Matrix | Initial Volume (mL) | Final Volume (mL) | Prep Factor (mL/mL) | pH Check |
|------------------------------|----------------------|--------|---------------------|-------------------|---------------------|----------|
| 1202046565 MB                | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046566 LCS               | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098002                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098003                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098004                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247182001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247192001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046567 DUP (247192001)   | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046568 MS (247192001)    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046569 SDILT (247192001) | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |

| Reagent/Solvent Lot ID | Description       | Amount | Comments: |
|------------------------|-------------------|--------|-----------|
| 1265209                | HYDROCHLORIC ACID | 2.5 mL |           |
| 1268732                | Nitric Acid CONC. | 1 mL   |           |



Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 954669.0  
Analyst: Anthony Green  
Method: SW846 3005A  
Lab SOP: GL-MA-E-006 REV# 9  
Instrument: Metals Manual Instrument

Verified by:

| Type | Sample Id  | Description  | Serial Number | Spike Amount | Spike Units |
|------|------------|--|---------------|--------------|-------------|
| LCS  | 1202046571 | ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A) | U1100205-A    | .5           | mL          |
| LCS  | 1202046571 | MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B)     | U1100205-B    | .5           | mL          |
| MS   | 1202046573 | ICP-MS DOE liquid Spike Solution A                           | U1090930-A    | .5           | mL          |
| MS   | 1202046573 | ICP-MS DOE Liquid Spike Solution B                           | U1090930-B    | .5           | mL          |

| Sample ID                    | Run Date             | Matrix | Initial Volume (mL) | Final Volume (mL) | Prep Factor (mL/mL) | pH Check |
|------------------------------|----------------------|--------|---------------------|-------------------|---------------------|----------|
| 1202046570 MB                | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046571 LCS               | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098002                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098003                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247098004                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247182001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 247192001                    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046572 DUP (247192001)   | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046573 MS (247192001)    | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |
| 1202046574 SDILT (247192001) | 24-FEB-2010 07:45:00 | Water  | 50                  | 50                | 1                   | <2       |

| Reagent/Solvent Lot ID | Description       | Amount | Comments |
|------------------------|-------------------|--------|----------|
| 1265209                | HYDROCHLORIC ACID | 2.5 mL |          |
| 1268732                | Nitric Acid CONC. | 1 mL   |          |

# Standard Logbook

**Serial ID:** UHG1167639-01      **Opened:** 13-AUG-09      **Amount :** 125 mL  
**Name:** MHGSTOCK1      **Received:** 13-AUG-09      **Catalog Number :** PLHG4-2Y  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 15-37HG  
**Employee:** Bryan Davis      **Solvent :** 10% HNO3  
**Supplier:** Spex  
**Description:** Mercury Source Standard #1 1,000 mg/L  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Mercury | 1000 mg/L     |         |               |

**Serial ID:** UHG1167641-02      **Opened:** 13-AUG-09      **Amount :** 100 mL  
**Name:** MHGSTOCK2      **Received:** 13-AUG-09      **Catalog Number :** AHG1KN-100  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 4905530  
**Employee:** Bryan Davis      **Solvent :** 3% HNO3  
**Supplier:** Ricca Chemical Company  
**Description:** Mercury Source Standard #2 1,000 mg/L  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Mercury | 999.7 mg/L    |         |               |

**Serial ID:** UI090421-40      **Opened:** 09-OCT-09      **Amount :** 250 mL  
**Name:** TRACE ICP Na-1000SOUR      **Received:** 21-APR-09      **Catalog Number :** HP100052-1  
**Type:** Source Material      **Expires:** 09-OCT-10      **Lot Number :** 0830227  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** ENVIRONMENTAL EXPRESS  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Sodium  | 1000 ug/mL    |         |               |

**Serial ID:** UI090422-40      **Opened:** 04-MAY-09      **Amount :** 500 mL  
**Name:** TRACE ICP ICSA SOLN A      **Received:** 22-APR-09      **Catalog Number :** 160005-01-03  
**Type:** Source Material      **Expres:** 04-MAY-10      **Lot Number :** 1013357  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** o2si  
**Description:** TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Aluminum | 5000 mg/L     | Calcium   | 5000 mg/L     |
| Iron     | 2000 mg/L     | Magnesium | 5000 mg/L     |

# Standard Logbook

**Serial ID:** UI090612-02      **Opened:** 12-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **Received:** 12-JUN-09      **Lot Number :** 1016377  
**Type:** Source Material      **Expires:** 12-JUN-10      **Solvent :** 2% HNO3  
**Employee:** Paul Boyd  
**Supplier:** O2SI  
**Description:** ICPMS Tungsten standard SPIKE - 10mg/L  
**Comments:** None

| Analyte  | Concentration | Analyte | Concentration |
|----------|---------------|---------|---------------|
| Tungsten | 10 mg/L       |         |               |

**Serial ID:** UI090701-09      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #1      **Received:** 01-JUL-09      **Catalog Number :** 160044-09-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016477  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** O2SI  
**Description:** ICPMS CRDL Master Soln #1  
**Comments:** None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 15 mg/L       | Arsenic   | 5 mg/L        |
| Barium      | 2 mg/L        | Beryllium | .5 mg/L       |
| Boron       | 15 mg/L       | Cadmium   | 1 mg/L        |
| Calcium     | 100 mg/L      | Chromium  | 3 mg/L        |
| Cobalt      | 1 mg/L        | Copper    | 1 mg/L        |
| Iron        | 25 mg/L       | Lead      | 2 mg/L        |
| Lithium     | 10 mg/L       | Magnesium | 15 mg/L       |
| Manganese   | 5 mg/L        | Nickel    | 2 mg/L        |
| Phosphorous | 50 mg/L       | Potassium | 300 mg/L      |
| Selenium    | 5 mg/L        | Sodium    | 250 mg/L      |
| Strontium   | 10 mg/L       | Thallium  | 1 mg/L        |
| Thorium     | 1 mg/L        | Uranium   | .2 mg/L       |
| Vanadium    | 10 mg/L       | Zinc      | 10 mg/L       |

**Serial ID:** UI090701-10      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #2      **Received:** 01-JUL-09      **Catalog Number :** 160044-08-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016476  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** O2SI  
**Description:** ICPMS CRDL Soln #2  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 2 mg/L        | Molybdenum | .5 mg/L       |
| Silver   | 1 mg/L        | Tin        | 2 mg/L        |
| Titanium | 10 mg/L       | Tungsten   | 5 mg/L        |

# Standard Logbook

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Zirconium      | 2 mg/L               |                |                      |

**Serial ID:** UI090701-40      **Opened:** 01-JUL-09      **Amount :** 500 mL  
**Name:** TRACE ICP Stock PQL St      **Received:** 30-JUN-09      **Catalog Number :** 160543-01-03  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016475  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** Q2si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Aluminum       | 100 mg/L             | Antimony       | 5 mg/L               |
| Arsenic        | 15 mg/L              | Barium         | 2.5 mg/L             |
| Beryllium      | 2.5 mg/L             | Boron          | 25 mg/L              |
| Cadmium        | 2.5 mg/L             | Calcium        | 100 mg/L             |
| Chromium       | 2.5 mg/L             | Cobalt         | 2.5 mg/L             |
| Copper         | 5 mg/L               | Iron           | 50 mg/L              |
| Lead           | 5 mg/L               | Magnesium      | 150 mg/L             |
| Manganese      | 5 mg/L               | Molybdenum     | 5 mg/L               |
| Nickel         | 2.5 mg/L             | Phosphorous    | 75 mg/L              |
| Potassium      | 75 mg/L              | Selenium       | 15 mg/L              |
| Silicon        | 50 mg/L              | Silver         | 2.5 mg/L             |
| Sodium         | 150 mg/L             | Strontium      | 2.5 mg/L             |
| Sulfur         | 50 mg/L              | Thallium       | 10 mg/L              |
| Tin            | 5 mg/L               | Titanium       | 2.5 mg/L             |
| Uranium        | 25 mg/L              | Vanadium       | 2.5 mg/L             |
| Zinc           | 5 mg/L               |                |                      |

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Aluminum       | 1000 mg/L            | Arsenic        | 100 mg/L             |
| Barium         | 100 mg/L             | Boron          | 100 mg/L             |
| Cadmium        | 100 mg/L             | Calcium        | 1000 mg/L            |
| Chromium       | 100 mg/L             | Cobalt         | 100 mg/L             |
| Copper         | 100 mg/L             | Iron           | 1000 mg/L            |
| Lead           | 100 mg/L             | Phosphorous    | 500 mg/L             |
| Potassium      | 500 mg/L             | Selenium       | 500 mg/L             |
| Sodium         | 500 mg/L             | Strontium      | 100 mg/L             |

# Standard Logbook

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR,HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

| Analyte    | Concentration | Analyte   | Concentration |
|------------|---------------|-----------|---------------|
| Antimony   | 100 mg/L      | Beryllium | 50 mg/L       |
| Magnesium  | 1000 mg/L     | Manganese | 100 mg/L      |
| Molybdenum | 100 mg/L      | Nickel    | 100 mg/L      |
| Silver     | 50 mg/L       | Sulfur    | 500 mg/L      |
| Thallium   | 100 mg/L      | Tin       | 100 mg/L      |
| Titanium   | 100 mg/L      | Uranium   | 100 mg/L      |
| Vanadium   | 100 mg/L      | Zinc      | 100 mg/L      |

**Serial ID:** UI090930-A      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE liquid Spike Solution A  
**Comments:** None

| Analyte                | Concentration | Analyte     | Concentration |
|------------------------|---------------|-------------|---------------|
| Aluminum               | 200 mg/L      | Arsenic     | 8 mg/L        |
| Barium                 | 5 mg/L        | Beryllium   | 5 mg/L        |
| Boron                  | 10 mg/L       | Cadmium     | 1 mg/L        |
| Calcium                | 200 mg/L      | Chromium    | 5 mg/L        |
| Cobalt                 | 5 mg/L        | Copper      | 5 mg/L        |
| Iron                   | 200 mg/L      | Lead        | 4 mg/L        |
| Lithium                | 5 mg/L        | Magnesium   | 200 mg/L      |
| Manganese              | 5 mg/L        | Nickel      | 5 mg/L        |
| Phosphorus, Total as P | 200 mg/L      | Potassium   | 200 mg/L      |
| Selenium               | 2 mg/L        | Silicon     | 200 mg/L      |
| Sodium                 | 200 mg/L      | Strontium   | 5 mg/L        |
| Thallium               | 10 mg/L       | Thorium     | 5 mg/L        |
| Total Uranium          | 5 mg/L        | Uranium     | 5 mg/L        |
| Uranium-235            | .0364 mg/L    | Uranium-238 | 4.96 mg/L     |
| Vanadium               | 5 mg/L        | Zinc        | 5 mg/L        |

# Standard Logbook

**Serial ID:** UI090930-B      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE Liquid Spike Solution B  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 20 mg/L       | Molybdenum | 5 mg/L        |
| Silver   | 5 mg/L        | Tin        | 5 mg/L        |
| Titanium | 5 mg/L        | Zirconium  | 5 mg/L        |

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Silica  | 2139 mg/L     | Silicon | 1000 mg/L     |

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 2000 mg/L     | Arsenic     | 200 mg/L      |
| Barium    | 200 mg/L      | Beryllium   | 200 mg/L      |
| Boron     | 200 mg/L      | Cadmium     | 200 mg/L      |
| Calcium   | 2000 mg/L     | Chromium    | 200 mg/L      |
| Cobalt    | 200 mg/L      | Copper      | 200 mg/L      |
| Iron      | 2000 mg/L     | Lead        | 200 mg/L      |
| Magnesium | 2000 mg/L     | Manganese   | 200 mg/L      |
| Nickel    | 200 mg/L      | Phosphorous | 1000 mg/L     |
| Potassium | 2000 mg/L     | Selenium    | 200 mg/L      |
| Sodium    | 2000 mg/L     | Strontium   | 200 mg/L      |
| Thallium  | 200 mg/L      | Uranium     | 200 mg/L      |
| Vanadium  | 200 mg/L      | Zinc        | 200 mg/L      |

# Standard Logbook

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 200 mg/L      | Molybdenum | 200 mg/L      |
| Silver   | 200 mg/L      | Sulfur     | 400 mg/L      |
| Tin      | 200 mg/L      | Titanium   | 200 mg/L      |

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRNMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

| Analyte | Concentration | Analyte | Concentration |
|---------|---------------|---------|---------------|
| Silica  | 2139 mg/L     | Silicon | 1000 mg/L     |

**Serial ID:** UI091217-06      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master A      **Received:** 17-DEC-09      **Catalog Number :** 160055-01  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018209  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2SI  
**Description:** ICPMS ICV/CCV SOLN A - 10ppm  
**Comments:** None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 2020 mg/L     | Calcium   | 2000 mg/L     |
| Iron        | 2000 mg/L     | Magnesium | 2000 mg/L     |
| Phosphorous | 2000 mg/L     | Potassium | 2000 mg/L     |
| Sodium      | 2000 mg/L     |           |               |

**Serial ID:** UI091217-07      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master B      **Received:** 17-DEC-09      **Catalog Number :** 160054-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018210  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** Q2SI  
**Description:** ICPMS ICV/CCV Soln B - 10ppm  
**Comments:** None

# Standard Logbook

| Analyte   | Concentration | Analyte   | Concentration |
|-----------|---------------|-----------|---------------|
| Arsenic   | 20 mg/L       | Barium    | 20 mg/L       |
| Beryllium | 20 mg/L       | Boron     | 40 mg/L       |
| Cadmium   | 20 mg/L       | Chromium  | 20 mg/L       |
| Cobalt    | 20 mg/L       | Copper    | 20 mg/L       |
| Lead      | 20 mg/L       | Lithium   | 20 mg/L       |
| Manganese | 20 mg/L       | Nickel    | 20 mg/L       |
| Selenium  | 20 mg/L       | Strontium | 20 mg/L       |
| Thallium  | 20 mg/L       | Thorium   | 20 mg/L       |
| Uranium   | 20 mg/L       | Vanadium  | 20 mg/L       |
| Zinc      | 20 mg/L       |           |               |

**Serial ID:** UI091217-08      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

| Analyte   | Concentration | Analyte    | Concentration |
|-----------|---------------|------------|---------------|
| Antimony  | 20 mg/L       | Molybdenum | 20 mg/L       |
| Silver    | 20 mg/L       | Tin        | 20 mg/L       |
| Titanium  | 20 mg/L       | Tungsten   | 20 mg/L       |
| Zirconium | 20 mg/L       |            |               |

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

| Analyte   | Concentration | Analyte   | Concentration |
|-----------|---------------|-----------|---------------|
| Arsenic   | 2 mg/L        | Barium    | 2 mg/L        |
| Beryllium | 2 mg/L        | Boron     | 2 mg/L        |
| Cadmium   | 2 mg/L        | Chromium  | 2 mg/L        |
| Cobalt    | 2 mg/L        | Copper    | 2 mg/L        |
| Lead      | 2 mg/L        | Lithium   | 2 mg/L        |
| Manganese | 2 mg/L        | Nickel    | 2 mg/L        |
| Selenium  | 2 mg/L        | Strontium | 2 mg/L        |
| Thallium  | 2 mg/L        | Thorium   | 2 mg/L        |
| Uranium   | 2 mg/L        | Vanadium  | 2 mg/L        |
| Zinc      | 2 mg/L        |           |               |



# Standard Logbook

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master C  
**Comments:** None

| Analyte   | Concentration | Analyte  | Concentration |
|-----------|---------------|----------|---------------|
| Antimony  | 2 mg/L        | Silver   | 2 mg/L        |
| Tin       | 2 mg/L        | Tungsten | 2 mg/L        |
| Zirconium | 2 mg/L        |          |               |

**Serial ID:** UI100205-01      **Opened:** 05-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

| Analyte   | Concentration | Analyte     | Concentration |
|-----------|---------------|-------------|---------------|
| Aluminum  | 1000 ug/mL    | Arsenic     | 100 ug/mL     |
| Barium    | 100 ug/mL     | Beryllium   | 100 ug/mL     |
| Boron     | 100 ug/mL     | Cadmium     | 100 ug/mL     |
| Calcium   | 1000 ug/mL    | Cobalt      | 100 ug/mL     |
| Iron      | 1000 ug/mL    | Lead        | 100 ug/mL     |
| Magnesium | 1000 ug/mL    | Phosphorous | 100 ug/mL     |
| Potassium | 1000 ug/mL    | Silver      | 100 ug/mL     |
| Sodium    | 1000 ug/mL    | Strontium   | 100 ug/mL     |

**Serial ID:** UI100205-06      **Opened:** 05-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** OS2I  
**Description:** Metals Spike Mix II  
**Comments:** None

| Analyte    | Concentration | Analyte   | Concentration |
|------------|---------------|-----------|---------------|
| Antimony   | 100 ug/mL     | Chromium  | 100 ug/mL     |
| Copper     | 100 ug/mL     | Manganese | 100 ug/mL     |
| Molybdenum | 100 ug/mL     | Nickel    | 100 ug/mL     |
| Selenium   | 100 ug/mL     | Silica    | 2141 ug/mL    |
| Silicon    | 1000 ug/mL    | Sulfur    | 1000 ug/mL    |
| Thallium   | 100 ug/mL     | Tin       | 100 ug/mL     |

# Standard Logbook

| Analyte     | Concentration | Analyte     | Concentration |
|-------------|---------------|-------------|---------------|
| Titanium    | 100 ug/mL     | Uranium     | 100 ug/mL     |
| Uranium-235 | .72 ug/mL     | Uranium-238 | 99.28 ug/mL   |
| Vanadium    | 100 ug/mL     | Zinc        | 100 ug/mL     |

**Serial ID:** UI100205-A      **Opened:** 05-FEB-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 05-FEB-10      **Lot Number :** 1018516  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** O2si  
**Description:** ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).  
**Comments:** None

| Analyte     | Concentration | Analyte     | Concentration |
|-------------|---------------|-------------|---------------|
| Aluminum    | 200 mg/L      | Arsenic     | 5 mg/L        |
| Barium      | 5 mg/L        | Beryllium   | 5 mg/L        |
| Bismuth     | 5 mg/L        | Boron       | 10 mg/L       |
| Cadmium     | 5 mg/L        | Calcium     | 200 mg/L      |
| Cesium      | 5 mg/L        | Chromium    | 5 mg/L        |
| Cobalt      | 5 mg/L        | Copper      | 5 mg/L        |
| Iron        | 200 mg/L      | Lead        | 5 mg/L        |
| Lithium     | 5 mg/L        | Magnesium   | 200 mg/L      |
| Manganese   | 5 mg/L        | Nickel      | 5 mg/L        |
| Phosphorous | 200 mg/L      | Potassium   | 200 mg/L      |
| Selenium    | 5 mg/L        | Sodium      | 200 mg/L      |
| Strontium   | 5 mg/L        | Thallium    | 5 mg/L        |
| Thorium     | 5 mg/L        | Uranium     | 5 mg/L        |
| Uranium-235 | .036 mg/L     | Uranium-238 | 4.964 mg/L    |
| Vanadium    | 5 mg/L        | Zinc        | 5 mg/L        |

**Serial ID:** UI100205-B      **Opened:** 05-FEB-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 05-FEB-10      **Lot Number :** 1018516  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** O2si  
**Description:** MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).  
**Comments:** None

| Analyte  | Concentration | Analyte    | Concentration |
|----------|---------------|------------|---------------|
| Antimony | 5 mg/L        | Molybdenum | 5 mg/L        |
| Silver   | 5 mg/L        | Tin        | 5 mg/L        |
| Titanium | 5 mg/L        | Zirconium  | 5 mg/L        |

# Standard Logbook

**Serial ID:** UI100217-48      **Opened:** 04-MAR-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 17-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-11      **Lot Number :** 1018878  
**Employee:** Helen Camello      **Solvent :** 3% HCl + 1% HNO3  
**Supplier:** o2si  
**Description:** Trace ICP Interferent Check Standard A  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Aluminum       | 500000 UG/L          | Calcium        | 500000 UG/L          |
| Iron           | 200000 UG/L          | Magnesium      | 500000 UG/L          |

**Serial ID:** UI100219-11      **Opened:** 19-FEB-10      **Amount :** 1000 mL  
**Name:** ICP-MS ICSA Master A      **Received:** 19-FEB-10      **Catalog Number :** 160013-01-01L  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018321  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3  
**Supplier:** 02SI  
**Description:** ICP-MS ICSA Master A  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Aluminum       | 1000 mg/L            | Calcium        | 1000 mg/L            |
| Carbon         | 2000 mg/L            | Chloride       | 10000 mg/L           |
| Iron           | 1000 mg/L            | Magnesium      | 1000 mg/L            |
| Molybdenum     | 20 mg/L              | Phosphorous    | 1000 mg/L            |
| Potassium      | 1000 mg/L            | Sodium         | 1000 mg/L            |
| Sulfur         | 1000 mg/L            | Titanium       | 20 mg/L              |

**Serial ID:** UI100226-40      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

|                |                      |                |                      |
|----------------|----------------------|----------------|----------------------|
| <b>Analyte</b> | <b>Concentration</b> | <b>Analyte</b> | <b>Concentration</b> |
| Antimony       | 10000 ug/L           | Arsenic        | 10000 ug/L           |
| Barium         | 15000 ug/L           | Beryllium      | 3000 ug/L            |
| Boron          | 5000 ug/L            | Cadmium        | 10000 ug/L           |
| Chromium       | 25000 ug/L           | Cobalt         | 10000 ug/L           |
| Copper         | 20000 ug/L           | Lead           | 25000 ug/L           |
| Manganese      | 10000 ug/L           | Molybdenum     | 10000 ug/L           |
| Nickel         | 10000 ug/L           | Phosphorous    | 15000 ug/L           |
| Potassium      | 300000 ug/L          | Selenium       | 10000 ug/L           |
| Silica         | 107000 ug/L          | Silicon        | 50000 ug/L           |

# Standard Logbook

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Silver   | 1000 ug/L     | Strontium | 10000 ug/L    |
| Sulfur   | 50000 ug/L    | Thallium  | 10000 ug/L    |
| Tin      | 10000 ug/L    | Titanium  | 10000 ug/L    |
| Vanadium | 10000 ug/L    | Zinc      | 15000 ug/L    |

**Serial ID:** UI100226-41      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** Q2SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

| Analyte  | Concentration | Analyte   | Concentration |
|----------|---------------|-----------|---------------|
| Aluminum | 500000 ug/L   | Calcium   | 500000 ug/L   |
| Iron     | 500000 ug/L   | Magnesium | 500000 ug/L   |
| Sodium   | 500000 ug/L   | Uranium   | 15000 ug/L    |

**Serial ID:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCalSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution B  
**Comments:** None

| Analyte   | Concentration | Analyte  | Concentration |
|-----------|---------------|----------|---------------|
| Arsenic   | 10 mg/L       | Barium   | 10 mg/L       |
| Beryllium | 10 mg/L       | Boron    | 20 mg/L       |
| Cadmium   | 10 mg/L       | Chromium | 10 mg/L       |
| Cobalt    | 10 mg/L       | Copper   | 10 mg/L       |
| Lead      | 10 mg/L       | Lithium  | 10 mg/L       |
| Manganese | 10 mg/L       | Nickel   | 10 mg/L       |
| Selenium  | 10 mg/L       | Silver   | 10 mg/L       |
| Strontium | 10 mg/L       | Thallium | 10 mg/L       |
| Thorium   | 10 mg/L       | Uranium  | 10 mg/L       |
| Vanadium  | 10 mg/L       | Zinc     | 10 mg/L       |

**Serial ID:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A

# Standard Logbook

Comments: None

| Analyte     | Concentration | Analyte   | Concentration |
|-------------|---------------|-----------|---------------|
| Aluminum    | 1000 mg/L     | Calcium   | 1000 mg/L     |
| Iron        | 1000 mg/L     | Magnesium | 1000 mg/L     |
| Phosphorous | 1000 mg/L     | Potassium | 1000 mg/L     |
| Sodium      | 1000 mg/L     |           |               |

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

| Analyte   | Concentration | Analyte    | Concentration |
|-----------|---------------|------------|---------------|
| Antimony  | 10 mg/L       | Molybdenum | 10 mg/L       |
| Tin       | 10 mg/L       | Titanium   | 10 mg/L       |
| Zirconium | 10 mg/L       |            |               |

