

Tuesday, February 23, 2010

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REQUEST NUMBER: 10-2010

**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: 10-2010

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/23/2010

TURNAROUND/REPORT DUE: 3/25/2010

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-846:6020 | | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |

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REQUEST NUMBER: 10-2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|-------------|-------------|-------|--------------|---------------|--------------|----------------------|
| SW-846;6850 | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |

Tuesday, February 23, 2010

REQUEST NUMBER: 10-2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|--------------|-------------|-------|--------------|---------------|--------------|----------------------|
| SW-846:6850 | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| SW-846:7471A | | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| SW-846:9012A | | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |

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| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|--------------|-------------|-------|--------------|---------------|--------------|----------------------|
| SW-846:9012A | | | | | | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2010

LOS ALAMOS

REQUEST NUMBER: 10-2010

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/25/2010

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 |
|--------------|------|-----------|---------------|---------|--------|
| RE15-10-7896 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7894 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7900 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7898 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7897 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7895 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7899 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7893 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8011 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8004 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8009 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8003 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8007 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8002 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8010 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8006 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8001 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8012 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8008 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8005 | 1 | POLY | Met+U+CLO4+CN | Ice | R |

Relinquished By:

Date

Time

Received By:

Date

Time

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: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7893

WORK ORDER:

| AS PLANNED | | AS COLLECTED | AS PLANNED | | AS COLLECTED |
|-----------------------------|-----------|--------------|--------------------------|--------|----------------------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | MEDIA: | QBT3 | 11m 21/18/10 ATT SED |
| TIME COLLECTED (HH:MM) | | 0916 | SUB-MEDIA: | TUFF 1 | NA |
| PRS ID: | 15-008(b) | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 15-610716 | ↓ | FIELD QC TYPE: | NA | ↓ |
| LOCATION TYPE: | GENERIC | ↓ | FIELD PREP: | NA | ↓ |
| TOP DEPTH: | 0 | 0.0 | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | 0 | 0.5 | SCREEN/PORT DESC: | | NA |
| FIELD MATRIX: | R | SED | EXCAVATED: YES/NO/NA | | |
| COMPOSITE TYPE: | NA | | COMPOSITE TIME INTERVAL: | NA | |
| | | | WATER FLOWING: YES/NO/NA | | |
| BOREHOLE: YES/NO/NA | | | BOREHOLE DECLINATION: | NA | |
| | | | BOREHOLE DIRECTION: | NA | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+C N | 1 GAL POLY IL PS 01-11-10 | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown frozen silty sand, pine needles

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-6, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative


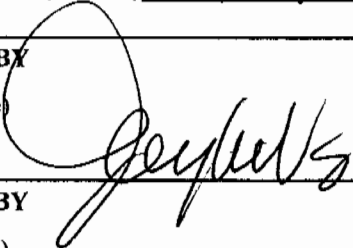
Alpha \leq 11 dpm
Beta/Gamma \leq 1755 dpm

PID $\frac{\text{Ambient Reading}}{2.1} = \frac{0.0}{2.1}$ ppm

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT) Jon Roberson

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature)  | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature)  | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7894

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|--|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 0930 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: 15-008(b) | | OK | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: 15-610716 | | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: GENERIC | | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: 0 | | 1.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: 0 | | 2.0 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: R | | SED | | EXCAVATED: YES/NO/NA | | NA | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | NA | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | NA | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 1L RS 01-11-10 | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown moist sand, some tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-6 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 5 dpm
Beta/Gamma \leq 1617 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{1.3}$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) <i>Jeyle W</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7895

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | QBT3 | | SED |
| TIME COLLECTED (HH:MM) | | 1307 | | SUB-MEDIA: | TUFF 1 | | NA |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 15-610717 | | | FIELD QC TYPE: | NA | | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | NA | | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: | INV | | ↓ |
| BOTTOM DEPTH: | 0 | 0.5 | | SCREEN/PORT DESC: | | | NA |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: | NA | | | COMPOSITE TIME INTERVAL: | NA | | WATER FLOWING: YES/NO/NA |
| BOREHOLE: YES/NO/NA | | | | BOREHOLE DECLINATION: | NA | | BOREHOLE DIRECTION: NA |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY IL RS 01-11-10 | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC: Brown sand, roots

FD: RE15-10-8065

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-17, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 27 dpmBeta/Gamma \leq 2130 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Lorey A Lopez

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) TLMcFarland (Signature) <i>Tracy McFarland</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <i>Jeydel</i> (Signature) <i>Jeydel</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7896

WORK ORDER:

| AS PLANNED | | AS COLLECTED | AS PLANNED | | AS COLLECTED |
|-----------------------------|-----------|--------------|--------------------------|--------|--------------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | MEDIA: | QBT3 | OK |
| TIME COLLECTED (HH:MM) | | 1315 | SUB-MEDIA: | TUFF 1 | ↓ |
| PRS ID: | 15-008(b) | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 15-610717 | ↓ | FIELD QC TYPE: | NA | ↓ |
| LOCATION TYPE: | GENERIC | ↓ | FIELD PREP: | NA | ↓ |
| TOP DEPTH: | 0 | 1.0 | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | 0 | 2.0 | SCREEN/PORT DESC: | | NA |
| FIELD MATRIX: | R | R | EXCAVATED: YES/NO/NA | | |
| COMPOSITE TYPE: | NA | | COMPOSITE TIME INTERVAL: | NA | |
| | | | WATER FLOWING: YES/NO/NA | | |
| BOREHOLE: YES/NO/NA | | | BOREHOLE DECLINATION: | NA | |
| | | | BOREHOLE DIRECTION: | NA | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 1L RS 01-11-10 | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-17

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 27 dpm
Beta/Gamma ≤ 2290 dpm

PID $\frac{\text{Ambient Reading}}{0.6} \text{ ppm}$

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Lacey A. Lopez

| | | | |
|--|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) TLMcFarland (Signature) Tracy R. F. | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) [Signature] | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7897

WORK ORDER:

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|-----------------------------|------------|--------------|-----------------------------|------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | MEDIA: | QBT3 | SED |
| TIME COLLECTED(HH:MM) | | 1334 | SUB-MEDIA: | TUFF 1 | NA |
| PRS ID: 15-008(b) | | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: 15-610718 | | ↓ | FIELD QC TYPE: | NA | ↓ |
| LOCATION TYPE: GENERIC | | ↓ | FIELD PREP: | NA | ↓ |
| TOP DEPTH: 0 | | 0.0 | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: 0 | | 0.5 | SCREEN/PORT DESC: | | NA |
| FIELD MATRIX: R | | SED | EXCAVATED: YES/NO/NA | | |
| COMPOSITE TYPE: NA | | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA |
| BOREHOLE: YES/NO/NA | | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 1L RS 01-11-10 | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

moist brown silty clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 44 dpm
Beta/Gamma = 2020 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.3}$ ppm

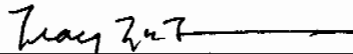
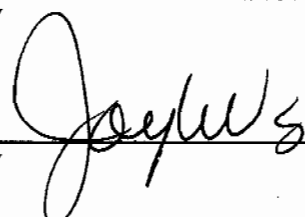
HE = NEG(-)

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Lorenz A. Lopez

| | | | |
|---|-----------|--|-----------|
| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
| (Printed Name) TL McFarland | 2/18/10 | (Printed Name) | 2/18/10 |
| (Signature)  | 1650 | (Signature)  | 1650 |
| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
| (Printed Name) | | (Printed Name) | |
| (Signature) | | (Signature) | |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7898

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|--|--|-----------------------------|--|---|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 1347 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: 15-008(b) | | OK | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: 15-610718 | | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: GENERIC | | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: 0 | | 1.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: 0 | | 2.0 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: R | | SED | | EXCAVATED: YES / <input checked="" type="radio"/> NO / NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES / <input checked="" type="radio"/> NO / NA | | | |
| BOREHOLE: YES / <input checked="" type="radio"/> NO / NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+C N | 1 GAL POLY 1L RS 01-11-10 | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

moist dark brown sand, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b - 11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 1997 dpm

PID $\frac{\text{Ambient Reading}}{1.6} = \frac{0.0}{1.6}$ ppm

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

Larry A. Lopez

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) TLMCFarland (Signature) <i>TLMCFarland</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7899