**Serial ID:** IHG100224-01      **Opened:** 24-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 24-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 25-FEB-10      **Solvent :** 1mL HNO3 + TypeI H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167639-01   | Mercury | 1000 mg/L    | .05 mL  | 250 mL     | 200 ug/L    |

**Serial ID:** IHG100224-02      **Opened:** 24-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Intermediate      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167641-02   | Mercury | 999.7 mg/L   | .05 mL  | 250 mL     | 200 ug/L    |

# Standard Logbook

**Serial ID:** WHG100224-01a      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.2CRA      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 0.2/CRA  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-01    | Mercury | 200 ug/L     | 20 uL   | 20 mL      | .2 ug/L     |

**Serial ID:** WHG100224-02      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.5      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 0.5  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-01    | Mercury | 200 ug/L     | 50 uL   | 20 mL      | .5 ug/L     |

**Serial ID:** WHG100224-03      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL2.0      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 2.0  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-01    | Mercury | 200 ug/L     | 200 uL  | 20 mL      | 2 ug/L      |

**Serial ID:** WHG100224-04      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL5.0CCV      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 5.0/CCV  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-01    | Mercury | 200 ug/L     | 500 uL  | 20 mL      | 5 ug/L      |

# Standard Logbook

**Serial ID:** WHG100224-05      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL10.0      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 10.0  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-01    | Mercury | 200 ug/L     | 1 mL    | 20 mL      | 10 ug/L     |

**Serial ID:** WHG100224-06      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORK5.0ICV      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 2nd Source 5.0/ICV  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100224-02    | Mercury | 200 ug/L     | 500 uL  | 20 mL      | 5 ug/L      |

**Serial ID:** WHG100224-13      **Opened:** 24-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGLIQLCSMSSPIKE      **Received:** 24-FEB-10      **Solvent :** 2% HNO3-1274391  
**Type:** Working      **Expires:** 25-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury working intermediate standard for LCS/MS  
**Comments:** None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167639-01   | Mercury | 1000 mg/L    | .05 mL  | 250 mL     | 200 ug/L    |

**Serial ID:** WI100310-42      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.1 PPM CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte  | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| WI100310-44     | Aluminum | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Antimony | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Arsenic  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Barium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WI100310-44     | Beryllium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Boron       | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Cadmium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Calcium     | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Chromium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Cobalt      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Copper      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Iron        | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Lead        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Magnesium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Manganese   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Molybdenum  | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Nickel      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Phosphorous | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100310-44     | Potassium   | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Selenium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Silica      | 10698 ug/L   | 10 mL   | 100 mL     | 1069 ug/L   |
| WI100310-44     | Silicon     | 5000 ug/L    | 10 mL   | 100 mL     | 500 ug/L    |
| WI100310-44     | Silver      | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Sodium      | 10000 ug/L   | 10 mL   | 100 mL     | 1000 ug/L   |
| WI100310-44     | Strontium   | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Sulfur      | 2000 ug/L    | 10 mL   | 100 mL     | 200 ug/L    |
| WI100310-44     | Thallium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Tin         | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Titanium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Uranium     | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Vanadium    | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |
| WI100310-44     | Zinc        | 1000 ug/L    | 10 mL   | 100 mL     | 100 ug/L    |

**Serial ID:** WI100310-43      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-----------|--------------|---------|------------|--------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 5 mL    | 1000 mL    | 5000 UG/L    |
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL  | 1000 mL    | 5348.25 UG/L |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL  | 1000 mL    | 2500 UG/L    |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L    |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L     |



## Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091102-40     | Boron       | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Cadmium     | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Calcium     | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Chromium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Cobalt      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL  | 1000 mL    | 2500 UG/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL  | 1000 mL    | 5000 UG/L   |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL  | 1000 mL    | 1000 UG/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL  | 1000 mL    | 500 UG/L    |

**Serial ID:** WI100310-44      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL and 1 %HNO3-1281689  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI091015-42     | Silica    | 2139 mg/L    | 2.5 mL  | 500 mL     | 10698 ug/L  |
| UI091015-42     | Silicon   | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI091102-40     | Aluminum  | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Arsenic   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Barium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Beryllium | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Boron     | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cadmium   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Calcium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |

## Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091102-40     | Chromium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Cobalt      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Copper      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Iron        | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Lead        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Magnesium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Manganese   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Nickel      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Phosphorous | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI091102-40     | Potassium   | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Selenium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Sodium      | 2000 mg/L    | 2.5 mL  | 500 mL     | 10000 ug/L  |
| UI091102-40     | Strontium   | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Thallium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Uranium     | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Vanadium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-40     | Zinc        | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Antimony    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Molybdenum  | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Silver      | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Sulfur      | 400 mg/L     | 2.5 mL  | 500 mL     | 2000 ug/L   |
| UI091102-41     | Tin         | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |
| UI091102-41     | Titanium    | 200 mg/L     | 2.5 mL  | 500 mL     | 1000 ug/L   |

**Serial ID:** WI100310-45      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090421-40     | Sodium    | 1000 ug/mL   | 10 mL   | 500 mL     | 20000 UG/L  |
| UI090422-40     | Aluminum  | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Calcium   | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |
| UI090422-40     | Iron      | 2000 mg/L    | 5 mL    | 500 mL     | 20000 UG/L  |
| UI090422-40     | Magnesium | 5000 mg/L    | 5 mL    | 500 mL     | 50000 UG/L  |

**Serial ID:** WI100310-46      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** ICP TRACE ICPV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL AND 1%HNO3-1281689  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals

# Standard Logbook

Comments: None

| Parent Material | Analyte     | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090925-40     | Aluminum    | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Arsenic     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Barium      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Boron       | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cadmium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Calcium     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Chromium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Cobalt      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Copper      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Iron        | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-40     | Lead        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-40     | Phosphorous | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Potassium   | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Selenium    | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Sodium      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-40     | Strontium   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Antimony    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Beryllium   | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Magnesium   | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |
| UI090925-41     | Manganese   | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Molybdenum  | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Nickel      | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Silver      | 50 mg/L      | 2.5 mL  | 500 mL     | 250 ug/L    |
| UI090925-41     | Sulfur      | 500 mg/L     | 2.5 mL  | 500 mL     | 2500 ug/L   |
| UI090925-41     | Thallium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Tin         | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Titanium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Uranium     | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Vanadium    | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI090925-41     | Zinc        | 100 mg/L     | 2.5 mL  | 500 mL     | 500 ug/L    |
| UI091102-42     | Silica      | 2139 mg/L    | 2.5 mL  | 500 mL     | 10695 ug/L  |
| UI091102-42     | Silicon     | 1000 mg/L    | 2.5 mL  | 500 mL     | 5000 ug/L   |

**Serial ID:** WI100310-47      **Opened:** 10-MAR-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 11-MAR-10      **Solvent :** 3%HCL &1%HNO3-1281689  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

| Parent Material | Analyte  | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| UI090701-40     | Aluminum | 100 mg/L     | 2 mL    | 1000 mL    | 200 ug/L    |
| UI090701-40     | Antimony | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI090701-40     | Arsenic     | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |
| UI090701-40     | Barium      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Beryllium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Boron       | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Cadmium     | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Calcium     | 100 mg/L     | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Chromium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Cobalt      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Copper      | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Iron        | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Lead        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Magnesium   | 150 mg/L     | 2 mL    | 1000 mL    | 300 ug/L    |
| UI090701-40     | Manganese   | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Molybdenum  | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Nickel      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Phosphorous | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Potassium   | 75 mg/L      | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Selenium    | 15 mg/L      | 2 mL    | 1000 mL    | 15 ug/L     |
| UI090701-40     | Silicon     | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Silver      | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sodium      | 150 mg/L     | 2 mL    | 1000 mL    | 150 ug/L    |
| UI090701-40     | Strontium   | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Sulfur      | 50 mg/L      | 2 mL    | 1000 mL    | 100 ug/L    |
| UI090701-40     | Thallium    | 10 mg/L      | 2 mL    | 1000 mL    | 20 ug/L     |
| UI090701-40     | Tin         | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |
| UI090701-40     | Titanium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Uranium     | 25 mg/L      | 2 mL    | 1000 mL    | 50 ug/L     |
| UI090701-40     | Vanadium    | 2.5 mg/L     | 2 mL    | 1000 mL    | 5 ug/L      |
| UI090701-40     | Zinc        | 5 mg/L       | 2 mL    | 1000 mL    | 10 ug/L     |

**Serial ID:** WMS100312-04B      **Opened:** 12-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 12-MAR-10      **Balance Id :** 40245216  
**Type:** Working      **Expires:** 13-MAR-10      **Pipet Id :** 1758088  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl- 1281622  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090612-02     | Tungsten  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/L    |
| UMS100226-01    | Arsenic   | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Barium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Beryllium | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Boron     | 20 mg/L      | .5      | 50 mL      | 200 ug/l    |
| UMS100226-01    | Cadmium   | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UMS100226-01    | Chromium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Cobalt      | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Copper      | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lead        | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lithium     | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Manganese   | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Nickel      | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Selenium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Silver      | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Strontium   | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thallium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thorium     | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Uranium     | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Vanadium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-01    | Zinc        | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-02    | Aluminum    | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Calcium     | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Iron        | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Magnesium   | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Phosphorous | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Potassium   | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Sodium      | 1000 mg/L    | .5      | 50 mL      | 10000 ug/l  |
| UMS100226-03    | Antimony    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-03    | Molybdenum  | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-03    | Tin         | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-03    | Titanium    | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |
| UMS100226-03    | Zirconium   | 10 mg/L      | .5      | 50 mL      | 100 ug/l    |

**Serial ID:** WMS100313-04      **Opened:** 13-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 13-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 14-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1281622  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090612-02     | Tungsten  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/L    |
| UMS100226-01    | Arsenic   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Barium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Beryllium | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Boron     | 20 mg/L      | .5 mL   | 50 mL      | 200 ug/l    |
| UMS100226-01    | Cadmium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Chromium  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Cobalt    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UMS100226-01    | Copper      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lead        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Lithium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Manganese   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Nickel      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Selenium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Silver      | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Strontium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thallium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Thorium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Uranium     | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Vanadium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-01    | Zinc        | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-02    | Aluminum    | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Calcium     | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Iron        | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Magnesium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Phosphorous | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Potassium   | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-02    | Sodium      | 1000 mg/L    | .5 mL   | 50 mL      | 10000 ug/l  |
| UMS100226-03    | Antimony    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Molybdenum  | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Tin         | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Titanium    | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |
| UMS100226-03    | Zirconium   | 10 mg/L      | .5 mL   | 50 mL      | 100 ug/l    |

**Serial ID:** WMS100313-04A      **Opened:** 13-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 13-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 14-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| WMS100312-04B   | Aluminum  | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Antimony  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Arsenic   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Barium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Beryllium | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Boron     | 200 ug/l     | 5 mL    | 50 mL      | 20 ug/l     |
| WMS100312-04B   | Cadmium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Calcium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Chromium  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Cobalt    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |

# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WMS100312-04B   | Copper      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Iron        | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Lead        | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Lithium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Magnesium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Manganese   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Molybdenum  | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Nickel      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Phosphorous | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Potassium   | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Selenium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Silver      | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Sodium      | 10000 ug/l   | 5 mL    | 50 mL      | 1000 ug/l   |
| WMS100312-04B   | Strontium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Thallium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Thorium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Tin         | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Titanium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Tungsten    | 100 ug/L     | 5 mL    | 50 mL      | 10 ug/L     |
| WMS100312-04B   | Uranium     | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Vanadium    | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Zinc        | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |
| WMS100312-04B   | Zirconium   | 100 ug/l     | 5 mL    | 50 mL      | 10 ug/l     |

**Serial ID:** WMS100313-05      **Opened:** 13-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 13-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 14-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI091217-06     | Aluminum    | 2020 mg/L    | .125 mL | 50 mL      | 5050 ug/L   |
| UI091217-06     | Calcium     | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Iron        | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Magnesium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Phosphorous | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Potassium   | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-06     | Sodium      | 2000 mg/L    | .125 mL | 50 mL      | 5000 ug/L   |
| UI091217-07     | Arsenic     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Barium      | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Beryllium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Boron       | 40 mg/L      | .125 mL | 50 mL      | 100 ug/L    |
| UI091217-07     | Cadmium     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |

## Standard Logbook

| Parent Material | Analyte    | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|------------|--------------|---------|------------|-------------|
| UI091217-07     | Chromium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Cobalt     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Copper     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lead       | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Lithium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Manganese  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Nickel     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Selenium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Strontium  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thallium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Thorium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Uranium    | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Vanadium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-07     | Zinc       | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Antimony   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Molybdenum | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Silver     | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tin        | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Titanium   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Tungsten   | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |
| UI091217-08     | Zirconium  | 20 mg/L      | .125 mL | 50 mL      | 50 ug/L     |

**Serial ID:** WMS100313-06      **Opened:** 13-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 13-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 14-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

| Parent Material | Analyte   | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI090701-09     | Aluminum  | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Arsenic   | 5 mg/L       | .05 mL  | 50 mL      | 5 ug/L      |
| UI090701-09     | Barium    | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Beryllium | .5 mg/L      | .05 mL  | 50 mL      | .5 ug/L     |
| UI090701-09     | Boron     | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |
| UI090701-09     | Cadmium   | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Calcium   | 100 mg/L     | .05 mL  | 50 mL      | 100 ug/L    |
| UI090701-09     | Chromium  | 3 mg/L       | .05 mL  | 50 mL      | 3 ug/L      |
| UI090701-09     | Cobalt    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Copper    | 1 mg/L       | .05 mL  | 50 mL      | 1 ug/L      |
| UI090701-09     | Iron      | 25 mg/L      | .05 mL  | 50 mL      | 25 ug/L     |
| UI090701-09     | Lead      | 2 mg/L       | .05 mL  | 50 mL      | 2 ug/L      |
| UI090701-09     | Lithium   | 10 mg/L      | .05 mL  | 50 mL      | 10 ug/L     |
| UI090701-09     | Magnesium | 15 mg/L      | .05 mL  | 50 mL      | 15 ug/L     |



# Standard Logbook

| Parent Material | Analyte     | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|-------------|
| UI090701-09     | Manganese   | 5 mg/L       | .05 mL   | 50 mL      | 5 ug/L      |
| UI090701-09     | Nickel      | 2 mg/L       | .05 mL   | 50 mL      | 2 ug/L      |
| UI090701-09     | Phosphorous | 50 mg/L      | .05 mL   | 50 mL      | 50 ug/L     |
| UI090701-09     | Potassium   | 300 mg/L     | .05 mL   | 50 mL      | 300 ug/L    |
| UI090701-09     | Selenium    | 5 mg/L       | .05 mL   | 50 mL      | 5 ug/L      |
| UI090701-09     | Sodium      | 250 mg/L     | .05 mL   | 50 mL      | 250 ug/L    |
| UI090701-09     | Strontium   | 10 mg/L      | .05 mL   | 50 mL      | 10 ug/L     |
| UI090701-09     | Thallium    | 1 mg/L       | .05 mL   | 50 mL      | 1 ug/L      |
| UI090701-09     | Thorium     | 1 mg/L       | .05 mL   | 50 mL      | 1 ug/L      |
| UI090701-09     | Uranium     | .2 mg/L      | .05 mL   | 50 mL      | .2 ug/L     |
| UI090701-09     | Vanadium    | 10 mg/L      | .05 mL   | 50 mL      | 10 ug/L     |
| UI090701-09     | Zinc        | 10 mg/L      | .05 mL   | 50 mL      | 10 ug/L     |
| UI090701-10     | Antimony    | 2 mg/L       | .05 mL   | 50 mL      | 2 ug/L      |
| UI090701-10     | Molybdenum  | .5 mg/L      | .05 mL   | 50 mL      | .5 ug/L     |
| UI090701-10     | Silver      | 1 mg/L       | .05 mL   | 50 mL      | 1 ug/L      |
| UI090701-10     | Tin         | 2 mg/L       | .05 mL   | 50 mL      | 5 ug/L      |
| UI090701-10     | Titanium    | 10 mg/L      | .05 mL   | 50 mL      | 10 ug/L     |
| UI090701-10     | Tungsten    | 5 mg/L       | .05 mL   | 50 mL      | 5 ug/L      |
| UI090701-10     | Zirconium   | 2 mg/L       | .05 mL   | 50 mL      | 2 ug/L      |

**Serial ID:** WMS100313-07      **Opened:** 13-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 13-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 14-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Alliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|----------|------------|--------------|
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL     | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL     | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL     | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL     | 50 mL      | 2000 ug/L    |

# Standard Logbook

**Serial ID:** WMS100313-08      **Opened:** 13-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 13-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 14-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1281622  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICSAB  
**Comments:** None

| Parent Material | Analyte     | Parent Conc. | Aliquot | Final Vol. | Final Conc.  |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI091217-12     | Arsenic     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Barium      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Beryllium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Boron       | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Cadmium     | 2 mg/L       | .5 mL   | 50 mL      | 20.2 ug/L    |
| UI091217-12     | Chromium    | 2 mg/L       | .5 mL   | 50 mL      | 22.2 ug/L    |
| UI091217-12     | Cobalt      | 2 mg/L       | .5 mL   | 50 mL      | 20.4 ug/L    |
| UI091217-12     | Copper      | 2 mg/L       | .5 mL   | 50 mL      | 23.4 ug/L    |
| UI091217-12     | Lead        | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Lithium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Manganese   | 2 mg/L       | .5 mL   | 50 mL      | 22.7 ug/L    |
| UI091217-12     | Nickel      | 2 mg/L       | .5 mL   | 50 mL      | 22.4 ug/L    |
| UI091217-12     | Selenium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Strontium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Thallium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Thorium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Uranium     | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Vanadium    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-12     | Zinc        | 2 mg/L       | .5 mL   | 50 mL      | 27 ug/L      |
| UI091217-13     | Antimony    | 2 mg/L       | .5 mL   | 50 mL      | 20.5 ug/L    |
| UI091217-13     | Silver      | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tin         | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Tungsten    | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI091217-13     | Zirconium   | 2 mg/L       | .5 mL   | 50 mL      | 20 ug/L      |
| UI100219-11     | Aluminum    | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Calcium     | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Chloride    | 10000 mg/L   | 5 mL    | 50 mL      | 1000000 ug/L |
| UI100219-11     | Iron        | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Magnesium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Molybdenum  | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |
| UI100219-11     | Phosphorous | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Potassium   | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sodium      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Sulfur      | 1000 mg/L    | 5 mL    | 50 mL      | 100000 ug/L  |
| UI100219-11     | Titanium    | 20 mg/L      | 5 mL    | 50 mL      | 2000 ug/L    |

# Standard Logbook

Serial ID: 100202      Opened: 02-FEB-10      Lot Number : 200930201  
Name: I-HCL      Received: 02-FEB-10  
Type: Reagent/Solvent      Expires: 02-FEB-11  
Employee: Francena Armstrong  
Supplier: J.T. BAKER  
Description: HYDROCHLORIC ACID  
Comments: None

---

Serial ID: 1100721TCLP      Opened: 16-APR-09      Lot Number : H02026 L  
Name: I-HNO3      Received: 02-APR-09  
Type: Reagent/Solvent      Expires: 02-APR-10  
Employee: Clifford Postell  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

---

Serial ID: 1156689-A      Opened: 20-JUL-09      Lot Number : 41226920  
Name: B-KMnO4(VWR)-MER      Received: 20-JUL-09  
Type: Reagent/Solvent      Expires: 20-JUL-10  
Employee: Tara Griffin      Verified: 07-AUG-07  
Supplier: VWR  
Description: Potassium Permanganate  
Comments: None

---

Serial ID: 1176183      Opened: 24-AUG-09      Lot Number : H20001  
Name: B-H2SO4-MER      Received: 24-AUG-09  
Type: Reagent/Solvent      Expires: 24-AUG-10  
Employee: Tara Griffin  
Supplier: Mallinckrodt  
Description: Sulfuric Acid, Concentrated  
Comments: None

---

Serial ID: 1215906      Opened: 06-NOV-09      Lot Number : H44465  
Name: B-K2S2O8S-MER      Received: 06-NOV-09  
Type: Reagent/Solvent      Expires: 06-NOV-10  
Employee: Tara Griffin  
Supplier: J.T BAKER  
Description: Potassium Persulfate Concentrate.  
Comments: None

---

# Standard Logbook

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCl-MER      **Received:** 12-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 12-NOV-10  
**Employee:** Tara Griffin  
**Supplier:** Fisher Scientific  
**Description:** Hydroxylamine Hydrochloride  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

| Parent Material | Analyte         | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------------|--------------|---------|------------|-------------|
| 1228372-A       | B-NH2OH.HCl-MER | N/A          | 120 g   | 1000 mL    | N/A         |

**Serial ID:** 1261483-C      **Opened:** 28-JAN-10      **Balance Id :** BAL-002  
**Name:** B-K2S2O8-MER      **Received:** 28-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 28-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% Potassium Persulfate  
**Comments:** None

| Parent Material | Analyte      | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|--------------|--------------|---------|------------|-------------|
| 1215906         | B-K2S2O8-MER | N/A          | 50 g    | 1000 mL    | N/A         |

**Serial ID:** 1265209      **Opened:** 04-FEB-10      **Lot Number :** J02039  
**Name:** I-HCL      **Received:** 04-FEB-10      **Preservative Id :** 5 none  
**Type:** Reagent/Solvent      **Expires:** 04-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

**Serial ID:** 1268732      **Opened:** 11-FEB-10      **Lot Number :** H12022 L  
**Name:** I-HNO3      **Received:** 11-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.

# Standard Logbook

Comments: None

Serial ID: 1274391-1      Opened: 24-FEB-10      Instrument Id : MERCURY  
 Name: B-HNO3-MER      Received: 24-FEB-10      Lot Number : H44025  
 Type: Reagent/Solvent      Expires: 24-FEB-11  
 Employee: Tara Griffin  
 Supplier: Mallinckrodt Chemicals  
 Description: NITRIC ACID  
 Comments: None

Serial ID: 1274397-C      Opened: 24-FEB-10      Balance Id : BAL-002  
 Name: B-KMnO4-MER      Received: 24-FEB-10  
 Type: Reagent/Solvent      Expires: 20-JUL-10  
 Employee: Tara Griffin  
 Supplier: GEL  
 Description: 5% KMnO4 solution  
 Comments: None

| Parent Material | Analyte          | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|------------------|--------------|---------|------------|-------------|
| 1156689-A       | B-KMnO4(VWR)-MER | Crystals     | 50 g    | 1000 mL    | 3%          |

Serial ID: 1281622      Opened: 08-MAR-10      Solvent : Type I Water  
 Name: B-2%HNO3/1%HCl-ICPMS      Received: 08-MAR-10  
 Type: Reagent/Solvent      Expires: 15-MAR-10  
 Employee: Paul Boyd  
 Supplier: GEL  
 Description: 2%HNO3/1%HCl Solution (Type I Water)  
 Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| 100202          | I-HCL   | 36.5-38.0    | 90 mL   | 9 l        | N/A         |
| 1100721TCLP     | I-HNO3  | 69.0-70.0    | 180 mL  | 9 l        | N/A         |

Serial ID: 1281689      Opened: 08-MAR-10      Amount : 20 L  
 Name: B-ICP-RINSE SOLN      Received: 01-MAR-10      Lot Number : H04040+G34050  
 Type: Reagent/Solvent      Expires: 14-MAR-10      Solvent : 3%HCL+1%HNO3  
 Employee: Helen Camello  
 Supplier: GEL  
 Description: 3%HCL+1%HNO3 RINSE SOLN.  
 Comments: None

# **General Chemistry**

## **Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1863**

**Method/Analysis Information**

|                          |                       |                |                           |
|--------------------------|-----------------------|----------------|---------------------------|
| <b>Product:</b>          | <b>Cyanide, Total</b> |                |                           |
| <b>Analytical Batch:</b> | 954524                | <b>Method:</b> | SW9012A Cyanide and Total |
| <b>Prep Batch :</b>      | 954520                | <b>Method:</b> | SSW846 9010B Prep         |

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| <b>Sample ID</b> | <b>Client ID</b>                                     |
|------------------|--|
| 247188001        | RE15-10-8196   |
| 247188002        | RE15-10-8186   |
| 247188003        | RE15-10-8194   |
| 247188004        | RE15-10-8189   |
| 247188005        | RE15-10-8188   |
| 247188006        | RE15-10-8187   |
| 247188007        | RE15-10-8197   |
| 247188008        | RE15-10-8190   |
| 247188009        | RE15-10-8193   |
| 247188010        | RE15-10-8191   |
| 247188011        | RE15-10-8192   |
| 247188012        | RE15-10-8195   |
| 247188013        | RE15-10-8226   |
| 247188014        | RE15-10-8211   |
| 1202046166       | Method Blank (MB)                                    |
| 1202046167       | 247188001(RE15-10-8196) Sample Duplicate (DUP)       |
| 1202046168       | 247188002(RE15-10-8186) Sample Duplicate (DUP)       |
| 1202046169       | 247188001(RE15-10-8196) Matrix Spike (MS)            |
| 1202046170       | 247188002(RE15-10-8186) Matrix Spike (MS)            |
| 1202046171       | 247188001(RE15-10-8196) Matrix Spike Duplicate (MSD) |
| 1202046172       | 247188002(RE15-10-8186) Matrix Spike Duplicate (MSD) |
| 1202046173       | Laboratory Control Sample (LCS)                      |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.