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 1430 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: | 15-610719 | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: | 0 | 0.5 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES/NO/NA | | NO/NA | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | NO/NA | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 L POLY IL RS 01-11-10 | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-1 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpmBeta/Gamma \leq 1955 dpmPID $\frac{\text{Ambient Reading}}{0.1} = \frac{0.0}{0.1}$ ppm


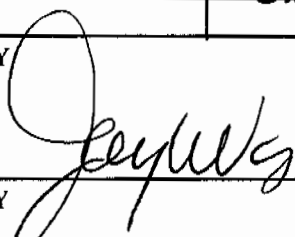
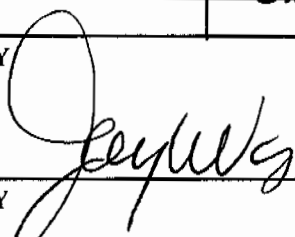
HE neg

COLLECTED BY (PRINT)

ThMcFarlane

REVIEWED BY (PRINT)

Riley Ewms

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Riley Ewms (Signature)  | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name)  (Signature)  | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7900

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|--|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 1445 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: 15-008(b) | | ok | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: 15-610719 | | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: GENERIC | | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: 0 | | 1.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: 0 | | 1.5 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: R | | R | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|-------------------------------|--------------|---------------|----------------------|
| 1 | Normal | 8082+NMED-HEXP | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 L POLY IL RS 01-11-10 | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 18.7 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{0.1} \text{ ppm}$

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

Lorey A. Lopez

| | | | |
|--|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) <u>Riley Gourd</u> (Signature) <u>[Signature]</u> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <u>[Signature]</u> (Signature) <u>[Signature]</u> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8001

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|----------------------|-----------------------|-----------------------|--------------------------|--------|--------------|--------------------------|
| DATE COLLECTED(MM/DD/YYYY): | <i>7m</i> 2/18/10 | 02/18/2010 | 02/10/2010 | MEDIA: | OBT3 | | SED |
| TIME COLLECTED (HH:MM) | | 0956 | | SUB-MEDIA: | TUFF 1 | | NA |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 15-610770 | ↓ | | FIELD QC TYPE: | NA | | ↓ |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | NA | | ↓ |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: | INV | | ↓ |
| BOTTOM DEPTH: | 0 | 0.8 | | SCREEN/PORT DESC: | | | NA |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: | NA | | | COMPOSITE TIME INTERVAL: | NA | | WATER FLOWING: YES/NO/NA |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: | NA | BOREHOLE DIRECTION: | NA | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+C N | 1 GAL POLY 1 liter 1/11/10 | Ice | Y | |
| 1 | ↓ | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

7m 2/18/10
Brown frozen ~~now~~ silty sand, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-20, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 2330 dpm

HE negative

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|--|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>[Signature]</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) <i>[Signature]</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8002

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: QBT3 | | ok | |
| TIME COLLECTED (HH:MM) | | 1012 | | SUB-MEDIA: TUFF 1 | | ↓ | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: HA | | ok | |
| LOCATION ID: | 15-610770 | ↓ | | FIELD QC TYPE: NA | | ↓ | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: NA | | ↓ | |
| TOP DEPTH: | 0 | 1.0 | | SAMPLE USAGE: INV | | ↓ | |
| BOTTOM DEPTH: | 0 | 2.0 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | R | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+C N | 1 GAL POLY 1 liter 1/11/10 xc | Ice | Y | |
| 1 | ↓ | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Gray, tuft and brown silty sand, some roots

SAMPLE COMMENTS:

Tuft at 1.5 ft

LOCATION DESC:

8b-20, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 38 dpm
Beta/Gamma \leq 2020 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{12.7}$ ppm

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>Sherri Sherwood</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8003

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: QBT3 | | SED | |
| TIME COLLECTED (HH:MM) | | 1002 | | SUB-MEDIA: TUFF 1 | | NA | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: HA | | ok | |
| LOCATION ID: | 15-610771 | ↓ | | FIELD QC TYPE: NA | | ↓ | |
| LOCATION TYPE: | GENERIC | | | FIELD PREP: NA | | | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: INV | | ↓ | |
| BOTTOM DEPTH: | 0 | 0.5 | | SCREEN/PORT DESC: | | | |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES/NO/NA | | NA | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 11 liter 1/11/10 | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown silty sand, some loamy material, roots, leaves

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-5, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \pm 36 dpm
Beta/Gamma \pm 2420 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{0.0} \text{ppm}$

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>Sherri Sherwood</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8004

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: QBT3 | | Allh | |
| TIME COLLECTED (HH:MM) | | 1624 | | SUB-MEDIA: TUFF 1 | | NA | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: HA | | ok | |
| LOCATION ID: | 15-610771 | ↓ | | FIELD QC TYPE: NA | | ↓ | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: NA | | ↓ | |
| TOP DEPTH: | 0 | 1.0 | | SAMPLE USAGE: INV | | ↓ | |
| BOTTOM DEPTH: | 0 | 2.0 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | S | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|-------------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 11.1 liter 1/11/10 de | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown moist silty sand, roots

SAMPLE COMMENTS:

NA

FR: RE15-10-8089

LOCATION DESC:

8b-5 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 1907 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.7}$ ppm

COLLECTED BY (PRINT)

T. M. C. Farlane

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|--|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>[Signature]</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <i>[Signature]</i> (Signature) <i>[Signature]</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8005

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | OBT3 | |
| TIME COLLECTED (HH:MM) | | 1038 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: | 15-610772 | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: | 0 | 0.5 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | S | | EXCAVATED: YES/NO/NA | | NO/NA | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | NO/NA | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 1 liter 1/11/10 | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brownish black silty sand, moist

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b - 21

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha ≤ 5 dpm

Beta/Gamma ≤ 250 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <i>Geyle W</i> (Signature) <i>Geyle W</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8006

WORK ORDER:

| AS PLANNED | | AS COLLECTED | AS PLANNED | | AS COLLECTED |
|-----------------------------|-----------|-----------------------------|--------------------------|--|--------------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | MEDIA: | | OBT3 |
| TIME COLLECTED (HH:MM) | | 1045 | SUB-MEDIA: | | TUFF 1 |
| PRS ID: | 15-008(b) | ok | SAMPLE TECH CODE: | | HA |
| LOCATION ID: | 15-610772 | ↓ | FIELD QC TYPE: | | NA |
| LOCATION TYPE: | GENERIC | ↓ | FIELD PREP: | | NA |
| TOP DEPTH: | 0 | 1.0 | SAMPLE USAGE: | | INV |
| BOTTOM DEPTH: | 0 | 2.0 | SCREEN/PORT DESC: | | NA |
| FIELD MATRIX: | R | S | EXCAVATED: YES/NO/NA | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | WATER FLOWING: YES/NO/NA | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | BOREHOLE DIRECTION: NA | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+C N | 1 GAE POLY 1 liter 1/11/10 LC | Ice | Y | |
| 1 | ↓ | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Tannish brown silty sand,
tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-21

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 11 dpm
Beta/Gamma \leq 2220 dpm

HE neg

PID $\frac{\text{Ambient Reading}}{0.0}$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) <i>Jay Williams</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8007

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|--|-----------|-----------------------------|--|---|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: QBT3 | | SED | |
| TIME COLLECTED (HH:MM) | | 1055 | | SUB-MEDIA: TUFF 1 | | NA | |
| PRS ID: | 15-008(b) | OK | | SAMPLE TECH CODE: HA | | OK | |
| LOCATION ID: | 15-610773 | ↓ | | FIELD QC TYPE: NA | | ↓ | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: NA | | ↓ | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: INV | | ↓ | |
| BOTTOM DEPTH: | 0 | 0.8 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES / <input checked="" type="checkbox"/> NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES / <input checked="" type="checkbox"/> NA | | | |
| BOREHOLE: YES / <input checked="" type="checkbox"/> NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|-----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 11 liter 1/11/10 AC | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown moist silty sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-10 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm
Beta/Gamma = 2010 dpm

HE neg.