#### **Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

#### **Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

#### **Initial Calibration**

All initial calibration requirements have been met for this SDG.

#### **Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

#### **Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

#### **Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

#### **Quality Control (QC) Information**

#### **Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

#### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

#### **Quality Control (QC) Designation**

The following samples were selected for QC analysis: 247188001 (RE15-10-8196) and 247188002 (RE15-10-8186).

#### **Matrix Spike (MS)/Post Spike (PS) Recovery Statement**

The MS/PS recoveries for this sample set were within the required acceptance limits.

#### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries for this sample set were within the required acceptance limits.

#### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPDs between the spike and spike duplicate met the acceptance limits.

#### **Duplicate Relative Percent Difference (RPD) Statement**

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202046167 (RE15-10-8196) and 247188001 (RE15-10-8196).

#### **Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

#### **Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**

All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The following sample in this sample group was diluted due to high concentration: 1202046173 (LCS).

**Sample Re-analysis**

The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**

A DER was not required for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

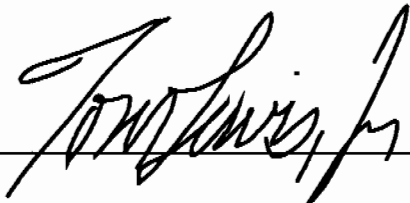
**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

Reviewer:  Date: 13Mar10

# **Sample Data Summary**

## GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

### Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1863 GEL Work Order: 247188

**The Qualifiers in this report are defined as follows:**

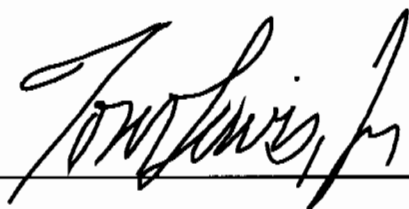
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8187  
Sample ID: 247188006  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 2.49%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 65.8 | 242 | ug/kg | 1  | AXC2    | 02/24/10 | 1337 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8197  
Sample ID: 247188007  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.46%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 61.6 | 227 | ug/kg | 1 | AXC2 | 02/24/10 | 1338 | 954524 | I |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8190  
Sample ID: 247188008  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: .925%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 68.6 | 252 | ug/kg | 1  | AXC2    | 02/24/10 | 1339 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |



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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8193  
Sample ID: 247188009  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.27%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 68.9 | 253 | ug/kg | 1  | AXC2    | 02/24/10 | 1339 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8191  
Sample ID: 247188010  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: .666%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 59.0 | 217 | ug/kg | 1  | AXC2    | 02/24/10 | 1340 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8192  
Sample ID: 247188011  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.2%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 64.9 | 239 | ug/kg | 1  | AXC2    | 02/24/10 | 1341 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8195  
Sample ID: 247188012  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.55%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 62.8 | 231 | ug/kg | 1  | AXC2    | 02/24/10 | 1342 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8226  
Sample ID: 247188013  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 2.43%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 67.0 | 246 | ug/kg | 1  | AXC2    | 02/24/10 | 1343 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8211  
Sample ID: 247188014  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.23%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 64.9 | 239 | ug/kg | 1 | AXC2 | 02/24/10 | 1344 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8196  
Sample ID: 247188001  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.17%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 59.3 | 218 | ug/kg | 1  | AXC2    | 02/24/10 | 1323 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8186  
Sample ID: 247188002  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.16%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 66.2 | 243 | ug/kg | 1 | AXC2 | 02/24/10 | 1327 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |



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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8194  
Sample ID: 247188003  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.03%

Project: LANL01004  
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|
|-----------|-----------|--------|----|----|-------|----|---------|------|------|-------|--------|

### Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

|                |   |    |      |     |       |   |      |          |      |        |   |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|
| Cyanide, Total | U | ND | 61.3 | 226 | ug/kg | 1 | AXC2 | 02/24/10 | 1331 | 954524 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8189  
Sample ID: 247188004  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.02%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 68.7 | 253 | ug/kg | 1  | AXC2    | 02/24/10 | 1331 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

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## Certificate of Analysis

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Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 10, 2010

Client SDG: 10-1863

Client Sample ID: RE15-10-8188  
Sample ID: 247188005  
Matrix: R  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client  
Moisture: 1.63%

Project: LANL01004  
Client ID: LANL010

| Parameter  | Qualifier | Result | DL   | RL  | Units | DF | Analyst | Date     | Time | Batch  | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>                       |           |        |      |     |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> |           |        |      |     |       |    |         |          |      |        |        |
| Cyanide, Total                                       | U         | ND     | 60.6 | 223 | ug/kg | 1  | AXC2    | 02/24/10 | 1336 | 954524 | 1      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/24/10 | 1131 | 954520     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

# **Quality Control Summary**

# GEL LABORATORIES LLC

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## QC Summary

Report Date: March 10, 2010

Page 1 of 2

Los Alamos National Laboratory  
PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 247188

| Parmname                       | NOM       | Sample | Qual | QC | Units | RPD%  | REC% | Range      | Anlst | Date     | Time  |
|--------------------------------|-----------|--------|------|----|-------|-------|------|------------|-------|----------|-------|
| <b>Flow Injection Analysis</b> |           |        |      |    |       |       |      |            |       |          |       |
| Batch                          | 954524    |        |      |    |       |       |      |            |       |          |       |
| QC1202046167                   | 247188001 | DUP    |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 |           | U      | ND   | U  | ND    | ug/kg | N/A  |            | AXC2  | 02/24/10 | 13:24 |
| QC1202046168                   | 247188002 | DUP    |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 |           | U      | ND   | U  | ND    | ug/kg | N/A  |            |       | 02/24/10 | 13:28 |
| QC1202046173                   | LCS       |        |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 | 67900     |        |      |    | 66000 | ug/kg | 97.2 | (32%-157%) |       | 02/24/10 | 13:14 |
| QC1202046166                   | MB        |        |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 |           |        | U    |    | 250   | ug/kg |      |            |       | 02/24/10 | 13:13 |
| QC1202046169                   | 247188001 | MS     |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 | 4600      | U      | ND   |    | 5010  | ug/kg | 109  | (26%-158%) |       | 02/24/10 | 13:25 |
| QC1202046170                   | 247188002 | MS     |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 | 4600      | U      | ND   |    | 4580  | ug/kg | 99.6 | (26%-158%) |       | 02/24/10 | 13:29 |
| QC1202046171                   | 247188001 | MSD    |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 | 5060      | U      | ND   |    | 5560  | ug/kg | 10.4 | (0%-30%)   |       | 02/24/10 | 13:26 |
| QC1202046172                   | 247188002 | MSD    |      |    |       |       |      |            |       |          |       |
| Cyanide, Total                 | 4770      | U      | ND   |    | 4960  | ug/kg | 8.02 | (0%-30%)   |       | 02/24/10 | 13:30 |

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based

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### QC Summary

Workorder: 247188

Page 2 of 2

| Parmname | NOM | Sample   | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|----------|-----|--|------|----|-------|------|------|-------|-------|------|------|
|          |     | on nearest internal standard response factor   |      |    |       |      |      |       |       |      |      |
| N/A      |     | RPD or %Recovery limits do not apply.  |      |    |       |      |      |       |       |      |      |
| ND       |     | Analyte concentration is not detected above the detection limit  |      |    |       |      |      |       |       |      |      |
| NJ       |     | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier   |      |    |       |      |      |       |       |      |      |
| P        |     | Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70% |      |    |       |      |      |       |       |      |      |
| R        |     | Sample results are rejected  |      |    |       |      |      |       |       |      |      |
| U        |     | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.   |      |    |       |      |      |       |       |      |      |
| UI       |     | Gamma Spectroscopy--Uncertain identification   |      |    |       |      |      |       |       |      |      |
| X        |     | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier   |      |    |       |      |      |       |       |      |      |
| Y        |     | QC Samples were not spiked with this compound  |      |    |       |      |      |       |       |      |      |
| Z        |     | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.  |      |    |       |      |      |       |       |      |      |
| ^        |     | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.           |      |    |       |      |      |       |       |      |      |
| d        |     | 5-day BOD--The 2:1 depletion requirement was not met for this sample   |      |    |       |      |      |       |       |      |      |
| h        |     | Preparation or preservation holding time was exceeded  |      |    |       |      |      |       |       |      |      |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 10-MAR-2010 12:20

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1863**

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

| Sample Type | Run Date                    | Data File                    | Result     | Nominal    | Recovery    | Limits            | Within Limits |
|-------------|-----------------------------|------------------------------|------------|------------|-------------|-------------------|---------------|
| <b>ICV</b>  | <b>24-FEB-2010 12:28:41</b> | <b>OM_2-24-2010_12-18-12</b> | <b>146</b> | <b>150</b> | <b>97.3</b> | <b>(90%-110%)</b> | <b>Yes</b>    |
| CCV         | 24-FEB-2010 13:07:47        | OM_2-24-2010_12-18-12        | 104        | 100        | 104         | (90%-110%)        | Yes           |
| CCV         | 24-FEB-2010 13:20:19        | OM_2-24-2010_12-18-12        | 105        | 100        | 105         | (90%-110%)        | Yes           |
| CCV         | 24-FEB-2010 13:32:47        | OM_2-24-2010_12-18-12        | 104        | 100        | 104         | (90%-110%)        | Yes           |
| CCV         | 24-FEB-2010 13:45:13        | OM_2-24-2010_12-18-12        | 105        | 100        | 105         | (90%-110%)        | Yes           |

| Sample Type | Run Date                    | Data File                    | Result       | Limits    | Within Limits |
|-------------|-----------------------------|------------------------------|--------------|-----------|---------------|
| <b>ICB</b>  | <b>24-FEB-2010 12:30:31</b> | <b>OM_2-24-2010_12-18-12</b> | <b>-1.38</b> | <b>10</b> | <b>Yes</b>    |
| CCB         | 24-FEB-2010 13:09:37        | OM_2-24-2010_12-18-12        | -1.65        | 10        | Yes           |
| CCB         | 24-FEB-2010 13:22:09        | OM_2-24-2010_12-18-12        | -2.13        | 10        | Yes           |
| CCB         | 24-FEB-2010 13:34:38        | OM_2-24-2010_12-18-12        | -1.63        | 10        | Yes           |
| CCB         | 24-FEB-2010 13:47:03        | OM_2-24-2010_12-18-12        | -1.73        | 10        | Yes           |



# Cyanide, Total

# Prep Logbook

## Cyanide Sample Distillation

| <b>Batch ID:</b>   | <b>954520.0</b>         | Verified by:  |               |              |             |
|--------------------|-------------------------|---|---------------|--------------|-------------|
| <b>Analyst:</b>    | Alan Stanley            |   |               |              |             |
| <b>Method:</b>     | SW846 9010B Prep        |   |               |              |             |
| <b>Lab SOP:</b>    | GL-GC-E-067 REV# 13     |   |               |              |             |
| <b>Instrument:</b> | Sartorius Balance B-001 |   |               |              |             |
| Type               | Sample Id               | Description   | Serial Number | Spike Amount | Spike Units |
| LCS                | 1202046173              | Total Cyanide Solid LCS   | URF1200957-01 | .25          | g           |
| MS                 | 1202046169              | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MS                 | 1202046170              | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MSD                | 1202046171              | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MSD                | 1202046172              | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |

| Sample ID                  | Run Date             | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check 1 |
|----------------------------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 1202046166 MB              | 24-FEB-2010 11:31:00 | Soil   | 0.5                | 25                | 50                 | >12        |
| 1202046173 LCS             | 24-FEB-2010 11:31:00 | Soil   | 0.25               | 25                | 100                | >12        |
| 247086001                  | 24-FEB-2010 11:31:00 | Soil   | 0.57               | 25                | 43.85965           | >12        |
| 247088001                  | 24-FEB-2010 11:31:00 | Soil   | 0.57               | 25                | 43.85965           | >12        |
| 247088002                  | 24-FEB-2010 11:31:00 | Soil   | 0.52               | 25                | 48.07692           | >12        |
| 247088003                  | 24-FEB-2010 11:31:00 | Soil   | 0.57               | 25                | 43.85965           | >12        |
| 247091001                  | 24-FEB-2010 11:31:00 | Soil   | 0.56               | 25                | 44.64286           | >12        |
| 247091002                  | 24-FEB-2010 11:31:00 | Soil   | 0.54               | 25                | 46.2963            | >12        |
| 247188001                  | 24-FEB-2010 11:31:00 | Soil   | 0.58               | 25                | 43.10345           | >12        |
| 1202046167 DUP (247188001) | 24-FEB-2010 11:31:00 | Soil   | 0.51               | 25                | 49.01961           | >12        |
| 1202046169 MS (247188001)  | 24-FEB-2010 11:31:00 | Soil   | 0.55               | 25                | 45.45455           | >12        |
| 1202046171 MSD (247188001) | 24-FEB-2010 11:31:00 | Soil   | 0.5                | 25                | 50                 | >12        |
| 247188002                  | 24-FEB-2010 11:31:00 | Soil   | 0.52               | 25                | 48.07692           | >12        |
| 1202046168 DUP (247188002) | 24-FEB-2010 11:31:00 | Soil   | 0.52               | 25                | 48.07692           | >12        |
| 1202046170 MS (247188002)  | 24-FEB-2010 11:31:00 | Soil   | 0.55               | 25                | 45.45455           | >12        |
| 1202046172 MSD (247188002) | 24-FEB-2010 11:31:00 | Soil   | 0.53               | 25                | 47.16981           | >12        |
| 247188003                  | 24-FEB-2010 11:31:00 | Soil   | 0.56               | 25                | 44.64286           | >12        |
| 247188004                  | 24-FEB-2010 11:31:00 | Soil   | 0.5                | 25                | 50                 | >12        |
| 247188005                  | 24-FEB-2010 11:31:00 | Soil   | 0.57               | 25                | 43.85965           | >12        |
| 247188006                  | 24-FEB-2010 11:31:00 | Soil   | 0.53               | 25                | 47.16981           | >12        |
| 247188007                  | 24-FEB-2010 11:31:00 | Soil   | 0.56               | 25                | 44.64286           | >12        |

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

# Prep Logbook

**Batch ID:** 954520.0  
**Analyst:** Alan Stanley  
**Method:** SW846 9010B Prep  
**Lab SOP:** GL-GC-E-067 REV# 13  
**Instrument:** Sartorius Balance B-001

Verified by:

| Type | Sample Id  | Description   | Serial Number | Spike Amount | Spike Units |
|------|------------|---|---------------|--------------|-------------|
| LCS  | 1202046173 | Total Cyanide Solid LCS   | URF1200957-01 | .25          | g           |
| MS   | 1202046169 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MS   | 1202046170 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MSD  | 1202046171 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |
| MSD  | 1202046172 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025         | mL          |

| Sample ID | Run Date             | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check 1 |
|-----------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 247188008 | 24-FEB-2010 11:31:00 | Soil   | 0.5                | 25                | 50                 | >12        |
| 247188009 | 24-FEB-2010 11:31:00 | Soil   | 0.5                | 25                | 50                 | >12        |
| 247188010 | 24-FEB-2010 11:31:00 | Soil   | 0.58               | 25                | 43.10345           | >12        |
| 247188011 | 24-FEB-2010 11:31:00 | Soil   | 0.53               | 25                | 47.16981           | >12        |
| 247188012 | 24-FEB-2010 11:31:00 | Soil   | 0.55               | 25                | 45.45455           | >12        |
| 247188013 | 24-FEB-2010 11:31:00 | Soil   | 0.52               | 25                | 48.07692           | >12        |
| 247188014 | 24-FEB-2010 11:31:00 | Soil   | 0.53               | 25                | 47.16981           | >12        |

## Comments:

| Reagent/Solvent Lot ID | Description                       | Amount   |
|------------------------|-----------------------------------|----------|
| 1260189-C              | 50% H2SO4 CN Prep                 | 2.5 mL   |
| 1270661-C              | Bismuth Nitrate Solution          | 1.25 mL  |
| 1270663-C              | 0.8N H3NO3S                       | 1.25 mL  |
| 1270669-C              | 51% MgCl2 Soln                    | 1 mL     |
| 1273851-C              | 0.25N Sodium Hydroxide Solution   | 25 mL    |
| WCN100224-07           | 150 ppb CN Distilled ICV Standard | .0375 mL |

This is runlog Lachat1

| Sample ID    | Batch  | Dilution | Analyst | Runtime            | Dataset               |
|--------------|--------|----------|---------|--------------------|-----------------------|
| 200 ppb      |        | 1        | axc2    | 2/24/2010 12:21:32 | OM_2-24-2010_12-18-12 |
| 150 ppb      |        | 1        | axc2    | 2/24/2010 12:22:24 | OM_2-24-2010_12-18-12 |
| 100 ppb      |        | 1        | axc2    | 2/24/2010 12:23:16 | OM_2-24-2010_12-18-12 |
| 50 ppb       |        | 1        | axc2    | 2/24/2010 12:24:09 | OM_2-24-2010_12-18-12 |
| 10 ppb       |        | 1        | axc2    | 2/24/2010 12:25:02 | OM_2-24-2010_12-18-12 |
| CRDL 5.0 ppb |        | 1        | axc2    | 2/24/2010 12:25:56 | OM_2-24-2010_12-18-12 |
| ICAL-00      |        | 1        | axc2    | 2/24/2010 12:26:50 | OM_2-24-2010_12-18-12 |
| ICV          |        | 1        | axc2    | 2/24/2010 12:28:41 | OM_2-24-2010_12-18-12 |
| ICB          |        | 1        | axc2    | 2/24/2010 12:30:31 | OM_2-24-2010_12-18-12 |
| CRDL         |        | 1        | axc2    | 2/24/2010 12:32:21 | OM_2-24-2010_12-18-12 |
| 1202044519   | 953692 | 1        | axc2    | 2/24/2010 12:34:11 | OM_2-24-2010_12-18-12 |
| 1202044526   | 953692 | 25       | axc2    | 2/24/2010 12:35:04 | OM_2-24-2010_12-18-12 |
| 246974013    | 953692 | 1        | axc2    | 2/24/2010 12:35:57 | OM_2-24-2010_12-18-12 |
| 1202044520   | 953692 | 1        | axc2    | 2/24/2010 12:36:50 | OM_2-24-2010_12-18-12 |
| 1202044522   | 953692 | 1        | axc2    | 2/24/2010 12:37:44 | OM_2-24-2010_12-18-12 |
| 1202044524   | 953692 | 1        | axc2    | 2/24/2010 12:38:36 | OM_2-24-2010_12-18-12 |
| 246974014    | 953692 | 1        | axc2    | 2/24/2010 12:39:29 | OM_2-24-2010_12-18-12 |
| 1202044521   | 953692 | 1        | axc2    | 2/24/2010 12:40:21 | OM_2-24-2010_12-18-12 |
| 1202044523   | 953692 | 1        | axc2    | 2/24/2010 12:41:13 | OM_2-24-2010_12-18-12 |
| 1202044525   | 953692 | 1        | axc2    | 2/24/2010 12:42:06 | OM_2-24-2010_12-18-12 |
| CCV          |        | 1        | axc2    | 2/24/2010 12:42:58 | OM_2-24-2010_12-18-12 |
| CCB          |        | 1        | axc2    | 2/24/2010 12:44:48 | OM_2-24-2010_12-18-12 |
| 246974015    | 953692 | 1        | axc2    | 2/24/2010 12:46:37 | OM_2-24-2010_12-18-12 |
| 246974016    | 953692 | 1        | axc2    | 2/24/2010 12:47:29 | OM_2-24-2010_12-18-12 |
| 246974017    | 953692 | 1        | axc2    | 2/24/2010 12:48:21 | OM_2-24-2010_12-18-12 |
| 246982001    | 953692 | 1        | axc2    | 2/24/2010 12:49:13 | OM_2-24-2010_12-18-12 |
| 246982002    | 953692 | 1        | axc2    | 2/24/2010 12:50:04 | OM_2-24-2010_12-18-12 |
| 246982003    | 953692 | 1        | axc2    | 2/24/2010 12:50:58 | OM_2-24-2010_12-18-12 |
| 246982004    | 953692 | 1        | axc2    | 2/24/2010 12:51:52 | OM_2-24-2010_12-18-12 |
| 246982005    | 953692 | 1        | axc2    | 2/24/2010 12:52:45 | OM_2-24-2010_12-18-12 |
| 246982006    | 953692 | 1        | axc2    | 2/24/2010 12:53:38 | OM_2-24-2010_12-18-12 |
| 246982007    | 953692 | 1        | axc2    | 2/24/2010 12:54:32 | OM_2-24-2010_12-18-12 |
| CCV          |        | 1        | axc2    | 2/24/2010 12:55:24 | OM_2-24-2010_12-18-12 |
| CCB          |        | 1        | axc2    | 2/24/2010 12:57:14 | OM_2-24-2010_12-18-12 |
| 247040001    | 953692 | 1        | axc2    | 2/24/2010 12:59:04 | OM_2-24-2010_12-18-12 |
| 247040002    | 953692 | 1        | axc2    | 2/24/2010 12:59:57 | OM_2-24-2010_12-18-12 |
| 247040003    | 953692 | 1        | axc2    | 2/24/2010 13:00:50 | OM_2-24-2010_12-18-12 |
| 247040004    | 953692 | 1        | axc2    | 2/24/2010 13:01:42 | OM_2-24-2010_12-18-12 |
| 247040005    | 953692 | 1        | axc2    | 2/24/2010 13:02:35 | OM_2-24-2010_12-18-12 |
| 247040006    | 953692 | 1        | axc2    | 2/24/2010 13:03:27 | OM_2-24-2010_12-18-12 |
| 247040007    | 953692 | 1        | axc2    | 2/24/2010 13:04:19 | OM_2-24-2010_12-18-12 |
| 247040008    | 953692 | 1        | axc2    | 2/24/2010 13:05:11 | OM_2-24-2010_12-18-12 |
| 1202049736   | 955985 | 1        | axc2    | 2/24/2010 13:06:03 | OM_2-24-2010_12-18-12 |
| 1202049737   | 955985 | 250      | axc2    | 2/24/2010 13:06:55 | OM_2-24-2010_12-18-12 |
| CCV          |        | 1        | axc2    | 2/24/2010 13:07:47 | OM_2-24-2010_12-18-12 |
| CCB          |        | 1        | axc2    | 2/24/2010 13:09:37 | OM_2-24-2010_12-18-12 |
| 1202049738   | 955985 | 250      | axc2    | 2/24/2010 13:11:28 | OM_2-24-2010_12-18-12 |
| 247535001    | 955985 | 1        | axc2    | 2/24/2010 13:12:21 | OM_2-24-2010_12-18-12 |
| 1202046166   | 954524 | 1        | axc2    | 2/24/2010 13:13:15 | OM_2-24-2010_12-18-12 |
| 1202046173   | 954524 | 25       | axc2    | 2/24/2010 13:14:08 | OM_2-24-2010_12-18-12 |
| 247086001    | 954524 | 1        | axc2    | 2/24/2010 13:15:03 | OM_2-24-2010_12-18-12 |
| 247088001    | 954524 | 1        | axc2    | 2/24/2010 13:15:56 | OM_2-24-2010_12-18-12 |
| 247088002    | 954524 | 1        | axc2    | 2/24/2010 13:16:49 | OM_2-24-2010_12-18-12 |
| 247088003    | 954524 | 1        | axc2    | 2/24/2010 13:17:41 | OM_2-24-2010_12-18-12 |
| 247091001    | 954524 | 1        | axc2    | 2/24/2010 13:18:34 | OM_2-24-2010_12-18-12 |
| 247091002    | 954524 | 1        | axc2    | 2/24/2010 13:19:26 | OM_2-24-2010_12-18-12 |
| CCV          |        | 1        | axc2    | 2/24/2010 13:20:19 | OM_2-24-2010_12-18-12 |
| CCB          |        | 1        | axc2    | 2/24/2010 13:22:09 | OM_2-24-2010_12-18-12 |

|            |        |   |      |           |          |                       |
|------------|--------|---|------|-----------|----------|-----------------------|
| 247188001  | 954524 | 1 | axc2 | 2/24/2010 | 13:23:57 | OM_2-24-2010_12-18-12 |
| 1202046167 | 954524 | 1 | axc2 | 2/24/2010 | 13:24:49 | OM_2-24-2010_12-18-12 |
| 1202046169 | 954524 | 1 | axc2 | 2/24/2010 | 13:25:42 | OM_2-24-2010_12-18-12 |
| 1202046171 | 954524 | 1 | axc2 | 2/24/2010 | 13:26:34 | OM_2-24-2010_12-18-12 |
| 247188002  | 954524 | 1 | axc2 | 2/24/2010 | 13:27:25 | OM_2-24-2010_12-18-12 |
| 1202046168 | 954524 | 1 | axc2 | 2/24/2010 | 13:28:20 | OM_2-24-2010_12-18-12 |
| 1202046170 | 954524 | 1 | axc2 | 2/24/2010 | 13:29:15 | OM_2-24-2010_12-18-12 |
| 1202046172 | 954524 | 1 | axc2 | 2/24/2010 | 13:30:08 | OM_2-24-2010_12-18-12 |
| 247188003  | 954524 | 1 | axc2 | 2/24/2010 | 13:31:01 | OM_2-24-2010_12-18-12 |
| 247188004  | 954524 | 1 | axc2 | 2/24/2010 | 13:31:55 | OM_2-24-2010_12-18-12 |
| CCV        |        | 1 | axc2 | 2/24/2010 | 13:32:47 | OM_2-24-2010_12-18-12 |
| CCB        |        | 1 | axc2 | 2/24/2010 | 13:34:38 | OM_2-24-2010_12-18-12 |
| 247188005  | 954524 | 1 | axc2 | 2/24/2010 | 13:36:27 | OM_2-24-2010_12-18-12 |
| 247188006  | 954524 | 1 | axc2 | 2/24/2010 | 13:37:20 | OM_2-24-2010_12-18-12 |
| 247188007  | 954524 | 1 | axc2 | 2/24/2010 | 13:38:13 | OM_2-24-2010_12-18-12 |
| 247188008  | 954524 | 1 | axc2 | 2/24/2010 | 13:39:06 | OM_2-24-2010_12-18-12 |
| 247188009  | 954524 | 1 | axc2 | 2/24/2010 | 13:39:58 | OM_2-24-2010_12-18-12 |
| 247188010  | 954524 | 1 | axc2 | 2/24/2010 | 13:40:52 | OM_2-24-2010_12-18-12 |
| 247188011  | 954524 | 1 | axc2 | 2/24/2010 | 13:41:43 | OM_2-24-2010_12-18-12 |
| 247188012  | 954524 | 1 | axc2 | 2/24/2010 | 13:42:36 | OM_2-24-2010_12-18-12 |
| 247188013  | 954524 | 1 | axc2 | 2/24/2010 | 13:43:28 | OM_2-24-2010_12-18-12 |
| 247188014  | 954524 | 1 | axc2 | 2/24/2010 | 13:44:20 | OM_2-24-2010_12-18-12 |
| CCV        |        | 1 | axc2 | 2/24/2010 | 13:45:13 | OM_2-24-2010_12-18-12 |
| CCB        |        | 1 | axc2 | 2/24/2010 | 13:47:03 | OM_2-24-2010_12-18-12 |
| 1202050880 | 956491 | 1 | axc2 | 2/24/2010 | 13:48:53 | OM_2-24-2010_12-18-12 |
| 1202050884 | 956491 | 1 | axc2 | 2/24/2010 | 13:49:48 | OM_2-24-2010_12-18-12 |
| 247130001  | 956491 | 1 | axc2 | 2/24/2010 | 13:50:42 | OM_2-24-2010_12-18-12 |
| 1202050881 | 956491 | 1 | axc2 | 2/24/2010 | 13:51:36 | OM_2-24-2010_12-18-12 |
| 1202050882 | 956491 | 1 | axc2 | 2/24/2010 | 13:52:31 | OM_2-24-2010_12-18-12 |
| 1202050883 | 956491 | 1 | axc2 | 2/24/2010 | 13:53:23 | OM_2-24-2010_12-18-12 |
| 247409001  | 956491 | 1 | axc2 | 2/24/2010 | 13:54:17 | OM_2-24-2010_12-18-12 |
| CCV        |        | 1 | axc2 | 2/24/2010 | 13:55:10 | OM_2-24-2010_12-18-12 |
| CCB        |        | 1 | axc2 | 2/24/2010 | 13:56:59 | OM_2-24-2010_12-18-12 |

Original Run Filename: OM\_2-24-2010\_12-18-12.OMN created 2/24/2010 12:18:12  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-24-2010\_12-18-12.OMN last modified 2/24/2010 13:58:05  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

| Sample                                    | Rep. | Cup No. | Channel 1         |        | Detection Time     | ADF | MDF   | Description  |
|---|------|---------|-------------------|--------|--------------------|-----|-------|--------------|
|   |      |         | TCYANIDE          | Area   |                    |     |       |              |
|   |      |         | Conc. (ug/L)      | (Vs)   |                    |     |       |              |
| WCN100224-01                              | 1    | S1      | 200               | 9.63   | 2/24/2010@12:21:32 |     |       | 200 ppb      |
| WCN100224-02                              | 1    | S2      | 150               | 7.09   | 2/24/2010@12:22:24 |     |       | 150 ppb      |
| WCN100224-03                              | 1    | S3      | 100               | 4.94   | 2/24/2010@12:23:16 |     |       | 100 ppb      |
| WCN100224-04                              | 1    | S4      | 50.0              | 2.48   | 2/24/2010@12:24:09 |     |       | 50 ppb       |
| WCN100224-05                              | 1    | S5      | 10.0              | 0.601  | 2/24/2010@12:25:02 |     |       | 10 ppb       |
| WCN100224-06                              | 1    | S6      | 5.00              | 0.390  | 2/24/2010@12:25:56 |     |       | CRDL 5.0 ppb |
| WCN100224-08                              | 1    | S7      | 0.00              | 0.0197 | 2/24/2010@12:26:50 |     |       | 0.0 ppb      |
| DQM Test: Minimum Correlation Coefficient |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | 0.99978 > 0.99500 |        |                    |     |       |              |
| Message                                   |      |         | Pass              |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| WCN100224-07                              | 1    | S8      | 146               | 7.03   | 2/24/2010@12:28:41 |     |       | ICV          |
| Known Conc:                               |      |         | 150               |        |                    |     |       |              |
| DQM Test: > + Percent Relative Difference |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | -2.7 < 10.0       |        |                    |     |       |              |
| Message                                   |      |         | ICV Passed        |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| DQM Test: < - Percent Relative Difference |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | -2.7 < 10.0       |        |                    |     |       |              |
| Message                                   |      |         | ICV Passed        |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| Calibration:                              |      |         | Table/Fig. 1      |        |                    |     |       |              |
| WCN100224-08                              | 1    | S7      | -1.38             | 0.0380 | 2/24/2010@12:30:31 |     |       | ICB/CCB      |
| Known Conc:                               |      |         | 0.00              |        |                    |     |       |              |
| DQM Test: > + Concentration Limit         |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | -1.38 < 5.01      |        |                    |     |       |              |
| Message                                   |      |         | ICB/CCB Passed    |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| DQM Test: < - Concentration Limit         |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | -1.38 > -5.01     |        |                    |     |       |              |
| Message                                   |      |         | ICB/CCB Passed    |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| WCN100224-06                              | 1    | S6      | 5.85              | 0.381  | 2/24/2010@12:32:21 |     |       | CRDL         |
| Known Conc:                               |      |         | 5.00              |        |                    |     |       |              |
| DQM Test: > + Concentration Limit         |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | 5.85 < 7.50       |        |                    |     |       |              |
| Message                                   |      |         | CRDL Passed       |        |                    |     |       |              |
| Action                                    |      |         | Continue          |        |                    |     |       |              |
| DQM Test: < - Concentration Limit         |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | 5.85 > 2.50       |        |                    |     |       |              |
| Message                                   |      |         | Pass              |        |                    |     |       |              |
| Action                                    |      |         | None              |        |                    |     |       |              |
| 1202044519 953692 MB                      | 1    | 1       | -1.84             | 0.0165 | 2/24/2010@12:34:11 |     |       |              |
| 1202044526 LCS                            | 1    | 2       | 20.2              | 1.06   | 2/24/2010@12:35:04 |     | 25.00 |              |
| 246974013                                 | 1    | 3       | 1.23              | 0.162  | 2/24/2010@12:35:57 |     |       |              |
| 1202044520 DUP                            | 1    | 4       | -0.211            | 0.0937 | 2/24/2010@12:36:50 |     |       |              |
| 1202044522 MS                             | 1    | 5       | 76.9              | 3.75   | 2/24/2010@12:37:44 |     |       |              |
| 1202044524 MSD                            | 1    | 6       | 87.5              | 4.26   | 2/24/2010@12:38:36 |     |       |              |
| 246974014                                 | 1    | 7       | -0.592            | 0.0756 | 2/24/2010@12:39:29 |     |       |              |
| 1202044521 DUP                            | 1    | 8       | -1.16             | 0.0488 | 2/24/2010@12:40:21 |     |       |              |
| 1202044523 MS                             | 1    | 9       | 73.7              | 3.60   | 2/24/2010@12:41:13 |     |       |              |
| 1202044525 MSD                            | 1    | 10      | 81.3              | 3.96   | 2/24/2010@12:42:06 |     |       |              |
| WCN100224-03                              | 1    | S3      | 105               | 5.07   | 2/24/2010@12:42:58 |     |       | CCV          |
| Known Conc:                               |      |         | 100               |        |                    |     |       |              |
| DQM Test: > + Percent Relative Difference |      |         |                   |        |                    |     |       |              |
| Result:                                   |      |         | 4.7 < 10.0        |        |                    |     |       |              |

|                      |   |    |   |               |          |                    |        |     |
|----------------------|---|----|---|---------------|----------|--------------------|--------|-----|
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
|                      |   |    | DQM Test: < - Percent Relative Difference |               |          |                    |        |     |
|                      |   |    | Result:                                   | 4.7 < 10.0    |          |                    |        |     |
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
| WCN100224-08         | 1 | S7 |   | -2.37         | -0.00871 | 2/24/2010@12:44:48 |        | CCB |
|                      |   |    | Known Conc:                               | 0.00          |          |                    |        |     |
|                      |   |    | DQM Test: > + Concentration Limit         |               |          |                    |        |     |
|                      |   |    | Result:                                   | -2.37 < 5.00  |          |                    |        |     |
|                      |   |    | Message                                   | CCB Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
|                      |   |    | DQM Test: < - Concentration Limit         |               |          |                    |        |     |
|                      |   |    | Result:                                   | -2.37 > -5.00 |          |                    |        |     |
|                      |   |    | Message                                   | CCB Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
| 246974015            | 1 | 11 |   | -0.653        | 0.0727   | 2/24/2010@12:46:37 |        |     |
| 246974016            | 1 | 12 |   | -0.830        | 0.0643   | 2/24/2010@12:47:29 |        |     |
| 246974017            | 1 | 13 |   | -0.765        | 0.0674   | 2/24/2010@12:48:21 |        |     |
| 246982001            | 1 | 14 |   | -1.23         | 0.0454   | 2/24/2010@12:49:13 |        |     |
| 246982002            | 1 | 15 |   | -1.18         | 0.0479   | 2/24/2010@12:50:04 |        |     |
| 246982003            | 1 | 16 |   | -1.63         | 0.0262   | 2/24/2010@12:50:58 |        |     |
| 246982004            | 1 | 17 |   | -1.47         | 0.0341   | 2/24/2010@12:51:52 |        |     |
| 246982005            | 1 | 18 |   | -1.40         | 0.0374   | 2/24/2010@12:52:45 |        |     |
| 246982006            | 1 | 19 |   | -1.65         | 0.0255   | 2/24/2010@12:53:38 |        |     |
| 246982007            | 1 | 20 |   | -1.11         | 0.0508   | 2/24/2010@12:54:32 |        |     |
| WCN100224-03         | 1 | S3 |   | 104           | 5.03     | 2/24/2010@12:55:24 |        | CCV |
|                      |   |    | Known Conc:                               | 100           |          |                    |        |     |
|                      |   |    | DQM Test: > + Percent Relative Difference |               |          |                    |        |     |
|                      |   |    | Result:                                   | 3.9 < 10.0    |          |                    |        |     |
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
|                      |   |    | DQM Test: < - Percent Relative Difference |               |          |                    |        |     |
|                      |   |    | Result:                                   | 3.9 < 10.0    |          |                    |        |     |
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
| WCN100224-08         | 1 | S7 |   | -1.72         | 0.0218   | 2/24/2010@12:57:14 |        | CCB |
|                      |   |    | Known Conc:                               | 0.00          |          |                    |        |     |
|                      |   |    | DQM Test: > + Concentration Limit         |               |          |                    |        |     |
|                      |   |    | Result:                                   | -1.72 < 5.00  |          |                    |        |     |
|                      |   |    | Message                                   | CCB Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
|                      |   |    | DQM Test: < - Concentration Limit         |               |          |                    |        |     |
|                      |   |    | Result:                                   | -1.72 > -5.00 |          |                    |        |     |
|                      |   |    | Message                                   | CCB Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
| 247040001            | 1 | 21 |   | -1.38         | 0.0384   | 2/24/2010@12:59:04 |        |     |
| 247040002            | 1 | 22 |   | -2.18         | 2.07e-4  | 2/24/2010@12:59:57 |        |     |
| 247040003            | 1 | 23 |   | -1.30         | 0.0422   | 2/24/2010@13:00:50 |        |     |
| 247040004            | 1 | 24 |   | -1.62         | 0.0267   | 2/24/2010@13:01:42 |        |     |
| 247040005            | 1 | 25 |   | -1.51         | 0.0321   | 2/24/2010@13:02:35 |        |     |
| 247040006            | 1 | 26 |   | -1.26         | 0.0437   | 2/24/2010@13:03:27 |        |     |
| 247040007            | 1 | 27 |   | -1.52         | 0.0315   | 2/24/2010@13:04:19 |        |     |
| 247040008            | 1 | 28 |   | -1.40         | 0.0371   | 2/24/2010@13:05:11 |        |     |
| 1202049736 955985 MB | 1 | 29 |   | -2.03         | 0.00721  | 2/24/2010@13:06:03 |        |     |
| 1202049737 LCS       | 1 | 30 |   | 57.4          | 2.83     | 2/24/2010@13:06:55 | 250.00 |     |
| WCN100224-03         | 1 | S3 |   | 104           | 5.06     | 2/24/2010@13:07:47 |        | CCV |
|                      |   |    | Known Conc:                               | 100           |          |                    |        |     |
|                      |   |    | DQM Test: > + Percent Relative Difference |               |          |                    |        |     |
|                      |   |    | Result:                                   | 4.4 < 10.0    |          |                    |        |     |
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
|                      |   |    | DQM Test: < - Percent Relative Difference |               |          |                    |        |     |
|                      |   |    | Result:                                   | 4.4 < 10.0    |          |                    |        |     |
|                      |   |    | Message                                   | CCV Passed    |          |                    |        |     |
|                      |   |    | Action                                    | Continue      |          |                    |        |     |
| WCN100224-08         | 1 | S7 |   | -1.65         | 0.0252   | 2/24/2010@13:09:37 |        | CCB |
|                      |   |    | Known Conc:                               | 0.00          |          |                    |        |     |

|   |   |               |       |          |                    |        |     |
|---|---|---------------|-------|----------|--------------------|--------|-----|
| DQM Test: > + Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -1.65 < 5.00  |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| DQM Test: < - Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -1.65 > -5.00 |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| 1202049738 LCSD                           | 1 | 31            | 143   | 6.89     | 2/24/2010@13:11:28 | 250.00 |     |
| 247535001                                 | 1 | 32            | -1.52 | 0.0316   | 2/24/2010@13:12:21 |        |     |
| 1202046166 954524 MB                      | 1 | 33            | -1.50 | 0.0326   | 2/24/2010@13:13:15 |        |     |
| 1202046173 LCS                            | 1 | 34            | 26.4  | 1.35     | 2/24/2010@13:14:08 | 25.00  |     |
| 247086001                                 | 1 | 35            | -2.19 | -1.71e-4 | 2/24/2010@13:15:03 |        |     |
| 247088001                                 | 1 | 36            | -1.36 | 0.0393   | 2/24/2010@13:15:56 |        |     |
| 247088002                                 | 1 | 37            | -1.70 | 0.0229   | 2/24/2010@13:16:49 |        |     |
| 247088003                                 | 1 | 38            | -2.18 | 1.87e-4  | 2/24/2010@13:17:41 |        |     |
| 247091001                                 | 1 | 39            | -1.47 | 0.0337   | 2/24/2010@13:18:34 |        |     |
| 247091002                                 | 1 | 40            | -2.10 | 0.00425  | 2/24/2010@13:19:26 |        |     |
| WCN100224-03                              | 1 | S3            | 105   | 5.06     | 2/24/2010@13:20:19 |        | CCV |
| Known Conc:                               |   | 100           |       |          |                    |        |     |
| DQM Test: > + Percent Relative Difference |   |               |       |          |                    |        |     |
| Result:                                   |   | 4.5 < 10.0    |       |          |                    |        |     |
| Message                                   |   | CCV Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| DQM Test: < - Percent Relative Difference |   |               |       |          |                    |        |     |
| Result:                                   |   | 4.5 < 10.0    |       |          |                    |        |     |
| Message                                   |   | CCV Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| WCN100224-08                              | 1 | S7            | -2.13 | 0.00277  | 2/24/2010@13:22:09 |        | CCB |
| Known Conc:                               |   | 0.00          |       |          |                    |        |     |
| DQM Test: > + Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -2.13 < 5.00  |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| DQM Test: < - Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -2.13 > -5.00 |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| 247188001                                 | 1 | 41            | -1.68 | 0.0239   | 2/24/2010@13:23:57 |        |     |
| 1202046167 DUP                            | 1 | 42            | -2.17 | 8.99e-4  | 2/24/2010@13:24:49 |        |     |
| 1202046169 MS                             | 1 | 43            | 109   | 5.29     | 2/24/2010@13:25:42 |        |     |
| 1202046171 MSD                            | 1 | 44            | 110   | 5.33     | 2/24/2010@13:26:34 |        |     |
| 247188002                                 | 1 | 45            | -1.75 | 0.0207   | 2/24/2010@13:27:25 |        |     |
| 1202046168 DUP                            | 1 | 46            | -1.40 | 0.0372   | 2/24/2010@13:28:20 |        |     |
| 1202046170 MS                             | 1 | 47            | 99.6  | 4.83     | 2/24/2010@13:29:15 |        |     |
| 1202046172 MSD                            | 1 | 48            | 104   | 5.03     | 2/24/2010@13:30:08 |        |     |
| 247188003                                 | 1 | 49            | -1.33 | 0.0406   | 2/24/2010@13:31:01 |        |     |
| 247188004                                 | 1 | 50            | -2.14 | 0.00233  | 2/24/2010@13:31:55 |        |     |
| WCN100224-03                              | 1 | S3            | 104   | 5.06     | 2/24/2010@13:32:47 |        | CCV |
| Known Conc:                               |   | 100           |       |          |                    |        |     |
| DQM Test: > + Percent Relative Difference |   |               |       |          |                    |        |     |
| Result:                                   |   | 4.5 < 10.0    |       |          |                    |        |     |
| Message                                   |   | CCV Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| DQM Test: < - Percent Relative Difference |   |               |       |          |                    |        |     |
| Result:                                   |   | 4.5 < 10.0    |       |          |                    |        |     |
| Message                                   |   | CCV Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| WCN100224-08                              | 1 | S7            | -1.63 | 0.0262   | 2/24/2010@13:34:38 |        | CCB |
| Known Conc:                               |   | 0.00          |       |          |                    |        |     |
| DQM Test: > + Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -1.63 < 5.00  |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |
| DQM Test: < - Concentration Limit         |   |               |       |          |                    |        |     |
| Result:                                   |   | -1.63 > -5.00 |       |          |                    |        |     |
| Message                                   |   | CCB Passed    |       |          |                    |        |     |
| Action                                    |   | Continue      |       |          |                    |        |     |



|   |   |    |               |          |                    |  |     |
|---|---|----|---------------|----------|--------------------|--|-----|
| 247188005                                 | 1 | 51 | -1.61         | 0.0275   | 2/24/2010@13:36:27 |  |     |
| 247188006                                 | 1 | 52 | -2.16         | 0.00144  | 2/24/2010@13:37:20 |  |     |
| 247188007                                 | 1 | 53 | -0.634        | 0.0736   | 2/24/2010@13:38:13 |  |     |
| 247188008                                 | 1 | 54 | -2.39         | -0.00966 | 2/24/2010@13:39:06 |  |     |
| 247188009                                 | 1 | 55 | -2.15         | 0.00189  | 2/24/2010@13:39:58 |  |     |
| 247188010                                 | 1 | 56 | -1.48         | 0.0334   | 2/24/2010@13:40:52 |  |     |
| 247188011                                 | 1 | 57 | -1.41         | 0.0370   | 2/24/2010@13:41:43 |  |     |
| 247188012                                 | 1 | 58 | -2.20         | -9.12e-4 | 2/24/2010@13:42:36 |  |     |
| 247188013                                 | 1 | 59 | -1.81         | 0.0178   | 2/24/2010@13:43:28 |  |     |
| 247188014                                 | 1 | 60 | -1.67         | 0.0245   | 2/24/2010@13:44:20 |  |     |
| WCN100224-03                              | 1 | S3 | 105           | 5.07     | 2/24/2010@13:45:13 |  | CCV |
| Known Conc:                               |   |    | 100           |          |                    |  |     |
| DQM Test: > + Percent Relative Difference |   |    |               |          |                    |  |     |
| Result:                                   |   |    | 4.8 < 10.0    |          |                    |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| DQM Test: < - Percent Relative Difference |   |    |               |          |                    |  |     |
| Result:                                   |   |    | 4.8 < 10.0    |          |                    |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| WCN100224-08                              | 1 | S7 | -1.73         | 0.0215   | 2/24/2010@13:47:03 |  | CCB |
| Known Conc:                               |   |    | 0.00          |          |                    |  |     |
| DQM Test: > + Concentration Limit         |   |    |               |          |                    |  |     |
| Result:                                   |   |    | -1.73 < 5.00  |          |                    |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| DQM Test: < - Concentration Limit         |   |    |               |          |                    |  |     |
| Result:                                   |   |    | -1.73 > -5.00 |          |                    |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| 1202050880 956491 MB                      | 1 | 61 | -1.51         | 0.0321   | 2/24/2010@13:48:53 |  |     |
| 1202050884 LCS                            | 1 | 62 | 53.2          | 2.63     | 2/24/2010@13:49:48 |  |     |
| 247130001                                 | 1 | 63 | -1.58         | 0.0288   | 2/24/2010@13:50:42 |  |     |
| 1202050881 DUP                            | 1 | 64 | -1.78         | 0.0191   | 2/24/2010@13:51:36 |  |     |
| 1202050882 MS                             | 1 | 65 | 113           | 5.45     | 2/24/2010@13:52:31 |  |     |
| 1202050883 MSD                            | 1 | 66 | 107           | 5.16     | 2/24/2010@13:53:23 |  |     |
| 247409001                                 | 1 | 67 | 41.8          | 2.08     | 2/24/2010@13:54:17 |  |     |
| WCN100224-03                              | 1 | S3 | 105           | 5.08     | 2/24/2010@13:55:10 |  | CCV |
| Known Conc:                               |   |    | 100           |          |                    |  |     |
| DQM Test: > + Percent Relative Difference |   |    |               |          |                    |  |     |
| Result:                                   |   |    | 5.0 < 10.0    |          |                    |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| DQM Test: < - Percent Relative Difference |   |    |               |          |                    |  |     |
| Result:                                   |   |    | 5.0 < 10.0    |          |                    |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| WCN100224-08                              | 1 | S7 | -1.48         | 0.0334   | 2/24/2010@13:56:59 |  | CCB |
| Known Conc:                               |   |    | 0.00          |          |                    |  |     |
| DQM Test: > + Concentration Limit         |   |    |               |          |                    |  |     |
| Result:                                   |   |    | -1.48 < 5.00  |          |                    |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |
| DQM Test: < - Concentration Limit         |   |    |               |          |                    |  |     |
| Result:                                   |   |    | -1.48 > -5.00 |          |                    |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |  |     |
| Action                                    |   |    | Continue      |          |                    |  |     |