PID Ambient 0.0
Reading 0.0 ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|---|------------------------------|
| RELINQUISHED BY: (Printed Name) Jon Roberson (Signature) Jon Roberson | Date/Time 2/18/10 1650 | RECEIVED BY: (Printed Name) (Signature) Jay W 8 | Date/Time 2/18/10 1650 |
| RELINQUISHED BY: (Printed Name) (Signature) | Date/Time | RECEIVED BY: (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8008

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|------|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | QBT3 | | A11h |
| TIME COLLECTED (HH:MM) | | 1135 | | SUB-MEDIA: | TUFF 1 | | NA |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 15-610773 | ↓ | | FIELD QC TYPE: | NA | | ↓ |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | NA | | ↓ |
| TOP DEPTH: | 0 | 1.0 | | SAMPLE USAGE: | INV | | ↓ |
| BOTTOM DEPTH: | 0 | 2.0 | | SCREEN/PORT DESC: | | | NA |
| FIELD MATRIX: | R | S | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: | NA | | | COMPOSITE TIME INTERVAL: | NA | | |
| | | | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | NA | | | BOREHOLE DECLINATION: | NA | | |
| | | | | BOREHOLE DIRECTION: | NA | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|-----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 11 liter 1/11/10 re | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown sandy silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-10 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 11 dpm

Beta/Gamma = 2380 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{6.0}{0.7} \text{ ppm}$

COLLECTED BY (PRINT)

J. McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <i>Jeffrey W. S.</i> (Signature) <i>Jeffrey W. S.</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8009

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|--|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | OBT3 | |
| TIME COLLECTED (HH:MM) | | 1059 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: 15-008(b) | | OK | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: 15-610774 | | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: GENERIC | | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: 0 | | 0.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: 0 | | 0.5 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: R | | SED | | EXCAVATED: YES/NO/NA | | NO | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | NO | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|-----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+CLO4+C N | 1 GAL POLY 11 liter 1/11/10 LC | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown loamy silt, organics

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-22, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 11 dpm
Beta/Gamma \leq 5100 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1050 | RECEIVED BY (Printed Name) (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1050 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8010

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|--------------|--|--------------------------|--------|--------------|----|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | QBT3 | | OK |
| TIME COLLECTED (HH:MM) | | 1105 | | SUB-MEDIA: | TUFF 1 | | ↓ |
| PRS ID: | 15-008(b) | OK | | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 15-610774 | ↓ | | FIELD QC TYPE: | NA | | ↓ |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | NA | | ↓ |
| TOP DEPTH: | 0 | 1.0 | | SAMPLE USAGE: | INV | | ↓ |
| BOTTOM DEPTH: | 0 | 2.0 | | 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: NA BOREHOLE DIRECTION: NA

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|----------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO-PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+CLO4+CN | 1 GAL POLY 1 liter 1/11/10 LC | Ice | Y | |
| 1 | ↓ | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Gray tuff, roots

SAMPLE COMMENTS:

Tuff at 1.0 ft

LOCATION DESC:

8b-22 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 27 dpm
Beta/Gamma = 2520 dpm

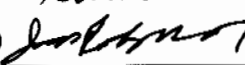
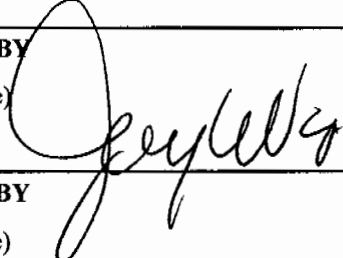
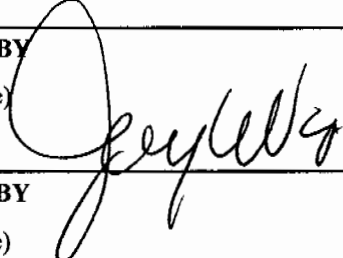
PID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature)  | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name)  (Signature)  | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8011

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|-----------|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 1135 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: | 15-008(b) | ok | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: | 15-610775 | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: | GENERIC | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: | 0 | 0.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: | 0 | 0.5 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: | R | SED | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | | H3 | 500 ML POLY | Ice | Y | |
| 1 | | Met+U+ClO4+C N | 1 GAL POLY 1 liter 1/11/10 RC | Ice | Y | |
| 1 | | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Brown loamy silt, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 11 dpm
Beta/Gamma \leq 2070 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.3} \text{ ppm}$

COLLECTED BY (PRINT)

L McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|---|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) <i>Jon Roberson</i> (Signature) <i>Jon Roberson</i> | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8012

WORK ORDER:

| AS PLANNED | | AS COLLECTED | | AS PLANNED | | AS COLLECTED | |
|-----------------------------|--|-----------------------------|--|--------------------------|--|--------------|--|
| DATE COLLECTED(MM/DD/YYYY): | | 02/18/2010 | | MEDIA: | | QBT3 | |
| TIME COLLECTED (HH:MM) | | 1138 | | SUB-MEDIA: | | TUFF 1 | |
| PRS ID: 15-008(b) | | OK | | SAMPLE TECH CODE: | | HA | |
| LOCATION ID: 15-610775 | | ↓ | | FIELD QC TYPE: | | NA | |
| LOCATION TYPE: GENERIC | | ↓ | | FIELD PREP: | | NA | |
| TOP DEPTH: 0 | | 1.0 | | SAMPLE USAGE: | | INV | |
| BOTTOM DEPTH: 0 | | 2.0 | | SCREEN/PORT DESC: | | NA | |
| FIELD MATRIX: R | | R | | EXCAVATED: YES/NO/NA | | | |
| COMPOSITE TYPE: NA | | COMPOSITE TIME INTERVAL: NA | | WATER FLOWING: YES/NO/NA | | | |
| BOREHOLE: YES/NO/NA | | BOREHOLE DECLINATION: NA | | BOREHOLE DIRECTION: NA | | | |

| # | PRIORITY | ORDER | CNTNR | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|----------|-------------------------|-----------------------------------|--------------|---------------|----------------------|
| 1 | Normal | AM241+GS+ISO PU+ISOU | 1 LITER POLY | None | Y | |
| 1 | ↓ | H3 | 500 ML POLY | Ice | Y | |
| 1 | ↓ | Met+U+ClO4+C N | 1 GAL POLY 11 liter 1/11/10 LC | Ice | Y | |
| 1 | ↓ | NMED Explosives list | 250 ML AMBER GLASS | Ice | Y | |
| 1 | ↓ | RADVANA+B+G | 1 EA 8 IN RESEALABLE POLY BAG | None | Y | |

SAMPLE DESC:

Gray, weathered tuff, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-16 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm

Beta/Gamma = 2110 dpm

PID $\frac{\text{Ambient Reading}}{46.0} = 0.0$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

Jon Roberson

| | | | |
|--|------------------------------|--|------------------------------|
| RELINQUISHED BY (Printed Name) Jon Roberson (Signature) Jon Roberson | Date/Time 2/18/10 1650 | RECEIVED BY (Printed Name) (Signature) [Signature] | Date/Time 2/18/10 1650 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |



173 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00061
Client Sample ID: RE15-10-7893
Sample Collection Date: 02/19/10 09:16
Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00061-001
Date Received: 02/19/10 00:00
Report Date: 02/22/10 12:59

| Analysis Description | Analysis Results | Analysis Error +/- 1 s | MDL | Tot | Qual | Analysis Units | Analysis Test Method | Analysis Uptime/Time | Analysis Technician | Transfer/Chem Recovery |
|----------------------|------------------|------------------------|-------|-------|------|----------------|----------------------|----------------------|---------------------|------------------------|
| GROSS ALPHA | 29.52 | 27.74 | 37.46 | 27.98 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 29.96 | 14.33 | 18.42 | 14.79 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | 0.11 | 0.14 | 0.08 | 0.16 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 20.01 | 0.33 | 0.87 | 6.33 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.00 | 0.00 | 0.08 | 0.08 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.02 | 0.05 | 0.05 | 0.05 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.19 | 0.15 | 0.08 | 0.15 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| EU-152 | 0.03 | -0.04 | 0.21 | -0.04 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 0.71 | 0.32 | 0.12 | 0.32 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 0.00 | 0.00 | 0.30 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | 0.78 | 0.54 | 0.30 | 0.54 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 4.87 | 2.23 | 0.87 | 2.42 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM 241 | 0.35 | 0.38 | 0.14 | 0.38 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 3.80

Matthew J. Edley
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in whole or in part requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00061

Request or PO Number:

Client Sample ID: RE15-10-7894

ARS Sample ID: ARS2-10-00061-002

Sample Collection Date: 02/18/10 09:50

Date Received: 02/19/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/22/10 12:59

| Analysis Description | Analysis Results | Analysis Error +/- 2 s | NDC | TPU | Qual | Analysis units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|------------------------|-------|-------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | 5.16 | 16.04 | 34.06 | 16.06 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 31.15 | 13.86 | 17.92 | 14.37 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | 0.02 | 0.09 | 0.07 | 0.09 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 24.34 | 6.75 | 0.77 | 6.79 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.00 | 0.04 | 0.07 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.04 | 0.06 | 0.05 | 0.06 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.00 | 0.09 | 0.04 | 0.09 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| EU-152 | -0.30 | 92.88 | 0.21 | 92.88 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 0.51 | 0.30 | 0.13 | 0.30 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 0.60 | 0.26 | 0.24 | 0.26 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | 0.83 | 0.44 | 0.31 | 0.44 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 3.02 | 2.77 | 1.06 | 2.66 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | -0.02 | 21.16 | 0.05 | 21.16 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 3.12

Matthew L Eden
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00061

Client Sample ID: RE15-10-7895

Sample Collection Date: 02/18/10 13:07

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00061-003

Date Received: 02/19/10 00:00

Report Date: 02/22/10 13:06

| Analysis Description | Analysis Results | Analysis Error $\pm 2s$ | MDC | TPU | Qual | Analysis Units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|-------------------------|-------|--------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | 17.21 | 21.33 | 32.65 | 21.43 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 44.60 | 16.00 | 18.12 | 16.91 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | -0.04 | 41.38 | 0.13 | 41.38 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 3.90 | 6.03 | 2.67 | 6.03 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.00 | 0.00 | 0.14 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.11 | 0.15 | 0.12 | 0.15 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.03 | 0.11 | 0.09 | 0.11 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| EU-152 | -0.56 | 160.17 | 0.36 | 160.17 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 1.45 | 0.54 | 0.16 | 0.55 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-226 | 1.37 | 1.07 | 0.55 | 1.02 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | 1.55 | 0.88 | 0.47 | 0.88 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 3.77 | 3.08 | 1.30 | 3.20 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | 0.54 | 0.38 | 0.13 | 0.38 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 0.91

 Matt A. Elder

 Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

AKS sample delivery group: AR52-10-00661

Request or PO Number:

Client Sample ID: RE15-10-7896

ARS Sample ID: AR52-10-00661-004

Sample Collection Date: 02/18/10 13:15

Date Received: 02/19/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/22/10 13:00

| Analysis Description | Analysis Results | Analysis Error +/- 1 s | MoC | TPU | Qual | Analysis Units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|------------------------|-------|--------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | 37.31 | 28.68 | 33.91 | 29.04 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 19.60 | 13.04 | 17.75 | 13.26 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | 0.11 | 0.21 | 0.12 | 0.21 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 21.30 | 8.36 | 1.35 | 8.38 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.11 | 0.14 | 0.13 | 0.14 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.17 | 0.22 | 0.09 | 0.22 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.03 | 0.10 | 0.09 | 0.10 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| EU-152 | -0.53 | 151.41 | 0.34 | 151.41 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 1.52 | 0.52 | 0.14 | 0.53 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 1.58 | 0.99 | 0.33 | 0.99 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | -0.57 | 197.36 | 0.44 | 197.36 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 4.14 | 2.91 | 1.20 | 3.06 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | 0.18 | 0.37 | 0.16 | 0.37 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 0.51

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00061
Client Sample ID: RE15-10-789/
Sample Collection Date: 02/18/10 13:34
Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00061-005
Date Received: 02/19/10 00:00
Report Date: 02/22/10 13:00

| Analysis Description | Analysis Results | Analysis Error +/- 2 s | MDC | TPU | Qual | Analysis Units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|------------------------|-------|-------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | -0.19 | 14.15 | 37.39 | 14.23 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 26.81 | 13.32 | 18.23 | 13.72 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| HA-22 | -0.03 | 31.73 | 0.10 | 31.73 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 1.22 | 7.01 | 3.31 | 7.01 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.00 | 0.00 | 0.11 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.24 | 0.10 | 0.13 | 0.19 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.28 | 0.29 | 0.09 | 0.29 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| EU-152 | -0.13 | -0.27 | 0.49 | -0.27 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 1.53 | 0.49 | 0.14 | 0.49 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 0.00 | 0.00 | 0.27 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | 1.67 | 0.94 | 0.40 | 0.96 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 14.97 | 5.66 | 1.92 | 5.61 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | -0.01 | -0.13 | 0.00 | -0.13 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 1.88

[Signature]
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00061

Request or PO Number:

Client Sample ID: RE15-10-7898

ARS Sample ID: AR52-10-00061-006

Sample Collection Date: 02/18/10 13:47

Date Received: 02/19/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/22/10 13:00

| Analysis Description | Analysis Results | Analysis Error +/- 2 s | MDC | TPU | Qual | Analysis Units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|------------------------|-------|-------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | 28.23 | 25.82 | 34.06 | 26.05 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 30.98 | 14.28 | 17.92 | 14.77 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | 0.04 | 0.15 | 0.13 | 0.15 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 26.59 | 9.40 | 1.37 | 9.43 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.00 | 0.00 | 0.13 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.40 | 0.29 | 0.09 | 0.29 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.00 | 0.00 | 0.08 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| SU-152 | 0.10 | 0.15 | 0.38 | 0.15 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 1.28 | 0.54 | 0.19 | 0.55 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 0.00 | 0.00 | 0.33 | 0.00 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | -0.04 | -0.55 | 0.41 | -0.55 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 7.47 | 4.39 | 1.94 | 4.71 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | 0.13 | 0.31 | 0.15 | 0.31 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |

NOTES: % Moisture: 1.36

M. J. Edin
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00061
Client Sample ID: RE15-10-7899
Sample Collection Date: 02/18/10 14:30
Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: AR52-10-00061-007
Data Received: 02/19/10 00:00
Report Date: 02/22/10 13:00

| Analysis Description | Analysis Results | Analysis Error +/- 3s | NDC | TPU | Qual | Analysis Units | Analysis Test Method | Analysis Date/Time | Analysis Technician | Tracer/Chem Recovery |
|----------------------|------------------|-----------------------|-------|-------|------|----------------|----------------------|--------------------|---------------------|----------------------|
| GROSS ALPHA | 17.26 | 21.39 | 32.78 | 21.50 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| GROSS BETA | 40.42 | 15.65 | 18.31 | 16.41 | | pCi/g | EPA 900.0M | 2/22/2010 | NP | N/A |
| NA-22 | -8.03 | 30.28 | 0.10 | 30.28 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| K-40 | 26.91 | 8.12 | 1.04 | 8.16 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CO-60 | 0.06 | 0.12 | 0.10 | 0.12 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-134 | 0.13 | 0.10 | 0.07 | 0.10 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| CS-137 | 0.49 | 0.26 | 0.06 | 0.27 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| SU-152 | 0.30 | 0.37 | 0.26 | 0.37 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| PB-212 | 0.89 | 0.39 | 0.14 | 0.39 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| RA-228 | 1.28 | 0.81 | 0.25 | 0.81 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-235 | 0.64 | 0.56 | 0.41 | 0.58 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| U-238 | 5.70 | 3.24 | 1.24 | 3.49 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |
| AM-241 | 0.31 | 0.38 | 0.15 | 0.39 | | pCi/g | EPA 901.1M | 2/22/2010 | NP | N/A |


NOTES: % Moisture: 2.47

M. L. Edin
Quality Assurance Review

NOTES: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate# 30658

NELAP Certificate # E87558

| DATA VALIDATION COVER SHEET | |
|--|---|
| 5121-1 <p style="text-align: center;">Data Validation Cover Sheet</p> | Records Use only  |

Section I.

REQUEST NUMBER: 10-2010 VALIDATION DATE: 04/29/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Susan Ball 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 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 |

☐ 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. The MS/MSD %R calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 µg/kg should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The %Rs were within the acceptance limits when calculated correctly. No sample results were qualified.


Reviewed by: Mary Donivan Level: I Date: 04/30/10

VALIDATOR'S SIGNATURE:  DATE: 04/29/10


| | |
|---------------------------|---|
| Form 5121-1, Revision 0.0 | LOS ALAMOS Environmental Restoration Project |
|---------------------------|---|

| 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 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 Criterion = Yes | |
|--------------------------|-------------------------------------|--------------------------|---|--|------------------|
| (Check One) | | | | Non-detected Analyte | Detected 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, 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, 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 | |
|---|---|
| 5121-2 | Records Use only |
| LC/MS/MS Perchlorate Analytical Data Validation Checklist |  |

| 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 |

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: 958899

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7896

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899001

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 94.1

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 05:49 | per0315085a |
| 14797-73-0 | Perchlorate-101 | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate-O(18) | | | 5.33 | ug/kg | | 1 | 16-MAR-10 05:49 | per0315085a |

[^] 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

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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7894
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899002
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 73

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:14 | per0315088a |
| 14797-73-0 | Perchlorate-101 | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate-O(18) | | | 7.26 | ug/kg | | 1 | 16-MAR-10 06:14 | per0315088a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7900
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899003
 Date Filtered: 08-MAR-10
 Injection Volume (mL): 20
 %Solids: 91.8

| CAS No. | Analyte ^a | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:22 | per0315089a |
| 14797-73-0 | Perchlorate-101 | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate-O(18) | | | 5.92 | ug/kg | | 1 | 16-MAR-10 06:22 | per0315089a |

^a 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
 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: 258899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7898

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899004

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 85

| CAS No. | Analyte ^a | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .591 | 2.36 | 0.616 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate Isotope Ratio | | | 2.57 | | | 1 | 16-MAR-10 06:30 | per0315090a |
| 14797-73-0 | Perchlorate-101 | .591 | 2.36 | 0.716 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate-O(18) | | | 6.60 | ug/kg | | 1 | 16-MAR-10 06:30 | per0315090a |

^a 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7897

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899005

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 84

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:02 | per0315094a |
| 14797-73-0 | Perchlorate-101 | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate-O(18) | | | 6.22 | ug/kg | | 1 | 16-MAR-10 07:02 | per0315094a |

[^] 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

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 258899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7895
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899006
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 90.1
 Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:10 | per0315095a |
| 14797-73-0 | Perchlorate-101 | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate-O(18) | | | 5.97 | ug/kg | | 1 | 16-MAR-10 07:10 | per0315095a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7899

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899007

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 82

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:18 | per0315096a |
| 14797-73-0 | Perchlorate-101 | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate-O(18) | | | 6.75 | ug/kg | | 1 | 16-MAR-10 07:18 | per0315096a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7893
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899008
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 72

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:26 | per0315097a |
| 14797-73-0 | Perchlorate-101 | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate-O(18) | | | 7.54 | ug/kg | | 1 | 16-MAR-10 07:26 | per0315097a |

[^] 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: 958892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8011

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899009

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 85

| CAS No. | Analyte ^A | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:34 | per0315098a |
| 14797-73-0 | Perchlorate-101 | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate-O(18) | | | 6.44 | ug/kg | | 1 | 16-MAR-10 07:34 | per0315098a |

^A 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8004

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899010

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 88

| CAS No. | Analyte ^a | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:43 | per0315099a |
| 14797-73-0 | Perchlorate-101 | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate-O(18) | | | 6.43 | ug/kg | | 1 | 16-MAR-10 07:43 | per0315099a |

^a 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: 258892
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8009
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899011
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 % Solids: 76

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:51 | per0315100a |
| 14797-73-0 | Perchlorate-101 | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate-O(18) | | | 7.23 | ug/kg | | 1 | 16-MAR-10 07:51 | per0315100a |

[^] 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

Client Sample No.

RE15-10-8003

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 24-FEB-10

Instrument: LCMSMS

GEL Job No (SDG): 10-2010

Method: SW846 6850 Modified

GEL Sample ID: 247899012

Matrix: SOIL

Date Filtered: 08-MAR-10

Extraction Batch ID: 258899

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 75

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:59 | per0315101a |
| 14797-73-0 | Perchlorate-101 | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate-O(18) | | | 7.27 | ug/kg | | 1 | 16-MAR-10 07:59 | per0315101a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8007

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899013

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

% Solids: 75

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:32 | per0315105a |
| 14797-73-0 | Perchlorate-101 | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate-O(18) | | | 7.46 | ug/kg | | 1 | 16-MAR-10 08:32 | per0315105a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8002
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2910
 GEL Sample ID: 247899014
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 92

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:40 | per0315106a |
| 14797-73-0 | Perchlorate-101 | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate-O(18) | | | 5.75 | ug/kg | | 1 | 16-MAR-10 08:40 | per0315106a |

[^] 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: 258892
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8010
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899015
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 89

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:48 | per0315107a |
| 14797-73-0 | Perchlorate-101 | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate-O(18) | | | 6.15 | ug/kg | | 1 | 16-MAR-10 08:48 | per0315107a |

[^] 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: 958899

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8006

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899016

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 92.9

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:56 | per0315108a |
| 14797-73-0 | Perchlorate-101 | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate-O(18) | | | 6.88 | ug/kg | | 1 | 16-MAR-10 08:56 | per0315108a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8001
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899017
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 71

| CAS No. | Analyte ^a | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:04 | per0315109a |
| 14797-73-0 | Perchlorate-101 | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate-O(18) | | | 8.02 | ug/kg | | 1 | 16-MAR-10 09:04 | per0315109a |

^a 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 %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: 958899

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8012

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899018

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 94.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|-----|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:12 | per0315110a |
| 14797-73-0 | Perchlorate-101 | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate-O(18) | | | 5.60 | ug/kg | | 1 | 16-MAR-10 09:12 | per0315110a |

[^] 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

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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8008
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899019
 Date Filtered: 08-MAR-10
 Injection Volume (mL): 20
 % Solids: 82
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:20 | per0315111a |
| 14797-73-0 | Perchlorate-101 | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate-O(18) | | | 6.23 | ug/kg | | 1 | 16-MAR-10 09:20 | per0315111a |

[^] 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: 258992
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8005
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899020
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 82

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:28 | per0315112a |
| 14797-73-0 | Perchlorate-101 | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate-O(18) | | | 6.46 | ug/kg | | 1 | 16-MAR-10 09:28 | per0315112a |

[^] 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

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

**Section I.**REQUEST NUMBER: 10-2010 VALIDATION DATE: 04/29/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Susan Ball 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 |
| <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 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, Ba, Cr, Fe, Mg, Mn, Na, and V were detected. The Na results for samples RE15-10-7899, -8002, and -8010 and the Cr results for samples RE15-10-7895 and -8008 through -8012, were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a. The remaining sample results for Na were subsequently qualified ND due to FR blank outliers and, thus, were not qualified for the MB infraction. The remaining associated sample results were detects >50X the MB concentrations and, thus, were not qualified.
- In the CCBs, Fe and Mg were detected. The associated sample results were detects >5X the highest blank concentration and, thus, were not qualified.
- In the FR blanks, samples -8086, -8088, and -8089 (in RN 10-2013) associated with all the samples, Ca, Cu, Fe, Mg, K, Na, U, and V were detected. The Cu result for sample -8012 and all associated Na results except -7899, -8002, and -8010 were detects ≤5X the greatest FR blank concentrations and, thus, were qualified U,I4d. The remaining associated sample results were detects >5X the greatest FR blank concentrations and, thus, were not qualified.
- The LCS %R for Sb was < the laboratory UAL but ≥10%. The associated sample results which were NDs were qualified UJ,I12a and those which were detects were qualified J-,I12a.
- The MS %Rs for Mg and K were > the laboratory UAL. The associated sample results were detects and, thus, were qualified J+,I6b. The MS %Rs for Al, Fe, and Mn were also > the laboratory UAL. However, the parent sample concentrations were >4X the spike concentrations and, thus, the Al, Fe, and Mn sample results were not qualified, based on professional judgment.
- The duplicate RPDs for Ba and Ca were >35%, and both the parent and the duplicate sample results were ≥5X the

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only



PQLs. The associated sample results were detects and, thus, were qualified J,110a.