Analyte Properties Table for OM\_2-24-2010\_12-18-12.OMN

| Property              | Channel 1<br>TCYANIDE |
|-----------------------|-----------------------|
| Concentration Units   | ug/L                  |
| Calibration Fit Type  | First Order           |
| Clear Calibration     | True                  |
| Force Through Zero    | False                 |
| Calibration Weighting | None                  |
| Auto Dilution Trigger | True                  |

|                       |                |
|-----------------------|----------------|
| % of High Standard    | 100            |
| Quik Chem Method      | 10-204-00-1-A  |
| Chemistry             | Direct/Bipolar |
| Calibration by Height | False          |
| Inject to Peak Start  | 22             |
| Peak Base Width       | 39             |

Channel 1: Current View

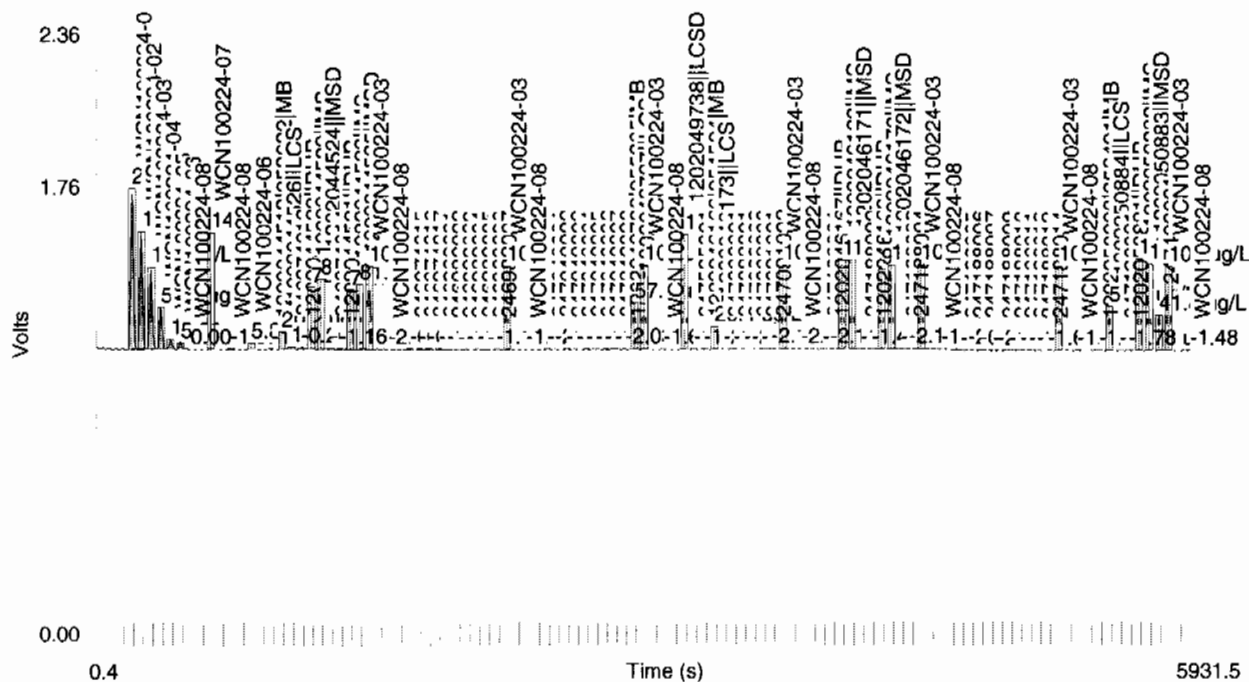
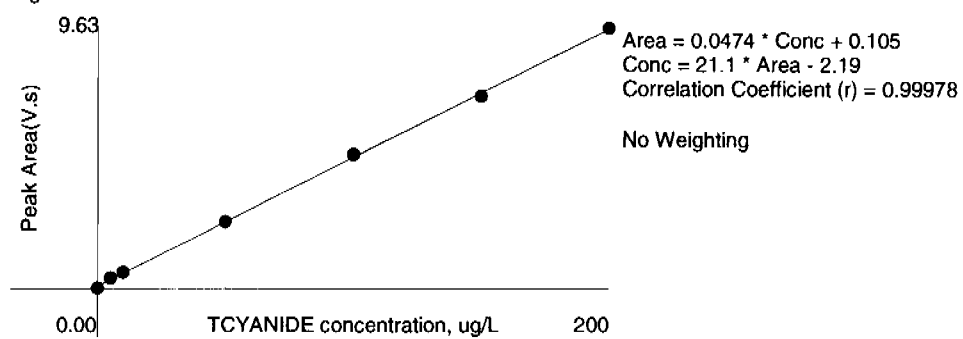


Table 1: TCYANIDE

|   | Conc. (ug/L) | Rep | Peak Area (Volt-s) | Peak Height (Volts) | % Residual | Detection Date | Detection Time |
|---|--------------|-----|--------------------|---------------------|------------|----------------|----------------|
| 1 | 200          | 1   | 9.63               | 0.634               | -0.5       | 2/24/2010      | 12:22:35       |
| 2 | 150          | 1   | 7.09               | 0.465               | 1.8        | 2/24/2010      | 12:23:27       |
| 3 | 100          | 1   | 4.94               | 0.323               | -2.0       | 2/24/2010      | 12:24:19       |
| 4 | 50.0         | 1   | 2.48               | 0.163               | -0.1       | 2/24/2010      | 12:25:12       |
| 5 | 10.0         | 1   | 0.601              | 0.0380              | -3.7       | 2/24/2010      | 12:26:06       |
| 6 | 5.00         | 1   | 0.390              | 0.0249              | -14.1      | 2/24/2010      | 12:26:59       |
| 7 | 0.00         | 1   | 0.0197             | 7.41e-4             |            | 2/24/2010      | 12:27:53       |

Figure 1: TCYANIDE



# **General Chemistry Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1863-1**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 954529      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 954526      **Method:** SSW846 9010B Prep

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| <b>Sample ID</b> | <b>Client ID</b>                                      |
|------------------|---|
| 247192001        | RE15-10-8235  |
| 1202046185       | Method Blank (MB)                                     |
| 1202046186       | 247036005(CASA-10-9470) Sample Duplicate (DUP)        |
| 1202046187       | 247109002(RE16-10-13118) Sample Duplicate (DUP)       |
| 1202046188       | 247036005(CASA-10-9470) Matrix Spike (MS)             |
| 1202046189       | 247109002(RE16-10-13118) Matrix Spike (MS)            |
| 1202046190       | 247036005(CASA-10-9470) Matrix Spike Duplicate (MSD)  |
| 1202046191       | 247109002(RE16-10-13118) Matrix Spike Duplicate (MSD) |
| 1202046192       | Laboratory Control Sample (LCS)                       |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**

The following samples were selected for QC analysis: 247036005 (CASA-10-9470) and 247109002 (RE16-10-13118).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**

The MS/PS recoveries for this sample set were within the required acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries for this sample set were within the required acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1202046189 (RE16-10-13118) and 1202046191 (RE16-10-13118).

**Duplicate Relative Percent Difference (RPD) Statement**

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202046186 (CASA-10-9470).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**

All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The samples in this SDG did not require dilutions.

**Sample Re-analysis**

The samples in this SDG did not require re-analysis.

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

The following DER was generated for this SDG: 794787 1202046189 (RE16-10-13118) and 1202046191 (RE16-10-13118).

#### **Additional Comments**

Additional comments were not required for this SDG.

#### **Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.



**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

Reviewer:  Date: 15Mar10

# **Sample Data Summary**

## **GEL LABORATORIES LLC**

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

### **Certificate of Analysis Report for**

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1863-1 GEL Work Order: 247192

**The Qualifiers in this report are defined as follows:**

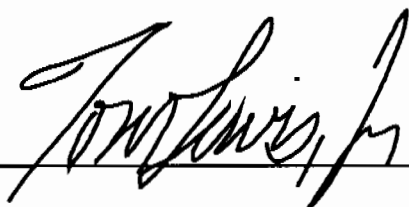
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read 'Valerie Davis', is written over a horizontal line.

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Los Alamos National Laboratory  
Address : PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: March 8, 2010

Client SDG: 10-1863-1

Client Sample ID: RE15-10-8235  
Sample ID: 247192001  
Matrix: W  
Collect Date: 10-FEB-10 12:00  
Receive Date: 16-FEB-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

| Parameter                                   | Qualifier | Result | DL   | RL   | Units | DF | Analyst | Date     | Time | Batch  | Method |
|---|-----------|--------|------|------|-------|----|---------|----------|------|--------|--------|
| <b>Flow Injection Analysis</b>              |           |        |      |      |       |    |         |          |      |        |        |
| <i>SW9012A Cyanide, Total "As Received"</i> |           |        |      |      |       |    |         |          |      |        |        |
| Cyanide, Total                              | U         | ND     | 1.66 | 5.00 | ug/L  | 1  | AXC2    | 02/23/10 | 1319 | 954529 | J      |

### The following Prep Methods were performed

| Method           | Description      | Analyst | Date     | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5    | 02/22/10 | 1346 | 954526     |

### The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
| 1      | SW846 9012A |                  |

# **Quality Control Summary**

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

Report Date: March 8, 2010  
Page 1 of 2

Los Alamos National Laboratory  
PO Box 1663  
TA-03, SM271, Drop Pt. 02U, Rm111  
Los Alamos, New Mexico  
Contact: Ms. Joylene Valdez

Workorder: 247192

| Parmname                       | NOM       | Sample | Qual | QC   | Units | RPD% | REC%  | Range      | Anlst    | Date     | Time  |
|--------------------------------|-----------|--------|------|------|-------|------|-------|------------|----------|----------|-------|
| <b>Flow Injection Analysis</b> |           |        |      |      |       |      |       |            |          |          |       |
| Batch                          | 954529    |        |      |      |       |      |       |            |          |          |       |
| QC1202046186                   | 247036005 | DUP    |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 |           | U      | ND   | U    | ND    | ug/L | N/A   |            | AXC2     | 02/23/10 | 12:56 |
| QC1202046187                   | 247109002 | DUP    |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 |           | U      | ND   | U    | ND    | ug/L | N/A   |            |          | 02/23/10 | 13:12 |
| QC1202046192                   | LCS       |        |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 | 50.0      |        |      |      | 52.8  | ug/L | 106   | (90%-110%) |          | 02/23/10 | 12:53 |
| QC1202046185                   | MB        |        |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 |           |        | U    | 5.00 | ug/L  |      |       |            |          | 02/23/10 | 12:52 |
| QC1202046188                   | 247036005 | MS     |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 | 100       | U      | ND   |      | 93.0  | ug/L | 92.5  | (60%-144%) |          | 02/23/10 | 12:57 |
| QC1202046189                   | 247109002 | MS     |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 | 100       | U      | ND   |      | 108   | ug/L | 108   | (60%-144%) |          | 02/23/10 | 13:13 |
| QC1202046190                   | 247036005 | MSD    |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 | 100       | U      | ND   |      | 105   | ug/L | 12.1  | 104        | (0%-20%) | 02/23/10 | 12:58 |
| QC1202046191                   | 247109002 | MSD    |      |      |       |      |       |            |          |          |       |
| Cyanide, Total                 | 100       | U      | ND   |      | 86.4  | ug/L | 22.2* | 86.4       | (0%-20%) | 02/23/10 | 13:14 |

Notes:  
RER is calculated at the 95% confidence level (2-sigma).  
The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

## GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

### QC Summary

Workorder: 247192

Page 2 of 2

| Parname | NOM  | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---------|--|--------|------|----|-------|------|------|-------|-------|------|------|
| ND      | Analyte concentration is not detected above the detection limit  |        |      |    |       |      |      |       |       |      |      |
| NJ      | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier   |        |      |    |       |      |      |       |       |      |      |
| P       | Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70% |        |      |    |       |      |      |       |       |      |      |
| R       | Sample results are rejected  |        |      |    |       |      |      |       |       |      |      |
| U       | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.   |        |      |    |       |      |      |       |       |      |      |
| X       | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier   |        |      |    |       |      |      |       |       |      |      |
| Y       | QC Samples were not spiked with this compound  |        |      |    |       |      |      |       |       |      |      |
| Z       | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.  |        |      |    |       |      |      |       |       |      |      |
| ^       | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.           |        |      |    |       |      |      |       |       |      |      |
| d       | 5-day BOD--The 2:1 depletion requirement was not met for this sample   |        |      |    |       |      |      |       |       |      |      |
| h       | Preparation or preservation holding time was exceeded  |        |      |    |       |      |      |       |       |      |      |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**



# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 08-MAR-2010 18:53

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1863-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

| Sample Type | Run Date             | Data File             | Result | Nominal | Recovery | Limits     | Within Limits |
|-------------|----------------------|-----------------------|--------|---------|----------|------------|---------------|
| ICV         | 23-FEB-2010 10:14:06 | OM_2-23-2010_10-03-36 | 149    | 150     | 99.3     | (90%-110%) | Yes           |
| CCV         | 23-FEB-2010 12:48:19 | OM_2-23-2010_11-19-05 | 103    | 100     | 103      | (90%-110%) | Yes           |
| CCV         | 23-FEB-2010 12:59:01 | OM_2-23-2010_11-19-05 | 104    | 100     | 104      | (90%-110%) | Yes           |
| CCV         | 23-FEB-2010 13:09:50 | OM_2-23-2010_11-19-05 | 103    | 100     | 103      | (90%-110%) | Yes           |
| CCV         | 23-FEB-2010 13:20:35 | OM_2-23-2010_11-19-05 | 104    | 100     | 104      | (90%-110%) | Yes           |

| Sample Type | Run Date             | Data File             | Result | Limits | Within Limits |
|-------------|----------------------|-----------------------|--------|--------|---------------|
| ICB         | 23-FEB-2010 10:15:57 | OM_2-23-2010_10-03-36 | -1.34  | 10     | Yes           |
| CCB         | 23-FEB-2010 12:49:13 | OM_2-23-2010_11-19-05 | -1.16  | 10     | Yes           |
| CCB         | 23-FEB-2010 12:59:56 | OM_2-23-2010_11-19-05 | -1.46  | 10     | Yes           |
| CCB         | 23-FEB-2010 13:10:44 | OM_2-23-2010_11-19-05 | -0.806 | 10     | Yes           |
| CCB         | 23-FEB-2010 13:22:26 | OM_2-23-2010_11-19-05 | -1.39  | 10     | Yes           |

# Cyanide, Total

# Prep LogBook

Analyst: AXS5  
 Batch: 954526  
 Lab SOP: GL-GC-E-067 REV# 13

Verified by: \_\_\_\_\_

| Sample Type | Sample ID  | Parent Sample ID | Method           | Prep Date         | Ph  | Initial Wt. | Final Volume | Prep Factor | Matrix       | Spike Amount | Spike Units |
|-------------|------------|------------------|------------------|-------------------|-----|-------------|--------------|-------------|--------------|--------------|-------------|
| MB          | 1202046185 |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .0125        | mL          |
| LCS         | 1202046192 |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 246983002  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247036005  |                  | EPA 335.4        | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | GROUND WATER | .025         | mL          |
| DUP         | 1202046186 | 247036005        | EPA 335.4        | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | GROUND WATER | .025         | mL          |
| MS          | 1202046188 | 247036005        | EPA 335.4        | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | GROUND WATER | .025         | mL          |
| MSD         | 1202046190 | 247036005        | EPA 335.4        | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | GROUND WATER | .025         | mL          |
| SAMPLE      | 247039001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247039002  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247039003  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247039004  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247092001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247098001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247098002  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247098003  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247098004  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247109001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247109002  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| DUP         | 1202046187 | 247109002        | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| MS          | 1202046189 | 247109002        | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| MSD         | 1202046191 | 247109002        | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247127001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247139001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247179001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247182001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247183001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |
| SAMPLE      | 247192001  |                  | SW846 9010B Prep | 22-FEB-2010 13:46 | >12 | 25 mL       | 25 mL        | 1           | WATER        | .025         | mL          |

## Prep LogBook

| Reagent/Solvent Lot ID | Amount   | Description                       | Comments |
|------------------------|----------|-----------------------------------|----------|
| 100210-C               | 25 mL    | 0.25N Sodium Hydroxide Solution   |          |
| WCN100222-07           | .0375 mL | 150 ppb CN Distilled ICV Standard |          |
| 1270663-C              | 1.25 mL  | 0.8N H3NO3S                       |          |
| 1260189-C              | 2.5 mL   | 50% H2SO4 CN Prep                 |          |
| 1270669-C              | 1 mL     | 51% MgCl2 Soln                    |          |
| 1270661-C              | 1.25 mL  | Bismuth Nitrate Solution          |          |

This is runlog Lachat1

| Sample ID    | Batch  | Dilution | Analyst | Runtime            | Dataset               |
|--------------|--------|----------|---------|--------------------|-----------------------|
| 200 ppb      |        | 1        | axc2    | 2/23/2010 10:06:57 | OM_2-23-2010_10-03-36 |
| 150 ppb      |        | 1        | axc2    | 2/23/2010 10:07:49 | OM_2-23-2010_10-03-36 |
| 100 ppb      |        | 1        | axc2    | 2/23/2010 10:08:41 | OM_2-23-2010_10-03-36 |
| 50 ppb       |        | 1        | axc2    | 2/23/2010 10:09:34 | OM_2-23-2010_10-03-36 |
| 10 ppb       |        | 1        | axc2    | 2/23/2010 10:10:28 | OM_2-23-2010_10-03-36 |
| CRDL 5.0 ppb |        | 1        | axc2    | 2/23/2010 10:11:21 | OM_2-23-2010_10-03-36 |
| ICAL-00      |        | 1        | axc2    | 2/23/2010 10:12:16 | OM_2-23-2010_10-03-36 |
| ICV          |        | 1        | axc2    | 2/23/2010 10:14:06 | OM_2-23-2010_10-03-36 |
| ICB          |        | 1        | axc2    | 2/23/2010 10:15:57 | OM_2-23-2010_10-03-36 |
| CRDL         |        | 1        | axc2    | 2/23/2010 10:17:46 | OM_2-23-2010_10-03-36 |
| 1202046146   | 954516 | 1        | axc2    | 2/23/2010 10:19:36 | OM_2-23-2010_10-03-36 |
| 1202046153   | 954516 | 25       | axc2    | 2/23/2010 10:20:29 | OM_2-23-2010_10-03-36 |
| 247172001    | 954516 | 1        | axc2    | 2/23/2010 10:21:22 | OM_2-23-2010_10-03-36 |
| 1202046147   | 954516 | 1        | axc2    | 2/23/2010 10:22:15 | OM_2-23-2010_10-03-36 |
| 1202046149   | 954516 | 1        | axc2    | 2/23/2010 10:23:08 | OM_2-23-2010_10-03-36 |
| 1202046151   | 954516 | 1        | axc2    | 2/23/2010 10:24:01 | OM_2-23-2010_10-03-36 |
| 247172002    | 954516 | 1        | axc2    | 2/23/2010 10:24:54 | OM_2-23-2010_10-03-36 |
| 1202046148   | 954516 | 1        | axc2    | 2/23/2010 10:25:46 | OM_2-23-2010_10-03-36 |
| 1202046150   | 954516 | 1        | axc2    | 2/23/2010 10:26:38 | OM_2-23-2010_10-03-36 |
| 1202046152*  | 954516 | 1        | axc2    | 2/23/2010 10:27:31 | OM_2-23-2010_10-03-36 |
| CCV          |        | 1        | axc2    | 2/23/2010 10:28:23 | OM_2-23-2010_10-03-36 |
| CCB          |        | 1        | axc2    | 2/23/2010 10:30:13 | OM_2-23-2010_10-03-36 |
| 247178001    | 954516 | 1        | axc2    | 2/23/2010 10:32:01 | OM_2-23-2010_10-03-36 |
| 247178002    | 954516 | 1        | axc2    | 2/23/2010 10:32:53 | OM_2-23-2010_10-03-36 |
| 247178003    | 954516 | 1        | axc2    | 2/23/2010 10:33:45 | OM_2-23-2010_10-03-36 |
| 247178004    | 954516 | 1        | axc2    | 2/23/2010 10:34:37 | OM_2-23-2010_10-03-36 |
| 247178005    | 954516 | 1        | axc2    | 2/23/2010 10:35:28 | OM_2-23-2010_10-03-36 |
| 247178006    | 954516 | 1        | axc2    | 2/23/2010 10:36:22 | OM_2-23-2010_10-03-36 |
| 247178007    | 954516 | 1        | axc2    | 2/23/2010 10:37:16 | OM_2-23-2010_10-03-36 |
| 247178008    | 954516 | 1        | axc2    | 2/23/2010 10:38:10 | OM_2-23-2010_10-03-36 |
| 247178009    | 954516 | 1        | axc2    | 2/23/2010 10:39:03 | OM_2-23-2010_10-03-36 |
| 247178010    | 954516 | 1        | axc2    | 2/23/2010 10:39:56 | OM_2-23-2010_10-03-36 |
| CCV          |        | 1        | axc2    | 2/23/2010 10:40:48 | OM_2-23-2010_10-03-36 |
| CCB          |        | 1        | axc2    | 2/23/2010 10:42:39 | OM_2-23-2010_10-03-36 |
| 247178011    | 954516 | 1        | axc2    | 2/23/2010 10:44:28 | OM_2-23-2010_10-03-36 |
| 247181001    | 954516 | 1        | axc2    | 2/23/2010 10:45:20 | OM_2-23-2010_10-03-36 |
| 247181002    | 954516 | 1        | axc2    | 2/23/2010 10:46:14 | OM_2-23-2010_10-03-36 |
| 247187001    | 954516 | 1        | axc2    | 2/23/2010 10:47:06 | OM_2-23-2010_10-03-36 |
| 247187002    | 954516 | 1        | axc2    | 2/23/2010 10:47:58 | OM_2-23-2010_10-03-36 |
| 247187003    | 954516 | 1        | axc2    | 2/23/2010 10:48:51 | OM_2-23-2010_10-03-36 |
| 247197001    | 954516 | 1        | axc2    | 2/23/2010 10:49:43 | OM_2-23-2010_10-03-36 |
| 247197002    | 954516 | 1        | axc2    | 2/23/2010 10:50:35 | OM_2-23-2010_10-03-36 |
| 1202046124   | 954512 | 1        | axc2    | 2/23/2010 10:51:27 | OM_2-23-2010_10-03-36 |
| 1202046131   | 954512 | 25       | axc2    | 2/23/2010 10:52:19 | OM_2-23-2010_10-03-36 |
| CCV          |        | 1        | axc2    | 2/23/2010 10:53:12 | OM_2-23-2010_10-03-36 |
| CCB          |        | 1        | axc2    | 2/23/2010 10:55:01 | OM_2-23-2010_10-03-36 |
| 247108001    | 954512 | 1        | axc2    | 2/23/2010 10:56:52 | OM_2-23-2010_10-03-36 |
| 1202046125   | 954512 | 1        | axc2    | 2/23/2010 10:57:45 | OM_2-23-2010_10-03-36 |
| 1202046127   | 954512 | 1        | axc2    | 2/23/2010 10:58:39 | OM_2-23-2010_10-03-36 |
| 1202046129   | 954512 | 1        | axc2    | 2/23/2010 10:59:32 | OM_2-23-2010_10-03-36 |
| 247108002    | 954512 | 1        | axc2    | 2/23/2010 11:00:25 | OM_2-23-2010_10-03-36 |
| 1202046126   | 954512 | 1        | axc2    | 2/23/2010 11:01:19 | OM_2-23-2010_10-03-36 |
| 1202046128   | 954512 | 1        | axc2    | 2/23/2010 11:02:11 | OM_2-23-2010_10-03-36 |
| 1202046130   | 954512 | 1        | axc2    | 2/23/2010 11:03:05 | OM_2-23-2010_10-03-36 |
| 247108003    | 954512 | 1        | axc2    | 2/23/2010 11:03:58 | OM_2-23-2010_10-03-36 |
| 247108004    | 954512 | 1        | axc2    | 2/23/2010 11:04:50 | OM_2-23-2010_10-03-36 |
| CCV          |        | 1        | axc2    | 2/23/2010 11:05:42 | OM_2-23-2010_10-03-36 |
| CCB          |        | 1        | axc2    | 2/23/2010 11:07:33 | OM_2-23-2010_10-03-36 |

|            |        |   |      |           |          |                       |
|------------|--------|---|------|-----------|----------|-----------------------|
| 247108005* | 954512 | 1 | axc2 | 2/23/2010 | 11:09:22 | OM_2-23-2010_10-03-36 |
| 247195001* | 954512 | 1 | axc2 | 2/23/2010 | 11:10:14 | OM_2-23-2010_10-03-36 |
| 247195002* | 954512 | 1 | axc2 | 2/23/2010 | 11:11:05 | OM_2-23-2010_10-03-36 |