Reviewed by: Mary Donovan

Level: I

Date: 04/30/10

VALIDATOR'S SIGNATURE:

DATE: 04/29/10

Form 5118-1, Revision 0.0

LOS ALAMOS

Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST


5118-2

Metals Analytical Data Validation Checklist


Records Use only




| 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 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 | |
|---|---|
| 5118-2 Metals Analytical Data Validation Checklist | Records Use only  |

| 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 type="checkbox"/> | <input checked="" 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 checked="" type="checkbox"/> | <input 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 type="checkbox"/> | <input checked="" 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 | Records Use only |
| Metals Analytical Data Validation Checklist  | |

| 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"/> | 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 | |
|--|------------------|
| 5118-2 | Records Use only |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <div>Metals Analytical Data Validation Checklist</div> <div>  </div> </div> | |

| Yes No N/A | | | | Assign Qualifier Listed Below If Criterion = Yes | |
|-------------------------------------|-------------------------------------|-------------------------------------|--|--|------------------|
| (Check One) | | | | Non-detected Analyte | Detected 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: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899001

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7896

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 94.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4140000 | ug/Kg | * | 6920 | 20400 | 20400 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1020 | ug/Kg | U | 336 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.47 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 26600 | ug/Kg | * | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.33 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/24/10 22:46 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 509 | ug/Kg | U | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 963000 | ug/Kg | * | 8150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 10400 | ug/Kg | * | 153 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 768 | ug/Kg | | 153 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5680 | ug/Kg | * | 305 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9460000 | ug/Kg | * | 8150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 5410 | ug/Kg | | 255 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 764000 | ug/Kg | *N | 8660 | 30500 | 30500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 238000 | ug/Kg | * | 204 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 8.49 | ug/kg | J | 3.93 | 11.6 | 11.6 | 1 | AV | JXL1 | 03/15/10 09:04 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.13 | mg/kg | | 0.105 | 0.419 | 0.419 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 519000 | ug/Kg | *N | 6520 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.524 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 212 | ug/Kg | J | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 122000 | ug/Kg | | 7130 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.210 | mg/kg | U | 0.0629 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 0.813 | mg/kg | * | 0.0138 | 0.0419 | 0.0419 | 2 | MS | RMJ | 03/25/10 05:10 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 7430 | ug/Kg | * | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 47100 | ug/Kg | * | 336 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.522 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.507 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.552 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899002

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7894

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 73

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5250000 | ug/Kg | * | 7860 | 23100 | 23100 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1160 | ug/Kg | U | 381 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.6 | mg/kg | | 0.271 | 1.35 | 1.35 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 75900 | ug/Kg | * | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.674 | mg/kg | | 0.0271 | 0.135 | 0.135 | 2 | MS | RMJ | 03/24/10 22:59 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 148 | ug/Kg | J | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2060000 | ug/Kg | * | 9250 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 22000 | ug/Kg | * | 173 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3450 | ug/Kg | | 173 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 8660 | ug/Kg | * | 347 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9860000 | ug/Kg | * | 9250 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9330 | ug/Kg | | 289 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1020000 | ug/Kg | *N | 9820 | 34700 | 34700 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 330000 | ug/Kg | * | 231 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 5.04 | ug/kg | J | 4.99 | 14.7 | 14.7 | 1 | AV | JXL1 | 03/15/10 09:14 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.85 | mg/kg | | 0.135 | 0.542 | 0.542 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 954000 | ug/Kg | *N | 7400 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.35 | mg/kg | U | 0.677 | 1.35 | 1.35 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 578 | ug/Kg | U | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 87500 | ug/Kg | | 8090 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0954 | mg/kg | J | 0.0813 | 0.271 | 0.271 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 14.9 | mg/kg | * | 0.0179 | 0.0542 | 0.0542 | 2 | MS | RMJ | 03/25/10 05:31 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 16000 | ug/Kg | * | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 36200 | ug/Kg | * | 381 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.592 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.505 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.559 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899003

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7900

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 91.8

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6150000 | ug/Kg | * | 7110 | 20900 | 20900 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1050 | ug/Kg | U | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2 | mg/kg | | 0.2 | 0.999 | 0.999 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 44300 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.06 | mg/kg | | 0.02 | 0.0999 | 0.0999 | 2 | MS | RMJ | 03/24/10 23:06 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 110 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1040000 | ug/Kg | * | 8360 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 17800 | ug/Kg | * | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3470 | ug/Kg | | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 6270 | ug/Kg | * | 314 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 15300000 | ug/Kg | * | 8360 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 7690 | ug/Kg | | 261 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1120000 | ug/Kg | *N | 8880 | 31400 | 31400 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 280000 | ug/Kg | * | 209 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 8.15 | ug/kg | J | 4.05 | 11.9 | 11.9 | 1 | AV | JXL1 | 03/15/10 09:16 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 7.1 | mg/kg | | 0.0999 | 0.4 | 0.4 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 983000 | ug/Kg | *N | 6690 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 0.999 | mg/kg | U | 0.5 | 0.999 | 0.999 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 189 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium UJ,14d | 120000 | ug/Kg | | 7320 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.160 | mg/kg | J | 0.0599 | 0.2 | 0.2 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.53 | mg/kg | * | 0.0132 | 0.04 | 0.04 | 2 | MS | RMJ | 03/25/10 05:35 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 23800 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 49200 | ug/Kg | * | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.521 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.545 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.548 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899004

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7898

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 85

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 12400000 | ug/Kg | * | 6800 | 20000 | 20000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1000 | ug/Kg | U | 330 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 4.96 | mg/kg | | 0.222 | 1.11 | 1.11 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 65900 | ug/Kg | * | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.91 | mg/kg | | 0.0222 | 0.111 | 0.111 | 2 | MS | RMJ | 03/24/10 23:09 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 500 | ug/Kg | U | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2900000 | ug/Kg | * | 8000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 23300 | ug/Kg | * | 150 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 4580 | ug/Kg | | 150 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 18100 | ug/Kg | * | 300 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 15600000 | ug/Kg | * | 8000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 14000 | ug/Kg | | 250 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 2310000 | ug/Kg | *N | 8500 | 30000 | 30000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 263000 | ug/Kg | * | 200 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15 | ug/kg | | 4.09 | 12 | 12 | 1 | AV | JXL1 | 03/15/10 09:18 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 16.9 | mg/kg | | 0.111 | 0.444 | 0.444 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 1800000 | ug/Kg | *N | 6400 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.11 | mg/kg | U | 0.555 | 1.11 | 1.11 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 152 | ug/Kg | J | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 106000 | ug/Kg | | 7000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.330 | mg/kg | | 0.0666 | 0.222 | 0.222 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 15.5 | mg/kg | * | 0.0147 | 0.0444 | 0.0444 | 2 | MS | RMJ | 03/25/10 05:38 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 23100 | ug/Kg | * | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 38800 | ug/Kg | * | 330 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.591 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.532 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.59 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899005

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7897

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 84

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 10700000 | ug/Kg | * | 7400 | 21800 | 21800 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1090 | ug/Kg | U | 359 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 3.09 | mg/kg | | 0.214 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 66300 | ug/Kg | * | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.65 | mg/kg | | 0.0214 | 0.107 | 0.107 | 2 | MS | RMJ | 03/24/10 23:12 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 544 | ug/Kg | U | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2790000 | ug/Kg | * | 8710 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 14500 | ug/Kg | * | 163 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3130 | ug/Kg | | 163 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 33300 | ug/Kg | * | 327 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 14300000 | ug/Kg | * | 8710 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 32500 | ug/Kg | | 272 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 2130000 | ug/Kg | *N | 9250 | 32700 | 32700 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 205000 | ug/Kg | * | 218 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 12.3 | ug/kg | U | 4.18 | 12.3 | 12.3 | 1 | AV | JXL1 | 03/15/10 09:24 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 11.9 | mg/kg | | 0.107 | 0.428 | 0.428 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 1630000 | ug/Kg | *N | 6970 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.07 | mg/kg | U | 0.536 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 188 | ug/Kg | J | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 95200 | ug/Kg | | 7620 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.208 | mg/kg | J | 0.0643 | 0.214 | 0.214 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 36.5 | mg/kg | * | 0.0707 | 0.214 | 0.214 | 10 | MS | RMJ | 03/26/10 02:03 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 20800 | ug/Kg | * | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 33900 | ug/Kg | * | 359 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.548 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.583 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899006