Original Run Filename: OM\_2-23-2010\_10-03-36.OMN created 2/23/2010 10:03:36  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-23-2010\_10-03-36.OMN last modified 2/23/2010 11:12:14  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

| Sample                                    | Rep. | Cup No. | Channel 1         |           | Detection Time     | ADF | MDF   | Description  |
|---|------|---------|-------------------|-----------|--------------------|-----|-------|--------------|
|   |      |         | TCYANIDE          | Area (Vs) |                    |     |       |              |
| Conc. (ug/L)                              |      |         |                   |           |                    |     |       |              |
| WCN100223-01                              | 1    | S1      | 200               | 9.53      | 2/23/2010@10:06:57 |     |       | 200 ppb      |
| WCN100223-02                              | 1    | S2      | 150               | 7.13      | 2/23/2010@10:07:49 |     |       | 150 ppb      |
| WCN100223-03                              | 1    | S3      | 100               | 4.60      | 2/23/2010@10:08:41 |     |       | 100 ppb      |
| WCN100223-04                              | 1    | S4      | 50.0              | 2.53      | 2/23/2010@10:09:34 |     |       | 50 ppb       |
| WCN100223-05                              | 1    | S5      | 10.0              | 0.617     | 2/23/2010@10:10:28 |     |       | 10 ppb       |
| WCN100223-06                              | 1    | S6      | 5.00              | 0.385     | 2/23/2010@10:11:21 |     |       | CRDL 5.0 ppb |
| WCN100223-08                              | 1    | S7      | 0.00              | 0.0245    | 2/23/2010@10:12:16 |     |       | 0.0 ppb      |
| DQM Test: Minimum Correlation Coefficient |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | 0.99966 > 0.99500 |           |                    |     |       |              |
| Message                                   |      |         | Pass              |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| WCN100223-07                              | 1    | S8      | 149               | 7.09      | 2/23/2010@10:14:06 |     |       | ICV          |
| Known Conc:                               |      |         | 150               |           |                    |     |       |              |
| DQM Test: > + Percent Relative Difference |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | -0.5 < 10.0       |           |                    |     |       |              |
| Message                                   |      |         | ICV Passed        |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| DQM Test: < - Percent Relative Difference |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | -0.5 < 10.0       |           |                    |     |       |              |
| Message                                   |      |         | ICV Passed        |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| Calibration:                              |      |         | Table/Fig. 1      |           |                    |     |       |              |
| WCN100223-08                              | 1    | S7      | -1.34             | 0.0341    | 2/23/2010@10:15:57 |     |       | ICB/CCB      |
| Known Conc:                               |      |         | 0.00              |           |                    |     |       |              |
| DQM Test: > + Concentration Limit         |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | -1.34 < 5.01      |           |                    |     |       |              |
| Message                                   |      |         | ICB/CCB Passed    |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| DQM Test: < - Concentration Limit         |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | -1.34 > -5.01     |           |                    |     |       |              |
| Message                                   |      |         | ICB/CCB Passed    |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| WCN100223-06                              | 1    | S6      | 6.77              | 0.414     | 2/23/2010@10:17:46 |     |       | CRDL         |
| Known Conc:                               |      |         | 5.00              |           |                    |     |       |              |
| DQM Test: > + Concentration Limit         |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | 6.77 < 7.50       |           |                    |     |       |              |
| Message                                   |      |         | CRDL Passed       |           |                    |     |       |              |
| Action                                    |      |         | Continue          |           |                    |     |       |              |
| DQM Test: < - Concentration Limit         |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | 6.77 > 2.50       |           |                    |     |       |              |
| Message                                   |      |         | Pass              |           |                    |     |       |              |
| Action                                    |      |         | None              |           |                    |     |       |              |
| 1202046146 954516 MB                      | 1    | 1       | -1.30             | 0.0360    | 2/23/2010@10:19:36 |     |       |              |
| 1202046153 LCS                            | 1    | 2       | 20.1              | 1.04      | 2/23/2010@10:20:29 |     | 25.00 |              |
| 247172001                                 | 1    | 3       | -1.33             | 0.0345    | 2/23/2010@10:21:22 |     |       |              |
| 1202046147 DUP                            | 1    | 4       | -1.25             | 0.0384    | 2/23/2010@10:22:15 |     |       |              |
| 1202046149 MS                             | 1    | 5       | 98.6              | 4.72      | 2/23/2010@10:23:08 |     |       |              |
| 1202046151 MSD                            | 1    | 6       | 101               | 4.82      | 2/23/2010@10:24:01 |     |       |              |
| 247172002                                 | 1    | 7       | -0.836            | 0.0578    | 2/23/2010@10:24:54 |     |       |              |
| 1202046148 DUP                            | 1    | 8       | -1.14             | 0.0437    | 2/23/2010@10:25:46 |     |       |              |
| 1202046150 MS                             | 1    | 9       | 107               | 5.10      | 2/23/2010@10:26:38 |     |       |              |
| 1202046152 MSD                            | 1    | 10      | 69.8              | 3.37      | 2/23/2010@10:27:31 |     |       |              |
| WCN100223-03                              | 1    | S3      | 103               | 4.93      | 2/23/2010@10:28:23 |     |       | CCV          |
| Known Conc:                               |      |         | 100               |           |                    |     |       |              |
| DQM Test: > + Percent Relative Difference |      |         |                   |           |                    |     |       |              |
| Result:                                   |      |         | 3.0 < 10.0        |           |                    |     |       |              |

|   |   |             |               |        |                    |  |       |     |
|---|---|-------------|---------------|--------|--------------------|--|-------|-----|
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| DQM Test: < - Percent Relative Difference |   |             |               |        |                    |  |       |     |
|   |   | Result:     | 3.0 < 10.0    |        |                    |  |       |     |
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| WCN100223-08                              | 1 | S7          | -1.28         | 0.0369 | 2/23/2010@10:30:13 |  |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |  |       |     |
| DQM Test: > + Concentration Limit         |   |             |               |        |                    |  |       |     |
|   |   | Result:     | -1.28 < 5.00  |        |                    |  |       |     |
|   |   | Message     | CCB Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| DQM Test: < - Concentration Limit         |   |             |               |        |                    |  |       |     |
|   |   | Result:     | -1.28 > -5.00 |        |                    |  |       |     |
|   |   | Message     | CCB Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| 247178001                                 | 1 | 11          | -1.02         | 0.0494 | 2/23/2010@10:32:01 |  |       |     |
| 247178002                                 | 1 | 12          | -1.24         | 0.0391 | 2/23/2010@10:32:53 |  |       |     |
| 247178003                                 | 1 | 13          | -0.195        | 0.0879 | 2/23/2010@10:33:45 |  |       |     |
| 247178004                                 | 1 | 14          | -1.18         | 0.0420 | 2/23/2010@10:34:37 |  |       |     |
| 247178005                                 | 1 | 15          | -1.20         | 0.0409 | 2/23/2010@10:35:28 |  |       |     |
| 247178006                                 | 1 | 16          | -0.310        | 0.0825 | 2/23/2010@10:36:22 |  |       |     |
| 247178007                                 | 1 | 17          | -0.592        | 0.0693 | 2/23/2010@10:37:16 |  |       |     |
| 247178008                                 | 1 | 18          | 1.40          | 0.162  | 2/23/2010@10:38:10 |  |       |     |
| 247178009                                 | 1 | 19          | 0.677         | 0.129  | 2/23/2010@10:39:03 |  |       |     |
| 247178010                                 | 1 | 20          | -0.578        | 0.0699 | 2/23/2010@10:39:56 |  |       |     |
| WCN100223-03                              | 1 | S3          | 104           | 4.96   | 2/23/2010@10:40:48 |  |       | CCV |
|   |   | Known Conc: | 100           |        |                    |  |       |     |
| DQM Test: > + Percent Relative Difference |   |             |               |        |                    |  |       |     |
|   |   | Result:     | 3.7 < 10.0    |        |                    |  |       |     |
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| DQM Test: < - Percent Relative Difference |   |             |               |        |                    |  |       |     |
|   |   | Result:     | 3.7 < 10.0    |        |                    |  |       |     |
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| WCN100223-08                              | 1 | S7          | -1.27         | 0.0375 | 2/23/2010@10:42:39 |  |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |  |       |     |
| DQM Test: > + Concentration Limit         |   |             |               |        |                    |  |       |     |
|   |   | Result:     | -1.27 < 5.00  |        |                    |  |       |     |
|   |   | Message     | CCB Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| DQM Test: < - Concentration Limit         |   |             |               |        |                    |  |       |     |
|   |   | Result:     | -1.27 > -5.00 |        |                    |  |       |     |
|   |   | Message     | CCB Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| 247178011                                 | 1 | 21          | -1.34         | 0.0342 | 2/23/2010@10:44:28 |  |       |     |
| 247181001                                 | 1 | 22          | -1.33         | 0.0348 | 2/23/2010@10:45:20 |  |       |     |
| 247181002                                 | 1 | 23          | -0.741        | 0.0623 | 2/23/2010@10:46:14 |  |       |     |
| 247187001                                 | 1 | 24          | -1.57         | 0.0236 | 2/23/2010@10:47:06 |  |       |     |
| 247187002                                 | 1 | 25          | -1.22         | 0.0399 | 2/23/2010@10:47:58 |  |       |     |
| 247187003                                 | 1 | 26          | -1.40         | 0.0315 | 2/23/2010@10:48:51 |  |       |     |
| 247197001                                 | 1 | 27          | -1.38         | 0.0323 | 2/23/2010@10:49:43 |  |       |     |
| 247197002                                 | 1 | 28          | -1.11         | 0.0450 | 2/23/2010@10:50:35 |  |       |     |
| 1202046124 954512 MB                      | 1 | 29          | -1.30         | 0.0361 | 2/23/2010@10:51:27 |  |       |     |
| 1202046131 LCS                            | 1 | 30          | 16.8          | 0.885  | 2/23/2010@10:52:19 |  | 25.00 |     |
| WCN100223-03                              | 1 | S3          | 104           | 4.98   | 2/23/2010@10:53:12 |  |       | CCV |
|   |   | Known Conc: | 100           |        |                    |  |       |     |
| DQM Test: > + Percent Relative Difference |   |             |               |        |                    |  |       |     |
|   |   | Result:     | 4.3 < 10.0    |        |                    |  |       |     |
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| DQM Test: < - Percent Relative Difference |   |             |               |        |                    |  |       |     |
|   |   | Result:     | 4.3 < 10.0    |        |                    |  |       |     |
|   |   | Message     | CCV Passed    |        |                    |  |       |     |
|   |   | Action      | Continue      |        |                    |  |       |     |
| WCN100223-08                              | 1 | S7          | -1.30         | 0.0362 | 2/23/2010@10:55:01 |  |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |  |       |     |



|   |     |               |       |         |                    |                    |
|---|-----|---------------|-------|---------|--------------------|--------------------|
| DQM Test: > + Concentration Limit         |     |               |       |         |                    |                    |
| Result:                                   |     | -1.30 < 5.00  |       |         |                    |                    |
| Message                                   |     | CCB Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| DQM Test: < - Concentration Limit         |     |               |       |         |                    |                    |
| Result:                                   |     | -1.30 > -5.00 |       |         |                    |                    |
| Message                                   |     | CCB Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| 247108001                                 | 1   | 31            | -1.09 | 0.0462  | 2/23/2010@10:56:52 |                    |
| 1202046125                                | DUP | 1             | 32    | -1.54   | 0.0247             | 2/23/2010@10:57:45 |
| 1202046127                                | MS  | 1             | 33    | 81.1    | 3.90               | 2/23/2010@10:58:39 |
| 1202046129                                | MSD | 1             | 34    | 98.3    | 4.70               | 2/23/2010@10:59:32 |
| 247108002                                 |     | 1             | 35    | -1.05   | 0.0481             | 2/23/2010@11:00:25 |
| 1202046126                                | DUP | 1             | 36    | -0.928  | 0.0536             | 2/23/2010@11:01:19 |
| 1202046128                                | MS  | 1             | 37    | 95.0    | 4.55               | 2/23/2010@11:02:11 |
| 1202046130                                | MSD | 1             | 38    | 88.6    | 4.25               | 2/23/2010@11:03:05 |
| 247108003                                 |     | 1             | 39    | -1.15   | 0.0430             | 2/23/2010@11:03:58 |
| 247108004                                 |     | 1             | 40    | -1.94   | 0.00601            | 2/23/2010@11:04:50 |
| WCN100223-03                              | 1   | S3            | 104   | 4.96    | 2/23/2010@11:05:42 | CCV                |
| Known Conc:                               |     | 100           |       |         |                    |                    |
| DQM Test: > + Percent Relative Difference |     |               |       |         |                    |                    |
| Result:                                   |     | 3.8 < 10.0    |       |         |                    |                    |
| Message                                   |     | CCV Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| DQM Test: < - Percent Relative Difference |     |               |       |         |                    |                    |
| Result:                                   |     | 3.8 < 10.0    |       |         |                    |                    |
| Message                                   |     | CCV Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| WCN100223-08                              | 1   | S7            | -1.19 | 0.0415  | 2/23/2010@11:07:33 | CCB                |
| Known Conc:                               |     | 0.00          |       |         |                    |                    |
| DQM Test: > + Concentration Limit         |     |               |       |         |                    |                    |
| Result:                                   |     | -1.19 < 5.00  |       |         |                    |                    |
| Message                                   |     | CCB Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| DQM Test: < - Concentration Limit         |     |               |       |         |                    |                    |
| Result:                                   |     | -1.19 > -5.00 |       |         |                    |                    |
| Message                                   |     | CCB Passed    |       |         |                    |                    |
| Action                                    |     | Continue      |       |         |                    |                    |
| 247108005                                 | 1   | 41            | -2.02 | 0.00232 | 2/23/2010@11:09:22 |                    |
| 247195001                                 | 1   | 42            | -1.60 | 0.0222  | 2/23/2010@11:10:14 |                    |
| 247195002                                 | 1   | 43            | -1.50 | 0.0270  | 2/23/2010@11:11:05 |                    |

Analyte Properties Table for OM\_2-23-2010\_10-03-36.OMN

| Property              | Channel 1      |
|-----------------------|----------------|
|                       | TCYANIDE       |
| Concentration Units   | ug/L           |
| Calibration Fit Type  | First Order    |
| Clear Calibration     | True           |
| Force Through Zero    | False          |
| Calibration Weighting | None           |
| Auto Dilution Trigger | True           |
| % of High Standard    | 100            |
| Quik Chem Method      | 10-204-00-1-A  |
| Chemistry             | Direct/Bipolar |
| Calibration by Height | False          |
| Inject to Peak Start  | 22             |
| Peak Base Width       | 39             |



This is runlog Lachat1

| Sample ID  | Batch  | Dilution | Analyst | Runtime            | Dataset               |
|------------|--------|----------|---------|--------------------|-----------------------|
| CCV        |        | 1        | axc2    | 2/23/2010 11:22:28 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1        | axc2    | 2/23/2010 11:24:18 | OM_2-23-2010_11-19-05 |
| 247108005  | 954512 | 1        | axc2    | 2/23/2010 11:26:07 | OM_2-23-2010_11-19-05 |
| 247195001  | 954512 | 1        | axc2    | 2/23/2010 11:26:59 | OM_2-23-2010_11-19-05 |
| 247195002  | 954512 | 1        | axc2    | 2/23/2010 11:27:51 | OM_2-23-2010_11-19-05 |
| 247195003  | 954512 | 1        | axc2    | 2/23/2010 11:28:44 | OM_2-23-2010_11-19-05 |
| 247195004  | 954512 | 1        | axc2    | 2/23/2010 11:29:35 | OM_2-23-2010_11-19-05 |
| 247195005  | 954512 | 1        | axc2    | 2/23/2010 11:30:30 | OM_2-23-2010_11-19-05 |
| 247195006  | 954512 | 1        | axc2    | 2/23/2010 11:31:24 | OM_2-23-2010_11-19-05 |
| 247195007  | 954512 | 1        | axc2    | 2/23/2010 11:32:17 | OM_2-23-2010_11-19-05 |
| 247195008  | 954512 | 1        | axc2    | 2/23/2010 11:33:11 | OM_2-23-2010_11-19-05 |
| 247195009  | 954512 | 1        | axc2    | 2/23/2010 11:34:05 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1        | axc2    | 2/23/2010 11:34:57 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1        | axc2    | 2/23/2010 11:36:48 | OM_2-23-2010_11-19-05 |
| 247195010  | 954512 | 1        | axc2    | 2/23/2010 11:38:37 | OM_2-23-2010_11-19-05 |
| 247195011  | 954512 | 1        | axc2    | 2/23/2010 11:39:30 | OM_2-23-2010_11-19-05 |
| 247195012  | 954512 | 1        | axc2    | 2/23/2010 11:40:23 | OM_2-23-2010_11-19-05 |
| 247195013  | 954512 | 1        | axc2    | 2/23/2010 11:41:16 | OM_2-23-2010_11-19-05 |
| 247195014  | 954512 | 1        | axc2    | 2/23/2010 11:42:09 | OM_2-23-2010_11-19-05 |
| 247195015  | 954512 | 1        | axc2    | 2/23/2010 11:43:02 | OM_2-23-2010_11-19-05 |
| 1202042913 | 953106 | 1        | axc2    | 2/23/2010 11:43:55 | OM_2-23-2010_11-19-05 |
| 1202042920 | 953106 | 25       | axc2    | 2/23/2010 11:44:47 | OM_2-23-2010_11-19-05 |
| 246870010  | 953106 | 1        | axc2    | 2/23/2010 11:45:39 | OM_2-23-2010_11-19-05 |
| 1202042914 | 953106 | 1        | axc2    | 2/23/2010 11:46:31 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1        | axc2    | 2/23/2010 11:47:23 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1        | axc2    | 2/23/2010 11:49:13 | OM_2-23-2010_11-19-05 |
| 1202042916 | 953106 | 1        | axc2    | 2/23/2010 11:51:03 | OM_2-23-2010_11-19-05 |
| 1202042918 | 953106 | 1        | axc2    | 2/23/2010 11:51:57 | OM_2-23-2010_11-19-05 |
| 246872001  | 953106 | 1        | axc2    | 2/23/2010 11:52:52 | OM_2-23-2010_11-19-05 |
| 1202042915 | 953106 | 1        | axc2    | 2/23/2010 11:53:45 | OM_2-23-2010_11-19-05 |
| 1202042917 | 953106 | 1        | axc2    | 2/23/2010 11:54:39 | OM_2-23-2010_11-19-05 |
| 1202042919 | 953106 | 1        | axc2    | 2/23/2010 11:55:33 | OM_2-23-2010_11-19-05 |
| 246872002  | 953106 | 1        | axc2    | 2/23/2010 11:56:26 | OM_2-23-2010_11-19-05 |
| 246872003  | 953106 | 1        | axc2    | 2/23/2010 11:57:19 | OM_2-23-2010_11-19-05 |
| 246872004  | 953106 | 1        | axc2    | 2/23/2010 11:58:12 | OM_2-23-2010_11-19-05 |
| 246872005  | 953106 | 1        | axc2    | 2/23/2010 11:59:05 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1        | axc2    | 2/23/2010 11:59:57 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1        | axc2    | 2/23/2010 12:01:48 | OM_2-23-2010_11-19-05 |
| 246872006  | 953106 | 1        | axc2    | 2/23/2010 12:03:37 | OM_2-23-2010_11-19-05 |
| 246872007  | 953106 | 1        | axc2    | 2/23/2010 12:04:30 | OM_2-23-2010_11-19-05 |
| 246872008  | 953106 | 1        | axc2    | 2/23/2010 12:05:22 | OM_2-23-2010_11-19-05 |
| 246881001  | 953106 | 1        | axc2    | 2/23/2010 12:06:14 | OM_2-23-2010_11-19-05 |
| 246881002  | 953106 | 1        | axc2    | 2/23/2010 12:07:07 | OM_2-23-2010_11-19-05 |
| 246881003  | 953106 | 1        | axc2    | 2/23/2010 12:08:01 | OM_2-23-2010_11-19-05 |
| 246881004  | 953106 | 1        | axc2    | 2/23/2010 12:08:55 | OM_2-23-2010_11-19-05 |
| 246881005  | 953106 | 1        | axc2    | 2/23/2010 12:09:49 | OM_2-23-2010_11-19-05 |
| 246881006  | 953106 | 1        | axc2    | 2/23/2010 12:10:43 | OM_2-23-2010_11-19-05 |
| 246881007  | 953106 | 1        | axc2    | 2/23/2010 12:11:37 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1        | axc2    | 2/23/2010 12:12:29 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1        | axc2    | 2/23/2010 12:14:20 | OM_2-23-2010_11-19-05 |
| 246881008  | 953106 | 1        | axc2    | 2/23/2010 12:16:10 | OM_2-23-2010_11-19-05 |
| 246881009  | 953106 | 1        | axc2    | 2/23/2010 12:17:03 | OM_2-23-2010_11-19-05 |
| 246881010  | 953106 | 1        | axc2    | 2/23/2010 12:17:56 | OM_2-23-2010_11-19-05 |
| 246881011  | 953106 | 1        | axc2    | 2/23/2010 12:18:49 | OM_2-23-2010_11-19-05 |
| 1202046152 | 954516 | 1        | axc2    | 2/23/2010 12:19:42 | OM_2-23-2010_11-19-05 |
| 1202046158 | 954519 | 1        | axc2    | 2/23/2010 12:20:35 | OM_2-23-2010_11-19-05 |
| 1202046165 | 954519 | 25       | axc2    | 2/23/2010 12:21:28 | OM_2-23-2010_11-19-05 |
| 247084001  | 954519 | 1        | axc2    | 2/23/2010 12:22:20 | OM_2-23-2010_11-19-05 |