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7895

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 90.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4510000 | ug/Kg | * | 7120 | 20900 | 20900 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1050 | ug/Kg | U | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.74 | mg/kg | | 0.205 | 1.03 | 1.03 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 30600 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.32 | mg/kg | | 0.0205 | 0.103 | 0.103 | 2 | MS | RMJ | 03/24/10 23:14 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 523 | ug/Kg | U | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1270000 | ug/Kg | * | 8370 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 4990 | ug/Kg | * | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 950 | ug/Kg | | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 7130 | ug/Kg | * | 314 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9170000 | ug/Kg | * | 8370 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 6940 | ug/Kg | | 262 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 874000 | ug/Kg | *N | 8900 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 237000 | ug/Kg | * | 209 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 6.21 | ug/kg | J | 4.12 | 12.1 | 12.1 | 1 | AV | JXLJ | 03/15/10 09:26 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 5.44 | mg/kg | | 0.103 | 0.41 | 0.41 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 675000 | ug/Kg | *N | 6700 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.03 | mg/kg | U | 0.513 | 1.03 | 1.03 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 142 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 75700 | ug/Kg | | 7330 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0673 | mg/kg | J | 0.0615 | 0.205 | 0.205 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 2.38 | mg/kg | * | 0.0135 | 0.041 | 0.041 | 2 | MS | RMJ | 03/25/10 05:44 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8280 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 43700 | ug/Kg | * | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.53 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.541 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.549 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899007

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7899

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 82

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6510000 | ug/Kg | * | 8300 | 24400 | 24400 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1220 | ug/Kg | U | 403 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.41 | mg/kg | | 0.207 | 1.04 | 1.04 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 54600 | ug/Kg | * | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.620 | mg/kg | | 0.0207 | 0.104 | 0.104 | 2 | MS | RMJ | 03/24/10 23:17 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 611 | ug/Kg | U | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2180000 | ug/Kg | * | 9770 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 15600 | ug/Kg | * | 183 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3640 | ug/Kg | | 183 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5320 | ug/Kg | * | 366 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 22300000 | ug/Kg | * | 9770 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9460 | ug/Kg | | 305 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 2870000 | ug/Kg | *N | 10400 | 36600 | 36600 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 280000 | ug/Kg | * | 244 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 4.89 | ug/kg | J | 4.38 | 12.9 | 12.9 | 1 | AV | JXL1 | 03/15/10 09:28 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.78 | mg/kg | | 0.104 | 0.414 | 0.414 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 1780000 | ug/Kg | *N | 7820 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.04 | mg/kg | U | 0.518 | 1.04 | 1.04 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 269 | ug/Kg | J | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium J,14a | 253000 | ug/Kg | | 8550 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.105 | mg/kg | J | 0.0621 | 0.207 | 0.207 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 4.21 | mg/kg | * | 0.0137 | 0.0414 | 0.0414 | 2 | MS | RMJ | 03/25/10 05:47 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 34800 | ug/Kg | * | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 90000 | ug/Kg | * | 403 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.502 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.592 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.571 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899008

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7893

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 72

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3750000 | ug/Kg | * | 8550 | 25200 | 25200 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1260 | ug/Kg | U | 415 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.14 | mg/kg | | 0.274 | 1.37 | 1.37 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 53900 | ug/Kg | * | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.918 | mg/kg | | 0.0274 | 0.137 | 0.137 | 2 | MS | RMJ | 03/24/10 23:19 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 629 | ug/Kg | U | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1480000 | ug/Kg | * | 10100 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 34200 | ug/Kg | * | 189 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2650 | ug/Kg | | 189 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5730 | ug/Kg | * | 377 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 8060000 | ug/Kg | * | 10100 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 31300 | ug/Kg | | 314 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 712000 | ug/Kg | *N | 10700 | 37700 | 37700 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 268000 | ug/Kg | * | 252 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15.7 | ug/kg | U | 5.35 | 15.7 | 15.7 | 1 | AV | JXL1 | 03/15/10 09:30 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.17 | mg/kg | | 0.137 | 0.548 | 0.548 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 724000 | ug/Kg | *N | 8050 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.37 | mg/kg | U | 0.685 | 1.37 | 1.37 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 629 | ug/Kg | U | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 116000 | ug/Kg | | 8800 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0876 | mg/kg | J | 0.0822 | 0.274 | 0.274 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 16.2 | mg/kg | * | 0.0181 | 0.0548 | 0.0548 | 2 | MS | RMJ | 03/25/10 05:50 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 11400 | ug/Kg | * | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 31800 | ug/Kg | * | 415 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.552 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.507 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.529 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899009

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8011

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 85

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3720000 | ug/Kg | * | 6950 | 20400 | 20400 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1020 | ug/Kg | U | 337 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.32 | mg/kg | | 0.211 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 51400 | ug/Kg | * | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.7 | mg/kg | | 0.0211 | 0.105 | 0.105 | 2 | MS | RMJ | 03/24/10 23:22 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 511 | ug/Kg | U | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1330000 | ug/Kg | * | 8170 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 6830 | ug/Kg | * | 153 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2360 | ug/Kg | | 153 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 20100 | ug/Kg | * | 306 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10500000 | ug/Kg | * | 8170 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 16700 | ug/Kg | | 255 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 694000 | ug/Kg | *N | 8680 | 30600 | 30600 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 338000 | ug/Kg | * | 204 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 13 | ug/kg | U | 4.43 | 13 | 13 | 1 | AV | JXL1 | 03/15/10 09:32 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.33 | mg/kg | | 0.105 | 0.422 | 0.422 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 695000 | ug/Kg | *N | 6540 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.527 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 3270 | ug/Kg | | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 95400 | ug/Kg | | 7150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0713 | mg/kg | J | 0.0633 | 0.211 | 0.211 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 39.3 | mg/kg | * | 0.0696 | 0.211 | 0.211 | 10 | MS | RMJ | 03/26/10 02:06 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 11700 | ug/Kg | * | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 42000 | ug/Kg | * | 337 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.574 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.556 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.54 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899010

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8004

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 88

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5810000 | ug/Kg | * | 7650 | 22500 | 22500 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1120 | ug/Kg | U | 371 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.56 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 46500 | ug/Kg | * | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.861 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/25/10 01:47 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 562 | ug/Kg | U | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1650000 | ug/Kg | * | 9000 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 11500 | ug/Kg | * | 169 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2640 | ug/Kg | | 169 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 8780 | ug/Kg | * | 337 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 13000000 | ug/Kg | * | 9000 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 8670 | ug/Kg | | 281 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1060000 | ug/Kg | *N | 9560 | 33700 | 33700 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 287000 | ug/Kg | * | 225 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 11.6 | ug/kg | U | 3.95 | 11.6 | 11.6 | 1 | AV | JXL1 | 03/15/10 09:34 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.86 | mg/kg | | 0.105 | 0.421 | 0.421 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 895000 | ug/Kg | *N | 7200 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.526 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 185 | ug/Kg | J | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 122000 | ug/Kg | | 7870 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0757 | mg/kg | J | 0.0631 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 4.82 | mg/kg | * | 0.0139 | 0.0421 | 0.0421 | 2 | MS | RMJ | 03/25/10 06:03 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 14100 | ug/Kg | * | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 48100 | ug/Kg | * | 371 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.504 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.539 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.586 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899011

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8009

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 76

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3860000 | ug/Kg | * | 8750 | 25700 | 25700 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony J-,112a | 3450 | ug/Kg | | 425 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.5 | mg/kg | | 0.251 | 1.26 | 1.26 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 86200 | ug/Kg | * | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 7.37 | mg/kg | | 0.0251 | 0.126 | 0.126 | 2 | MS | RMJ | 03/25/10 01:50 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 422 | ug/Kg | J | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2310000 | ug/Kg | * | 10300 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 7290 | ug/Kg | * | 193 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1690 | ug/Kg | | 193 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 175000 | ug/Kg | * | 386 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 5330000 | ug/Kg | * | 10300 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 97700 | ug/Kg | | 322 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 867000 | ug/Kg | *N | 10900 | 38600 | 38600 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 240000 | ug/Kg | * | 257 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 7.56 | ug/kg | J | 5.11 | 15 | 15 | 1 | AV | JXL1 | 03/15/10 09:36 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.05 | mg/kg | | 0.126 | 0.502 | 0.502 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 849000 | ug/Kg | *N | 8240 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.26 | mg/kg | U | 0.628 | 1.26 | 1.26 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 183 | ug/Kg | J | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 153000 | ug/Kg | | 9010 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.251 | mg/kg | U | 0.0753 | 0.251 | 0.251 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 348 | mg/kg | * | 0.331 | 1 | 1 | 40 | MS | RMJ | 03/26/10 02:10 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 7230 | ug/Kg | * | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 51300 | ug/Kg | * | 425 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.508 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.521 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.522 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899012