|            |        |   |      |           |          |                       |
|------------|--------|---|------|-----------|----------|-----------------------|
| 247084002  | 954519 | 1 | axc2 | 2/23/2010 | 12:23:13 | OM_2-23-2010_11-19-05 |
| 247126001  | 954519 | 1 | axc2 | 2/23/2010 | 12:24:06 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 12:24:58 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 12:26:48 | OM_2-23-2010_11-19-05 |
| 247126002  | 954519 | 1 | axc2 | 2/23/2010 | 12:28:37 | OM_2-23-2010_11-19-05 |
| 247126003  | 954519 | 1 | axc2 | 2/23/2010 | 12:29:32 | OM_2-23-2010_11-19-05 |
| 247136001  | 954519 | 1 | axc2 | 2/23/2010 | 12:30:26 | OM_2-23-2010_11-19-05 |
| 247136002  | 954519 | 1 | axc2 | 2/23/2010 | 12:31:21 | OM_2-23-2010_11-19-05 |
| 247141001  | 954519 | 1 | axc2 | 2/23/2010 | 12:32:16 | OM_2-23-2010_11-19-05 |
| 247141002  | 954519 | 1 | axc2 | 2/23/2010 | 12:33:09 | OM_2-23-2010_11-19-05 |
| 247141003  | 954519 | 1 | axc2 | 2/23/2010 | 12:34:03 | OM_2-23-2010_11-19-05 |
| 247186001  | 954519 | 1 | axc2 | 2/23/2010 | 12:34:58 | OM_2-23-2010_11-19-05 |
| 1202046159 | 954519 | 1 | axc2 | 2/23/2010 | 12:35:51 | OM_2-23-2010_11-19-05 |
| 1202046161 | 954519 | 1 | axc2 | 2/23/2010 | 12:36:44 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 12:37:37 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 12:38:31 | OM_2-23-2010_11-19-05 |
| 1202046163 | 954519 | 1 | axc2 | 2/23/2010 | 12:39:24 | OM_2-23-2010_11-19-05 |
| 247186002  | 954519 | 1 | axc2 | 2/23/2010 | 12:40:17 | OM_2-23-2010_11-19-05 |
| 1202046160 | 954519 | 1 | axc2 | 2/23/2010 | 12:41:10 | OM_2-23-2010_11-19-05 |
| 1202046162 | 954519 | 1 | axc2 | 2/23/2010 | 12:42:03 | OM_2-23-2010_11-19-05 |
| 1202046164 | 954519 | 1 | axc2 | 2/23/2010 | 12:42:55 | OM_2-23-2010_11-19-05 |
| 247186003  | 954519 | 1 | axc2 | 2/23/2010 | 12:43:49 | OM_2-23-2010_11-19-05 |
| 247186004  | 954519 | 1 | axc2 | 2/23/2010 | 12:44:43 | OM_2-23-2010_11-19-05 |
| 247186005  | 954519 | 1 | axc2 | 2/23/2010 | 12:45:38 | OM_2-23-2010_11-19-05 |
| 247186006  | 954519 | 1 | axc2 | 2/23/2010 | 12:46:32 | OM_2-23-2010_11-19-05 |
| 247186007  | 954519 | 1 | axc2 | 2/23/2010 | 12:47:26 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 12:48:19 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 12:49:13 | OM_2-23-2010_11-19-05 |
| 247186008  | 954519 | 1 | axc2 | 2/23/2010 | 12:50:07 | OM_2-23-2010_11-19-05 |
| 247186009  | 954519 | 1 | axc2 | 2/23/2010 | 12:51:01 | OM_2-23-2010_11-19-05 |
| 247186010  | 954519 | 1 | axc2 | 2/23/2010 | 12:51:56 | OM_2-23-2010_11-19-05 |
| 1202046185 | 954529 | 1 | axc2 | 2/23/2010 | 12:52:50 | OM_2-23-2010_11-19-05 |
| 1202046192 | 954529 | 1 | axc2 | 2/23/2010 | 12:53:43 | OM_2-23-2010_11-19-05 |
| 246983002  | 954529 | 1 | axc2 | 2/23/2010 | 12:54:37 | OM_2-23-2010_11-19-05 |
| 247036005  | 954529 | 1 | axc2 | 2/23/2010 | 12:55:30 | OM_2-23-2010_11-19-05 |
| 1202046186 | 954529 | 1 | axc2 | 2/23/2010 | 12:56:23 | OM_2-23-2010_11-19-05 |
| 1202046188 | 954529 | 1 | axc2 | 2/23/2010 | 12:57:17 | OM_2-23-2010_11-19-05 |
| 1202046190 | 954529 | 1 | axc2 | 2/23/2010 | 12:58:09 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 12:59:01 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 12:59:56 | OM_2-23-2010_11-19-05 |
| 247039001  | 954529 | 1 | axc2 | 2/23/2010 | 13:00:48 | OM_2-23-2010_11-19-05 |
| 247039002  | 954529 | 1 | axc2 | 2/23/2010 | 13:01:43 | OM_2-23-2010_11-19-05 |
| 247039003  | 954529 | 1 | axc2 | 2/23/2010 | 13:02:39 | OM_2-23-2010_11-19-05 |
| 247039004  | 954529 | 1 | axc2 | 2/23/2010 | 13:03:33 | OM_2-23-2010_11-19-05 |
| 247092001  | 954529 | 1 | axc2 | 2/23/2010 | 13:04:27 | OM_2-23-2010_11-19-05 |
| 247098001  | 954529 | 1 | axc2 | 2/23/2010 | 13:05:21 | OM_2-23-2010_11-19-05 |
| 247098002  | 954529 | 1 | axc2 | 2/23/2010 | 13:06:15 | OM_2-23-2010_11-19-05 |
| 247098003  | 954529 | 1 | axc2 | 2/23/2010 | 13:07:10 | OM_2-23-2010_11-19-05 |
| 247098004  | 954529 | 1 | axc2 | 2/23/2010 | 13:08:04 | OM_2-23-2010_11-19-05 |
| 247109001  | 954529 | 1 | axc2 | 2/23/2010 | 13:08:58 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 13:09:50 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 13:10:44 | OM_2-23-2010_11-19-05 |
| 247109002  | 954529 | 1 | axc2 | 2/23/2010 | 13:11:38 | OM_2-23-2010_11-19-05 |
| 1202046187 | 954529 | 1 | axc2 | 2/23/2010 | 13:12:31 | OM_2-23-2010_11-19-05 |
| 1202046189 | 954529 | 1 | axc2 | 2/23/2010 | 13:13:25 | OM_2-23-2010_11-19-05 |
| 1202046191 | 954529 | 1 | axc2 | 2/23/2010 | 13:14:18 | OM_2-23-2010_11-19-05 |
| 247127001  | 954529 | 1 | axc2 | 2/23/2010 | 13:15:11 | OM_2-23-2010_11-19-05 |
| 247139001  | 954529 | 1 | axc2 | 2/23/2010 | 13:16:04 | OM_2-23-2010_11-19-05 |
| 247179001  | 954529 | 1 | axc2 | 2/23/2010 | 13:16:59 | OM_2-23-2010_11-19-05 |
| 247182001  | 954529 | 1 | axc2 | 2/23/2010 | 13:17:54 | OM_2-23-2010_11-19-05 |

|            |        |   |      |           |          |                       |
|------------|--------|---|------|-----------|----------|-----------------------|
| 247183001  | 954529 | 1 | axc2 | 2/23/2010 | 13:18:48 | OM_2-23-2010_11-19-05 |
| 247192001  | 954529 | 1 | axc2 | 2/23/2010 | 13:19:43 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 13:20:35 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 13:22:26 | OM_2-23-2010_11-19-05 |
| 1202049704 | 955981 | 1 | axc2 | 2/23/2010 | 13:24:16 | OM_2-23-2010_11-19-05 |
| 1202049711 | 955981 | 1 | axc2 | 2/23/2010 | 13:25:10 | OM_2-23-2010_11-19-05 |
| 246941002  | 955981 | 1 | axc2 | 2/23/2010 | 13:26:05 | OM_2-23-2010_11-19-05 |
| 1202049705 | 955981 | 1 | axc2 | 2/23/2010 | 13:26:59 | OM_2-23-2010_11-19-05 |
| 1202049707 | 955981 | 1 | axc2 | 2/23/2010 | 13:27:53 | OM_2-23-2010_11-19-05 |
| 1202049709 | 955981 | 1 | axc2 | 2/23/2010 | 13:28:47 | OM_2-23-2010_11-19-05 |
| 247203001  | 955981 | 1 | axc2 | 2/23/2010 | 13:29:41 | OM_2-23-2010_11-19-05 |
| 1202049706 | 955981 | 1 | axc2 | 2/23/2010 | 13:30:34 | OM_2-23-2010_11-19-05 |
| 1202049708 | 955981 | 1 | axc2 | 2/23/2010 | 13:31:28 | OM_2-23-2010_11-19-05 |
| 1202049710 | 955981 | 1 | axc2 | 2/23/2010 | 13:32:21 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 13:33:13 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 13:35:03 | OM_2-23-2010_11-19-05 |
| 247204001  | 955981 | 1 | axc2 | 2/23/2010 | 13:36:52 | OM_2-23-2010_11-19-05 |
| 247244001  | 955981 | 1 | axc2 | 2/23/2010 | 13:37:47 | OM_2-23-2010_11-19-05 |
| 247250001  | 955981 | 1 | axc2 | 2/23/2010 | 13:38:42 | OM_2-23-2010_11-19-05 |
| 247250002  | 955981 | 1 | axc2 | 2/23/2010 | 13:39:37 | OM_2-23-2010_11-19-05 |
| 247256001  | 955981 | 1 | axc2 | 2/23/2010 | 13:40:32 | OM_2-23-2010_11-19-05 |
| 247256002  | 955981 | 1 | axc2 | 2/23/2010 | 13:41:27 | OM_2-23-2010_11-19-05 |
| 247273001  | 955981 | 1 | axc2 | 2/23/2010 | 13:42:22 | OM_2-23-2010_11-19-05 |
| 247322001  | 955981 | 1 | axc2 | 2/23/2010 | 13:43:15 | OM_2-23-2010_11-19-05 |
| 247322002  | 955981 | 1 | axc2 | 2/23/2010 | 13:44:09 | OM_2-23-2010_11-19-05 |
| 247335001  | 955981 | 1 | axc2 | 2/23/2010 | 13:45:04 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 13:45:56 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 13:47:47 | OM_2-23-2010_11-19-05 |
| 247339001  | 955981 | 1 | axc2 | 2/23/2010 | 13:49:37 | OM_2-23-2010_11-19-05 |
| 247339002  | 955981 | 1 | axc2 | 2/23/2010 | 13:50:31 | OM_2-23-2010_11-19-05 |
| 247350001  | 955981 | 1 | axc2 | 2/23/2010 | 13:51:25 | OM_2-23-2010_11-19-05 |
| 247434001  | 955981 | 1 | axc2 | 2/23/2010 | 13:52:18 | OM_2-23-2010_11-19-05 |
| 247434002  | 955981 | 1 | axc2 | 2/23/2010 | 13:53:12 | OM_2-23-2010_11-19-05 |
| 247559001  | 955981 | 1 | axc2 | 2/23/2010 | 13:54:05 | OM_2-23-2010_11-19-05 |
| 247560001  | 955981 | 1 | axc2 | 2/23/2010 | 13:55:00 | OM_2-23-2010_11-19-05 |
| 247567001  | 955981 | 1 | axc2 | 2/23/2010 | 13:55:56 | OM_2-23-2010_11-19-05 |
| 247273001  | 955981 | 2 | axc2 | 2/23/2010 | 13:56:50 | OM_2-23-2010_11-19-05 |
| CCV        |        | 1 | axc2 | 2/23/2010 | 13:57:43 | OM_2-23-2010_11-19-05 |
| CCB        |        | 1 | axc2 | 2/23/2010 | 13:59:33 | OM_2-23-2010_11-19-05 |

Original Run Filename: OM\_2-23-2010\_11-19-05.OMN created 2/23/2010 11:19:05  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-23-2010\_11-19-05.OMN last modified 2/23/2010 14:00:39  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

| Sample                                    | Rep. | Cup No. | Channel 1     |           | Detection Time     | ADF | MDF | Description |
|---|------|---------|---------------|-----------|--------------------|-----|-----|-------------|
|   |      |         | TCYANIDE      | Area (Vs) |                    |     |     |             |
| WCN100223-03                              | 1    | S3      | 103           | 4.91      | 2/23/2010@11:22:28 |     |     | CCV         |
| Known Conc:                               |      |         | 100           |           |                    |     |     |             |
| DQM Test: > + Percent Relative Difference |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | 2.6 < 10.0    |           |                    |     |     |             |
| Message                                   |      |         | CCV Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| DQM Test: < - Percent Relative Difference |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | 2.6 < 10.0    |           |                    |     |     |             |
| Message                                   |      |         | CCV Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| Calibration:                              |      |         | Table/Fig. 1  |           |                    |     |     |             |
| WCN100223-08                              | 1    | S7      | -1.61         | 0.0215    | 2/23/2010@11:24:18 |     |     | CCB         |
| Known Conc:                               |      |         | 0.00          |           |                    |     |     |             |
| DQM Test: > + Concentration Limit         |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | -1.61 < 5.00  |           |                    |     |     |             |
| Message                                   |      |         | CCB Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| DQM Test: < - Concentration Limit         |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | -1.61 > -5.00 |           |                    |     |     |             |
| Message                                   |      |         | CCB Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| 247108005[954512]                         | 1    | 41      | -2.38         | -0.0147   | 2/23/2010@11:26:07 |     |     |             |
| 247195001                                 | 1    | 42      | -1.98         | 0.00432   | 2/23/2010@11:26:59 |     |     |             |
| 247195002                                 | 1    | 43      | -1.72         | 0.0166    | 2/23/2010@11:27:51 |     |     |             |
| 247195003                                 | 1    | 44      | -1.17         | 0.0424    | 2/23/2010@11:28:44 |     |     |             |
| 247195004                                 | 1    | 45      | -0.745        | 0.0621    | 2/23/2010@11:29:35 |     |     |             |
| 247195005                                 | 1    | 46      | -1.28         | 0.0369    | 2/23/2010@11:30:30 |     |     |             |
| 247195006                                 | 1    | 47      | -1.56         | 0.0240    | 2/23/2010@11:31:24 |     |     |             |
| 247195007                                 | 1    | 48      | -1.45         | 0.0293    | 2/23/2010@11:32:17 |     |     |             |
| 247195008                                 | 1    | 49      | -3.33         | -0.0592   | 2/23/2010@11:33:11 |     |     |             |
| 247195009                                 | 1    | 50      | -1.19         | 0.0412    | 2/23/2010@11:34:05 |     |     |             |
| WCN100223-03                              | 1    | S3      | 102           | 4.89      | 2/23/2010@11:34:57 |     |     | CCV         |
| Known Conc:                               |      |         | 100           |           |                    |     |     |             |
| DQM Test: > + Percent Relative Difference |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | 2.4 < 10.0    |           |                    |     |     |             |
| Message                                   |      |         | CCV Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| DQM Test: < - Percent Relative Difference |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | 2.4 < 10.0    |           |                    |     |     |             |
| Message                                   |      |         | CCV Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| WCN100223-08                              | 1    | S7      | -1.39         | 0.0321    | 2/23/2010@11:36:48 |     |     | CCB         |
| Known Conc:                               |      |         | 0.00          |           |                    |     |     |             |
| DQM Test: > + Concentration Limit         |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | -1.39 < 5.00  |           |                    |     |     |             |
| Message                                   |      |         | CCB Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| DQM Test: < - Concentration Limit         |      |         |               |           |                    |     |     |             |
| Result:                                   |      |         | -1.39 > -5.00 |           |                    |     |     |             |
| Message                                   |      |         | CCB Passed    |           |                    |     |     |             |
| Action                                    |      |         | Continue      |           |                    |     |     |             |
| 247195010                                 | 1    | 51      | -0.780        | 0.0605    | 2/23/2010@11:38:37 |     |     |             |
| 247195011                                 | 1    | 52      | -1.91         | 0.00734   | 2/23/2010@11:39:30 |     |     |             |
| 247195012                                 | 1    | 53      | -1.44         | 0.0298    | 2/23/2010@11:40:23 |     |     |             |
| 247195013                                 | 1    | 54      | -1.29         | 0.0368    | 2/23/2010@11:41:16 |     |     |             |
| 247195014                                 | 1    | 55      | -1.40         | 0.0315    | 2/23/2010@11:42:09 |     |     |             |

|   |   |    |               |          |                    |       |  |     |
|---|---|----|---------------|----------|--------------------|-------|--|-----|
| 247195015                                 | 1 | 56 | -1.32         | 0.0351   | 2/23/2010@11:43:02 |       |  |     |
| 1202042913 953106 MB                      | 1 | 57 | -1.34         | 0.0343   | 2/23/2010@11:43:55 |       |  |     |
| 1202042920 LCS                            | 1 | 58 | 20.7          | 1.07     | 2/23/2010@11:44:47 | 25.00 |  |     |
| 246870010                                 | 1 | 59 | -1.12         | 0.0447   | 2/23/2010@11:45:39 |       |  |     |
| 1202042914 DUP                            | 1 | 60 | -1.41         | 0.0309   | 2/23/2010@11:46:31 |       |  |     |
| WCN100223-03                              | 1 | S3 | 103           | 4.94     | 2/23/2010@11:47:23 |       |  | CCV |
| Known Conc:                               |   |    | 100           |          |                    |       |  |     |
| DQM Test: > + Percent Relative Difference |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | 3.4 < 10.0    |          |                    |       |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| DQM Test: < - Percent Relative Difference |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | 3.4 < 10.0    |          |                    |       |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| WCN100223-08                              | 1 | S7 | -1.29         | 0.0368   | 2/23/2010@11:49:13 |       |  | CCB |
| Known Conc:                               |   |    | 0.00          |          |                    |       |  |     |
| DQM Test: > + Concentration Limit         |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | -1.29 < 5.00  |          |                    |       |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| DQM Test: < - Concentration Limit         |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | -1.29 > -5.00 |          |                    |       |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| 1202042916 MS                             | 1 | 61 | 100           | 4.81     | 2/23/2010@11:51:03 |       |  |     |
| 1202042918 MSD                            | 1 | 62 | 99.6          | 4.76     | 2/23/2010@11:51:57 |       |  |     |
| 246872001                                 | 1 | 63 | -0.922        | 0.0539   | 2/23/2010@11:52:52 |       |  |     |
| 1202042915 DUP                            | 1 | 64 | -0.752        | 0.0618   | 2/23/2010@11:53:45 |       |  |     |
| 1202042917 MS                             | 1 | 65 | 87.7          | 4.21     | 2/23/2010@11:54:39 |       |  |     |
| 1202042919 MSD                            | 1 | 66 | 97.7          | 4.67     | 2/23/2010@11:55:33 |       |  |     |
| 246872002                                 | 1 | 67 | -0.703        | 0.0641   | 2/23/2010@11:56:26 |       |  |     |
| 246872003                                 | 1 | 68 | -0.152        | 0.0899   | 2/23/2010@11:57:19 |       |  |     |
| 246872004                                 | 1 | 69 | -2.08         | -2.27e-4 | 2/23/2010@11:58:12 |       |  |     |
| 246872005                                 | 1 | 70 | -0.139        | 0.0905   | 2/23/2010@11:59:05 |       |  |     |
| WCN100223-03                              | 1 | S3 | 104           | 4.98     | 2/23/2010@11:59:57 |       |  | CCV |
| Known Conc:                               |   |    | 100           |          |                    |       |  |     |
| DQM Test: > + Percent Relative Difference |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | 4.3 < 10.0    |          |                    |       |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| DQM Test: < - Percent Relative Difference |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | 4.3 < 10.0    |          |                    |       |  |     |
| Message                                   |   |    | CCV Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| WCN100223-08                              | 1 | S7 | -1.19         | 0.0412   | 2/23/2010@12:01:48 |       |  | CCB |
| Known Conc:                               |   |    | 0.00          |          |                    |       |  |     |
| DQM Test: > + Concentration Limit         |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | -1.19 < 5.00  |          |                    |       |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| DQM Test: < - Concentration Limit         |   |    |               |          |                    |       |  |     |
| Result:                                   |   |    | -1.19 > -5.00 |          |                    |       |  |     |
| Message                                   |   |    | CCB Passed    |          |                    |       |  |     |
| Action                                    |   |    | Continue      |          |                    |       |  |     |
| 246872006                                 | 1 | 71 | -1.15         | 0.0433   | 2/23/2010@12:03:37 |       |  |     |
| 246872007                                 | 1 | 72 | -1.05         | 0.0479   | 2/23/2010@12:04:30 |       |  |     |
| 246872008                                 | 1 | 73 | 0.643         | 0.127    | 2/23/2010@12:05:22 |       |  |     |
| 246881001                                 | 1 | 74 | -2.08         | -1.94e-4 | 2/23/2010@12:06:14 |       |  |     |
| 246881002                                 | 1 | 75 | -0.602        | 0.0689   | 2/23/2010@12:07:07 |       |  |     |
| 246881003                                 | 1 | 76 | -0.887        | 0.0555   | 2/23/2010@12:08:01 |       |  |     |
| 246881004                                 | 1 | 77 | -0.0611       | 0.0942   | 2/23/2010@12:08:55 |       |  |     |
| 246881005                                 | 1 | 78 | 0.768         | 0.133    | 2/23/2010@12:09:49 |       |  |     |
| 246881006                                 | 1 | 79 | -0.774        | 0.0608   | 2/23/2010@12:10:43 |       |  |     |
| 246881007                                 | 1 | 80 | -0.623        | 0.0678   | 2/23/2010@12:11:37 |       |  |     |
| WCN100223-03                              | 1 | S3 | 105           | 5.00     | 2/23/2010@12:12:29 |       |  | CCV |
| Known Conc:                               |   |    | 100           |          |                    |       |  |     |
| DQM Test: > + Percent Relative Difference |   |    |               |          |                    |       |  |     |

|   |   |             |               |        |                    |       |     |
|---|---|-------------|---------------|--------|--------------------|-------|-----|
|   |   | Result:     | 4.7 < 10.0    |        |                    |       |     |
|   |   | Message     | CCV Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| DQM Test: < - Percent Relative Difference |   |             |               |        |                    |       |     |
|   |   | Result:     | 4.7 < 10.0    |        |                    |       |     |
|   |   | Message     | CCV Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| WCN100223-08                              | 1 | S7          | -1.05         | 0.0478 | 2/23/2010@12:14:20 |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |       |     |
| DQM Test: > + Concentration Limit         |   |             |               |        |                    |       |     |
|   |   | Result:     | -1.05 < 5.00  |        |                    |       |     |
|   |   | Message     | CCB Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| DQM Test: < - Concentration Limit         |   |             |               |        |                    |       |     |
|   |   | Result:     | -1.05 > -5.00 |        |                    |       |     |
|   |   | Message     | CCB Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| 246881008                                 | 1 | 81          | -0.812        | 0.0590 | 2/23/2010@12:16:10 |       |     |
| 246881009                                 | 1 | 82          | -0.213        | 0.0871 | 2/23/2010@12:17:03 |       |     |
| 246881010                                 | 1 | 83          | 1.65          | 0.174  | 2/23/2010@12:17:56 |       |     |
| 246881011                                 | 1 | 84          | -1.44         | 0.0294 | 2/23/2010@12:18:49 |       |     |
| 1202046152 954516 MSD                     | 1 | 10          | 82.2          | 3.95   | 2/23/2010@12:19:42 |       |     |
| 1202046158 954519 MB                      | 1 | 85          | -1.23         | 0.0392 | 2/23/2010@12:20:35 |       |     |
| 1202046165 LCS                            | 1 | 86          | 27.6          | 1.39   | 2/23/2010@12:21:28 | 25.00 |     |
| 247084001                                 | 1 | 87          | -0.732        | 0.0627 | 2/23/2010@12:22:20 |       |     |
| 247084002                                 | 1 | 88          | -1.03         | 0.0489 | 2/23/2010@12:23:13 |       |     |
| 247126001                                 | 1 | 89          | -1.40         | 0.0313 | 2/23/2010@12:24:06 |       |     |
| WCN100223-03                              | 1 | S3          | 105           | 5.02   | 2/23/2010@12:24:58 |       | CCV |
|   |   | Known Conc: | 100           |        |                    |       |     |
| DQM Test: > + Percent Relative Difference |   |             |               |        |                    |       |     |
|   |   | Result:     | 5.1 < 10.0    |        |                    |       |     |
|   |   | Message     | CCV Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| DQM Test: < - Percent Relative Difference |   |             |               |        |                    |       |     |
|   |   | Result:     | 5.1 < 10.0    |        |                    |       |     |
|   |   | Message     | CCV Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| WCN100223-08                              | 1 | S7          | -1.23         | 0.0392 | 2/23/2010@12:26:48 |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |       |     |
| DQM Test: > + Concentration Limit         |   |             |               |        |                    |       |     |
|   |   | Result:     | -1.23 < 5.00  |        |                    |       |     |
|   |   | Message     | CCB Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| DQM Test: < - Concentration Limit         |   |             |               |        |                    |       |     |
|   |   | Result:     | -1.23 > -5.00 |        |                    |       |     |
|   |   | Message     | CCB Passed    |        |                    |       |     |
|   |   | Action      | Continue      |        |                    |       |     |
| 247126002                                 | 1 | 90          | -1.37         | 0.0329 | 2/23/2010@12:28:37 |       |     |
| 247126003                                 | 1 | 91          | -0.806        | 0.0593 | 2/23/2010@12:29:32 |       |     |
| 247136001                                 | 1 | 92          | -0.846        | 0.0574 | 2/23/2010@12:30:26 |       |     |
| 247136002                                 | 1 | 93          | -1.49         | 0.0274 | 2/23/2010@12:31:21 |       |     |
| 247141001                                 | 1 | 94          | -1.44         | 0.0296 | 2/23/2010@12:32:16 |       |     |
| 247141002                                 | 1 | 95          | -1.10         | 0.0454 | 2/23/2010@12:33:09 |       |     |
| 247141003                                 | 1 | 96          | 1.05          | 0.146  | 2/23/2010@12:34:03 |       |     |
| 247186001                                 | 1 | 97          | -1.11         | 0.0450 | 2/23/2010@12:34:58 |       |     |
| 1202046159 DUP                            | 1 | 98          | -0.879        | 0.0558 | 2/23/2010@12:35:51 |       |     |
| 1202046161 MS                             | 1 | 99          | 99.4          | 4.76   | 2/23/2010@12:36:44 |       |     |
| WCN100223-03                              | 1 | S3          | 104           | 4.98   | 2/23/2010@12:37:37 |       | CCV |
|   |   | Known Conc: | 0.00          |        |                    |       |     |
| WCN100223-08                              | 1 | S7          | -1.26         | 0.0382 | 2/23/2010@12:38:31 |       | CCB |
|   |   | Known Conc: | 0.00          |        |                    |       |     |
| 1202046163 MSD                            | 1 | 100         | 82.4          | 3.96   | 2/23/2010@12:39:24 |       |     |
| 247186002                                 | 1 | 101         | -0.608        | 0.0685 | 2/23/2010@12:40:17 |       |     |
| 1202046160 DUP                            | 1 | 102         | -1.18         | 0.0415 | 2/23/2010@12:41:10 |       |     |
| 1202046162 MS                             | 1 | 103         | 99.3          | 4.75   | 2/23/2010@12:42:03 |       |     |
| 1202046164 MSD                            | 1 | 104         | 99.5          | 4.76   | 2/23/2010@12:42:55 |       |     |
| 247186003                                 | 1 | 105         | -0.780        | 0.0605 | 2/23/2010@12:43:49 |       |     |
| 247186004                                 | 1 | 106         | 0.0465        | 0.0992 | 2/23/2010@12:44:43 |       |     |



|   |   |     |               |          |                    |  |     |
|---|---|-----|---------------|----------|--------------------|--|-----|
| 247186005                                 | 1 | 107 | -0.959        | 0.0521   | 2/23/2010@12:45:38 |  |     |
| 247186006                                 | 1 | 108 | -0.485        | 0.0743   | 2/23/2010@12:46:32 |  |     |
| 247186007                                 | 1 | 109 | -1.06         | 0.0473   | 2/23/2010@12:47:26 |  |     |
| WCN100223-03                              | 1 | S3  | 103           | 4.95     | 2/23/2010@12:48:19 |  | CCV |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| WCN100223-08                              | 1 | S7  | -1.16         | 0.0425   | 2/23/2010@12:49:13 |  | CCB |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| 247186008                                 | 1 | 110 | -1.30         | 0.0360   | 2/23/2010@12:50:07 |  |     |
| 247186009                                 | 1 | 111 | -0.542        | 0.0716   | 2/23/2010@12:51:01 |  |     |
| 247186010                                 | 1 | 112 | -0.994        | 0.0504   | 2/23/2010@12:51:56 |  |     |
| 1202046185 954529 MB                      | 1 | 113 | -1.55         | 0.0242   | 2/23/2010@12:52:50 |  |     |
| 1202046192 LCS                            | 1 | 114 | 52.8          | 2.57     | 2/23/2010@12:53:43 |  |     |
| 246983002                                 | 1 | 115 | -1.39         | 0.0319   | 2/23/2010@12:54:37 |  |     |
| 247036005                                 | 1 | 116 | 0.513         | 0.121    | 2/23/2010@12:55:30 |  |     |
| 1202046186 DUP                            | 1 | 117 | -1.91         | 0.00766  | 2/23/2010@12:56:23 |  |     |
| 1202046188 MS                             | 1 | 118 | 93.0          | 4.45     | 2/23/2010@12:57:17 |  |     |
| 1202046190 MSD                            | 1 | 119 | 105           | 5.03     | 2/23/2010@12:58:09 |  |     |
| WCN100223-03                              | 1 | S3  | 104           | 4.96     | 2/23/2010@12:59:01 |  | CCV |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| WCN100223-08                              | 1 | S7  | -1.46         | 0.0288   | 2/23/2010@12:59:56 |  | CCB |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| 247039001                                 | 1 | 120 | -1.15         | 0.0433   | 2/23/2010@13:00:48 |  |     |
| 247039002                                 | 1 | 121 | -1.35         | 0.0338   | 2/23/2010@13:01:43 |  |     |
| 247039003                                 | 1 | 122 | -1.24         | 0.0391   | 2/23/2010@13:02:39 |  |     |
| 247039004                                 | 1 | 123 | -1.49         | 0.0273   | 2/23/2010@13:03:33 |  |     |
| 247092001                                 | 1 | 124 | -2.07         | 2.59e-4  | 2/23/2010@13:04:27 |  |     |
| 247098001                                 | 1 | 125 | -2.08         | -2.07e-4 | 2/23/2010@13:05:21 |  |     |
| 247098002                                 | 1 | 126 | -1.26         | 0.0378   | 2/23/2010@13:06:15 |  |     |
| 247098003                                 | 1 | 127 | -1.54         | 0.0247   | 2/23/2010@13:07:10 |  |     |
| 247098004                                 | 1 | 128 | -1.58         | 0.0230   | 2/23/2010@13:08:04 |  |     |
| 247109001                                 | 1 | 129 | -1.47         | 0.0281   | 2/23/2010@13:08:58 |  |     |
| WCN100223-03                              | 1 | S3  | 103           | 4.94     | 2/23/2010@13:09:50 |  | CCV |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| WCN100223-08                              | 1 | S7  | -0.806        | 0.0593   | 2/23/2010@13:10:44 |  | CCB |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| 247109002                                 | 1 | 130 | -1.40         | 0.0315   | 2/23/2010@13:11:38 |  |     |
| 1202046187 DUP                            | 1 | 131 | -1.64         | 0.0200   | 2/23/2010@13:12:31 |  |     |
| 1202046189 MS                             | 1 | 132 | 108           | 5.17     | 2/23/2010@13:13:25 |  |     |
| 1202046191 MSD                            | 1 | 133 | 86.4          | 4.14     | 2/23/2010@13:14:18 |  |     |
| 247127001                                 | 1 | 134 | -1.37         | 0.0327   | 2/23/2010@13:15:11 |  |     |
| 247139001                                 | 1 | 135 | -1.34         | 0.0342   | 2/23/2010@13:16:04 |  |     |
| 247179001                                 | 1 | 136 | -2.08         | -2.07e-4 | 2/23/2010@13:16:59 |  |     |
| 247182001                                 | 1 | 137 | -1.43         | 0.0303   | 2/23/2010@13:17:54 |  |     |
| 247183001                                 | 1 | 138 | -1.38         | 0.0326   | 2/23/2010@13:18:48 |  |     |
| 247192001                                 | 1 | 139 | -1.93         | 0.00645  | 2/23/2010@13:19:43 |  |     |
| WCN100223-03                              | 1 | S3  | 104           | 4.98     | 2/23/2010@13:20:35 |  | CCV |
| Known Conc:                               |   |     | 100           |          |                    |  |     |
| DQM Test: > + Percent Relative Difference |   |     |               |          |                    |  |     |
| Result:                                   |   |     | 4.2 < 10.0    |          |                    |  |     |
| Message                                   |   |     | CCV Passed    |          |                    |  |     |
| Action                                    |   |     | Continue      |          |                    |  |     |
| DQM Test: < - Percent Relative Difference |   |     |               |          |                    |  |     |
| Result:                                   |   |     | 4.2 < 10.0    |          |                    |  |     |
| Message                                   |   |     | CCV Passed    |          |                    |  |     |
| Action                                    |   |     | Continue      |          |                    |  |     |
| WCN100223-08                              | 1 | S7  | -1.39         | 0.0321   | 2/23/2010@13:22:26 |  | CCB |
| Known Conc:                               |   |     | 0.00          |          |                    |  |     |
| DQM Test: > + Concentration Limit         |   |     |               |          |                    |  |     |
| Result:                                   |   |     | -1.39 < 5.00  |          |                    |  |     |
| Message                                   |   |     | CCB Passed    |          |                    |  |     |
| Action                                    |   |     | Continue      |          |                    |  |     |
| DQM Test: < - Concentration Limit         |   |     |               |          |                    |  |     |
| Result:                                   |   |     | -1.39 > -5.00 |          |                    |  |     |
| Message                                   |   |     | CCB Passed    |          |                    |  |     |
| Action                                    |   |     | Continue      |          |                    |  |     |
| 1202049704 955981 MB                      | 1 | 140 | -2.06         | 4.71e-4  | 2/23/2010@13:24:16 |  |     |
| 1202049711 LCS                            | 1 | 141 | 54.3          | 2.64     | 2/23/2010@13:25:10 |  |     |
| 246941002                                 | 1 | 142 | -1.47         | 0.0283   | 2/23/2010@13:26:05 |  |     |

|   |     |   |     |               |         |                    |  |      |     |
|---|-----|---|-----|---------------|---------|--------------------|--|------|-----|
| 1202049705                                | DUP | 1 | 143 | -2.02         | 0.00224 | 2/23/2010@13:26:59 |  |      |     |
| 1202049707                                | MS  | 1 | 144 | 108           | 5.14    | 2/23/2010@13:27:53 |  |      |     |
| 1202049709                                | MSD | 1 | 145 | 115           | 5.47    | 2/23/2010@13:28:47 |  |      |     |
| 247203001                                 |     | 1 | 146 | -1.26         | 0.0380  | 2/23/2010@13:29:41 |  |      |     |
| 1202049706                                | DUP | 1 | 147 | -2.03         | 0.00182 | 2/23/2010@13:30:34 |  |      |     |
| 1202049708                                | MS  | 1 | 148 | 109           | 5.22    | 2/23/2010@13:31:28 |  |      |     |
| 1202049710                                | MSD | 1 | 149 | 102           | 4.89    | 2/23/2010@13:32:21 |  |      |     |
| WCN100223-03                              |     | 1 | S3  | 104           | 4.99    | 2/23/2010@13:33:13 |  |      | CCV |
| Known Conc:                               |     |   |     | 100           |         |                    |  |      |     |
| DQM Test: > + Percent Relative Difference |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | 4.3 < 10.0    |         |                    |  |      |     |
| Message                                   |     |   |     | CCV Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| DQM Test: < - Percent Relative Difference |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | 4.3 < 10.0    |         |                    |  |      |     |
| Message                                   |     |   |     | CCV Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| WCN100223-08                              |     | 1 | S7  | -1.25         | 0.0385  | 2/23/2010@13:35:03 |  |      | CCB |
| Known Conc:                               |     |   |     | 0.00          |         |                    |  |      |     |
| DQM Test: > + Concentration Limit         |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | -1.25 < 5.00  |         |                    |  |      |     |
| Message                                   |     |   |     | CCB Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| DQM Test: < - Concentration Limit         |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | -1.25 > -5.00 |         |                    |  |      |     |
| Message                                   |     |   |     | CCB Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| 247204001                                 |     | 1 | 150 | 3.39          | 0.256   | 2/23/2010@13:36:52 |  |      |     |
| 247244001                                 |     | 1 | 151 | 2.20          | 0.200   | 2/23/2010@13:37:47 |  |      |     |
| 247250001                                 |     | 1 | 152 | -1.65         | 0.0198  | 2/23/2010@13:38:42 |  |      |     |
| 247250002                                 |     | 1 | 153 | -1.43         | 0.0302  | 2/23/2010@13:39:37 |  |      |     |
| 247256001                                 |     | 1 | 154 | -1.39         | 0.0317  | 2/23/2010@13:40:32 |  |      |     |
| 247256002                                 |     | 1 | 155 | -1.28         | 0.0369  | 2/23/2010@13:41:27 |  |      |     |
| 247273001                                 |     | 1 | 156 | 247           | 11.7    | 2/23/2010@13:42:22 |  |      |     |
| 247322001                                 |     | 1 | 157 | -1.24         | 0.0389  | 2/23/2010@13:43:15 |  |      |     |
| 247322002                                 |     | 1 | 158 | -1.40         | 0.0314  | 2/23/2010@13:44:09 |  |      |     |
| 247335001                                 |     | 1 | 159 | -1.39         | 0.0318  | 2/23/2010@13:45:04 |  |      |     |
| WCN100223-03                              |     | 1 | S3  | 105           | 5.01    | 2/23/2010@13:45:56 |  |      | CCV |
| Known Conc:                               |     |   |     | 100           |         |                    |  |      |     |
| DQM Test: > + Percent Relative Difference |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | 4.9 < 10.0    |         |                    |  |      |     |
| Message                                   |     |   |     | CCV Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| DQM Test: < - Percent Relative Difference |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | 4.9 < 10.0    |         |                    |  |      |     |
| Message                                   |     |   |     | CCV Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| WCN100223-08                              |     | 1 | S7  | -1.55         | 0.0242  | 2/23/2010@13:47:47 |  |      | CCB |
| Known Conc:                               |     |   |     | 0.00          |         |                    |  |      |     |
| DQM Test: > + Concentration Limit         |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | -1.55 < 5.00  |         |                    |  |      |     |
| Message                                   |     |   |     | CCB Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| DQM Test: < - Concentration Limit         |     |   |     |               |         |                    |  |      |     |
| Result:                                   |     |   |     | -1.55 > -5.00 |         |                    |  |      |     |
| Message                                   |     |   |     | CCB Passed    |         |                    |  |      |     |
| Action                                    |     |   |     | Continue      |         |                    |  |      |     |
| 247339001                                 |     | 1 | 160 | -1.25         | 0.0386  | 2/23/2010@13:49:37 |  |      |     |
| 247339002                                 |     | 1 | 161 | -2.07         | 1.64e-4 | 2/23/2010@13:50:31 |  |      |     |
| 247350001                                 |     | 1 | 162 | 1.51          | 0.168   | 2/23/2010@13:51:25 |  |      |     |
| 247434001                                 |     | 1 | 163 | -1.33         | 0.0346  | 2/23/2010@13:52:18 |  |      |     |
| 247434002                                 |     | 1 | 164 | -0.955        | 0.0523  | 2/23/2010@13:53:12 |  |      |     |
| 247559001                                 |     | 1 | 165 | -1.30         | 0.0363  | 2/23/2010@13:54:05 |  |      |     |
| 247560001                                 |     | 1 | 166 | -1.67         | 0.0188  | 2/23/2010@13:55:00 |  |      |     |
| 247567001                                 |     | 1 | 167 | -1.26         | 0.0379  | 2/23/2010@13:55:56 |  |      |     |
| 247273001                                 |     | 1 | 156 | 131           | 6.22    | 2/23/2010@13:56:50 |  | 2.00 |     |
| WCN100223-03                              |     | 1 | S3  | 105           | 5.02    | 2/23/2010@13:57:43 |  |      | CCV |
| Known Conc:                               |     |   |     | 100           |         |                    |  |      |     |

|   |   |               |       |        |                    |     |
|---|---|---------------|-------|--------|--------------------|-----|
| DQM Test: > + Percent Relative Difference |   |               |       |        |                    |     |
| Result:                                   |   | 5.1 < 10.0    |       |        |                    |     |
| Message                                   |   | CCV Passed    |       |        |                    |     |
| Action                                    |   | Continue      |       |        |                    |     |
| DQM Test: < - Percent Relative Difference |   |               |       |        |                    |     |
| Result:                                   |   | 5.1 < 10.0    |       |        |                    |     |
| Message                                   |   | CCV Passed    |       |        |                    |     |
| Action                                    |   | Continue      |       |        |                    |     |
| WCN100223-08                              | 1 | S7            | -1.21 | 0.0401 | 2/23/2010@13:59:33 | CCB |
| Known Conc:                               |   | 0.00          |       |        |                    |     |
| DQM Test: > + Concentration Limit         |   |               |       |        |                    |     |
| Result:                                   |   | -1.21 < 5.00  |       |        |                    |     |
| Message                                   |   | CCB Passed    |       |        |                    |     |
| Action                                    |   | Continue      |       |        |                    |     |
| DQM Test: < - Concentration Limit         |   |               |       |        |                    |     |
| Result:                                   |   | -1.21 > -5.00 |       |        |                    |     |
| Message                                   |   | CCB Passed    |       |        |                    |     |
| Action                                    |   | Continue      |       |        |                    |     |

Analyte Properties Table for OM\_2-23-2010\_11-19-05.OMN

| Property              | Channel 1<br>TCYANIDE |
|-----------------------|-----------------------|
| Concentration Units   | ug/L                  |
| Callibration Fit Type | First Order           |
| Clear Calibration     | True                  |
| Force Through Zero    | False                 |
| Calibration Weighting | None                  |
| Auto Dilution Trigger | True                  |
| % of High Standard    | 100                   |
| Quik Chem Method      | 10-204-00-1-A         |
| Chemistry             | Direct/Bipolar        |
| Calibration by Height | False                 |
| Inject to Peak Start  | 22                    |
| Peak Base Width       | 39                    |

### Channel 1: Current View

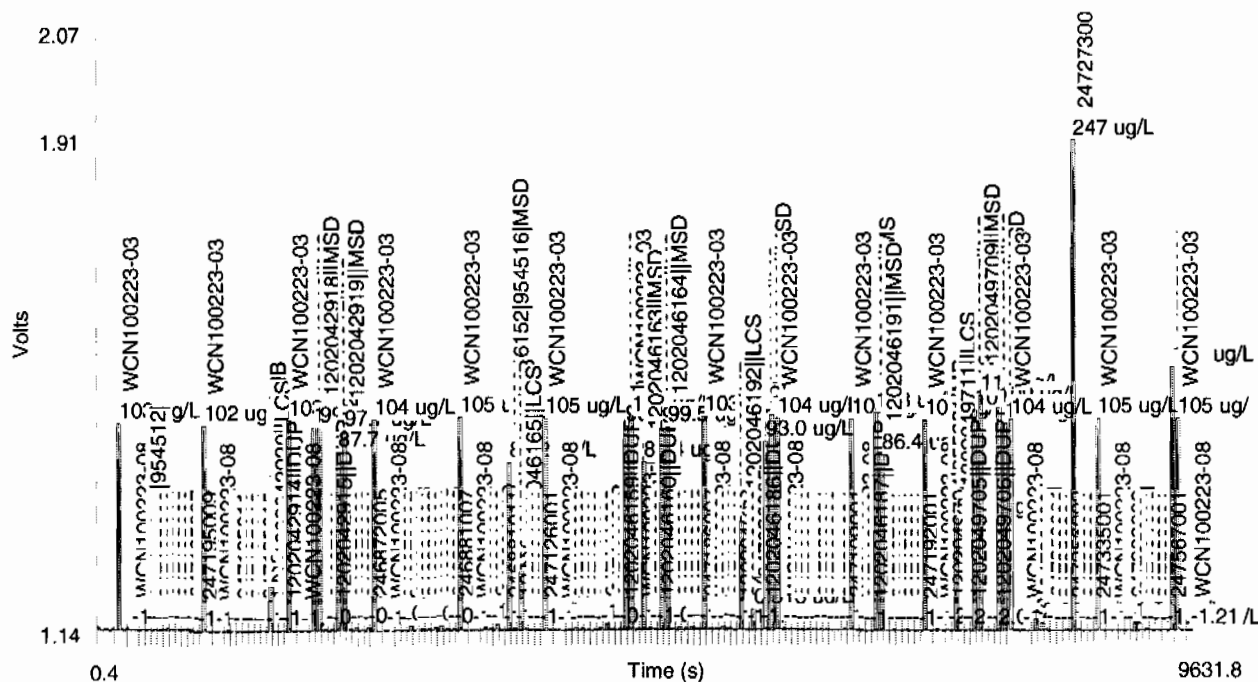
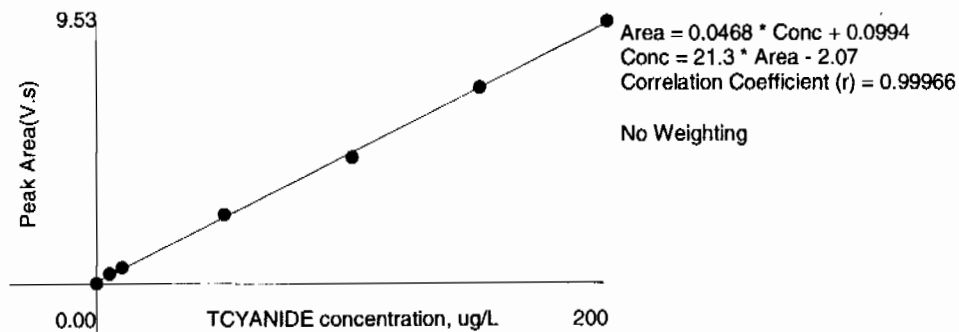


Table 1: TCYANIDE

|   | Conc. (ug/L) | Rep | Peak Area (Volt-s) | Peak Height (Volts) | % Residual | Detection Date | Detection Time |
|---|--------------|-----|--------------------|---------------------|------------|----------------|----------------|
| 1 | 200          | 1   | 9.53               | 0.622               | -0.6       | 2/23/2010      | 10:08:00       |
| 2 | 150          | 1   | 7.13               | 0.468               | -0.1       | 2/23/2010      | 10:08:52       |
| 3 | 100          | 1   | 4.60               | 0.301               | 3.8        | 2/23/2010      | 10:09:44       |
| 4 | 50.0         | 1   | 2.53               | 0.167               | -3.7       | 2/23/2010      | 10:10:37       |
| 5 | 10.0         | 1   | 0.617              | 0.0399              | -8.7       | 2/23/2010      | 10:11:31       |
| 6 | 5.00         | 1   | 0.385              | 0.0238              | -15.5      | 2/23/2010      | 10:12:24       |
| 7 | 0.00         | 1   | 0.0245             | 0.00128             |            | 2/23/2010      | 10:13:19       |

**Figure 1: TCYANIDE**



# Miscellaneous

### DATA EXCEPTION REPORT

|  |                                     |   |                                   |
|--|-------------------------------------|---|-----------------------------------|
| <b>Mo.Day Yr.</b><br>23-FEB-10   | <b>Division:</b><br>Industrial      | <b>Quality Criteria:</b><br>Specifications  | <b>Type:</b><br>Process           |
| <b>Instrument Type:</b><br>LACHAT Flow Injection Analyzer  | <b>Test / Method:</b><br>EPA 335.4  | <b>Matrix Type:</b><br>Liquid   | <b>Client Code:</b><br>ESHL, LANL |
| <b>Batch ID:</b><br>954529   | <b>Sample Numbers:</b><br>See Below |   |                                   |
| <p><b>Potentially affected work order(s)(SDG):</b> 246983(10-1812-1),247036(10-1826),247039(10-1819),247092(10-1831-1),247098(10-1833-1),247109(10-1837-1),247127(10-1849-1),247139(10-1854-1),247179(10-1871),247182(10-1861-1),247183(10-1868),247192(10-1863-1)</p> <p><b>Application Issues:</b></p> <p>Failed RPD for MS/MSD, or PS/PSD</p> |                                     |   |                                   |
| <b>Specification and Requirements Exception Description:</b>   |                                     | <b>DER Disposition:</b>   |                                   |
| <p>1. Failed RPD for MS/MSD:</p> <p>QC 1202046189MS</p> <p>1202046191MSD</p>   |                                     | <p>1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.</p> |                                   |

**Originator's Name:**

Ashley Earl

23-FEB-10

**Data Validator/Group Leader:**

Elzbieta Szulc

05-MAR-10