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8003

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 75

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-------------------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4500000 | ug/Kg | * | 8430 | 24800 | 24800 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1240 | ug/Kg | U | 409 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.95 | mg/kg | | 0.248 | 1.24 | 1.24 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 52900 | ug/Kg | * | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 7.96 | mg/kg | | 0.0248 | 0.124 | 0.124 | 2 | MS | RMJ | 03/25/10 01:52 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 620 | ug/Kg | U | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1620000 | ug/Kg | * | 9920 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 10600 | ug/Kg | * | 186 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2610 | ug/Kg | | 186 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 20900 | ug/Kg | * | 372 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 12100000 | ug/Kg | * | 9920 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 17600 | ug/Kg | | 310 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,116b | 896000 | ug/Kg | *N | 10500 | 37200 | 37200 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 329000 | ug/Kg | * | 248 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15.7 | ug/kg | U | 5.33 | 15.7 | 15.7 | 1 | AV | JXL1 | 03/15/10 09:38 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 9.93 | mg/kg | | 0.124 | 0.497 | 0.497 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,116b | 852000 | ug/Kg | *N | 7930 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.24 | mg/kg | U | 0.621 | 1.24 | 1.24 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 170 | ug/Kg | J | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,114d | 116000 | ug/Kg | | 8680 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.127 | mg/kg | J | 0.0745 | 0.248 | 0.248 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 103 | mg/kg | * | 0.164 | 0.497 | 0.497 | 20 | MS | RMJ | 03/26/10 02:13 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 12800 | ug/Kg | * | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 50900 | ug/Kg | * | 409 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.536 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.535 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.509 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899013

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8007

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 75

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 8970000 | ug/Kg | * | 8680 | 25500 | 25500 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1280 | ug/Kg | U | 421 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.91 | mg/kg | | 0.229 | 1.14 | 1.14 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 113000 | ug/Kg | * | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.24 | mg/kg | | 0.0229 | 0.114 | 0.114 | 2 | MS | RMJ | 03/25/10 01:55 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 278 | ug/Kg | J | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 3360000 | ug/Kg | * | 10200 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 17600 | ug/Kg | * | 192 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 9340 | ug/Kg | | 192 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 47300 | ug/Kg | * | 383 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 20300000 | ug/Kg | * | 10200 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 48400 | ug/Kg | | 319 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1550000 | ug/Kg | *N | 10900 | 38300 | 38300 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 765000 | ug/Kg | * | 255 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 7.37 | ug/kg | J | 5.23 | 15.4 | 15.4 | 1 | AV | JXL1 | 03/15/10 09:40 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 7.19 | mg/kg | | 0.114 | 0.457 | 0.457 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 1360000 | ug/Kg | *N | 8170 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.14 | mg/kg | U | 0.571 | 1.14 | 1.14 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 519 | ug/Kg | J | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 131000 | ug/Kg | | 8940 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.104 | mg/kg | J | 0.0686 | 0.229 | 0.229 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 28.4 | mg/kg | * | 0.0754 | 0.229 | 0.229 | 10 | MS | RMJ | 03/26/10 02:16 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 27600 | ug/Kg | * | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 83900 | ug/Kg | * | 421 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|-----------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.519 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.58 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.517 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899014

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8002

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 92

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3390000 | ug/Kg | * | 6960 | 20500 | 20500 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1020 | ug/Kg | U | 338 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.812 | mg/kg | J | 0.212 | 1.06 | 1.06 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 30100 | ug/Kg | * | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.693 | mg/kg | | 0.0212 | 0.106 | 0.106 | 2 | MS | RMJ | 03/25/10 01:58 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 512 | ug/Kg | U | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1180000 | ug/Kg | * | 8190 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 11800 | ug/Kg | * | 154 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1390 | ug/Kg | | 154 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5270 | ug/Kg | * | 307 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10800000 | ug/Kg | * | 8190 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9510 | ug/Kg | | 256 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 589000 | ug/Kg | *N | 8700 | 30700 | 30700 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 266000 | ug/Kg | * | 205 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 12.8 | ug/kg | U | 4.34 | 12.8 | 12.8 | 1 | AV | JXL1 | 03/15/10 09:42 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 2.29 | mg/kg | | 0.106 | 0.425 | 0.425 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 510000 | ug/Kg | *N | 6550 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.06 | mg/kg | U | 0.531 | 1.06 | 1.06 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 228 | ug/Kg | J | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium J,14a | 187000 | ug/Kg | | 7170 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.212 | mg/kg | U | 0.0637 | 0.212 | 0.212 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 2.35 | mg/kg | * | 0.014 | 0.0425 | 0.0425 | 2 | MS | RMJ | 03/25/10 06:15 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8480 | ug/Kg | * | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 50300 | ug/Kg | * | 338 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.531 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.512 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.511 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899015

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8010

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5170000 | ug/Kg | * | 6830 | 20100 | 20100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1000 | ug/Kg | U | 331 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.83 | mg/kg | | 0.218 | 1.09 | 1.09 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 82000 | ug/Kg | * | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.21 | mg/kg | | 0.0218 | 0.109 | 0.109 | 2 | MS | RMJ | 03/25/10 02:00 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 502 | ug/Kg | U | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1550000 | ug/Kg | * | 8030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 7400 | ug/Kg | * | 151 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2090 | ug/Kg | | 151 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 17200 | ug/Kg | * | 301 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9740000 | ug/Kg | * | 8030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 12400 | ug/Kg | | 251 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1090000 | ug/Kg | *N | 8530 | 30100 | 30100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 180000 | ug/Kg | * | 201 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 21.3 | ug/kg | | 4.56 | 13.4 | 13.4 | 1 | AV | JXL1 | 03/15/10 09:48 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.76 | mg/kg | | 0.109 | 0.436 | 0.436 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 766000 | ug/Kg | *N | 6420 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.09 | mg/kg | U | 0.545 | 1.09 | 1.09 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 203 | ug/Kg | J | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium J,14a | 147000 | ug/Kg | | 7030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0826 | mg/kg | J | 0.0654 | 0.218 | 0.218 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 13.7 | mg/kg | * | 0.0144 | 0.0436 | 0.0436 | 2 | MS | RMJ | 03/25/10 06:18 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 11300 | ug/Kg | * | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 32100 | ug/Kg | * | 331 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.513 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.5 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899016

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8006

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 92.9

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6750000 | ug/Kg | * | 6580 | 19400 | 19400 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 968 | ug/Kg | U | 319 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.01 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 28300 | ug/Kg | * | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.78 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/25/10 02:03 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 484 | ug/Kg | U | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 1480000 | ug/Kg | * | 7740 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 12200 | ug/Kg | * | 145 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 947 | ug/Kg | | 145 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 7550 | ug/Kg | * | 290 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10700000 | ug/Kg | * | 7740 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 7410 | ug/Kg | | 242 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1180000 | ug/Kg | *N | 8230 | 29000 | 29000 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 145000 | ug/Kg | * | 194 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 24.4 | ug/kg | | 3.66 | 10.8 | 10.8 | 1 | AV | JXL1 | 03/15/10 09:50 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.6 | mg/kg | | 0.105 | 0.42 | 0.42 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 679000 | ug/Kg | *N | 6190 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.526 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 484 | ug/Kg | U | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 111000 | ug/Kg | | 6780 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0801 | mg/kg | J | 0.0631 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 0.985 | mg/kg | * | 0.0139 | 0.042 | 0.042 | 2 | MS | RMJ | 03/25/10 06:27 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 9730 | ug/Kg | * | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 43500 | ug/Kg | * | 319 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.556 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.512 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.6 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899017

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8001

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 71

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5450000 | ug/Kg | * | 9340 | 27500 | 27500 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony J-,112a | 789 | ug/Kg | J | 453 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.96 | mg/kg | | 0.262 | 1.31 | 1.31 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 79600 | ug/Kg | * | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.2 | mg/kg | | 0.0262 | 0.131 | 0.131 | 2 | MS | RMJ | 03/25/10 02:10 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 359 | ug/Kg | J | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2110000 | ug/Kg | * | 11000 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 31600 | ug/Kg | * | 206 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2380 | ug/Kg | | 206 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 43800 | ug/Kg | * | 412 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9580000 | ug/Kg | * | 11000 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 27100 | ug/Kg | | 343 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1030000 | ug/Kg | *N | 11700 | 41200 | 41200 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 266000 | ug/Kg | * | 275 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 14.7 | ug/kg | U | 5.01 | 14.7 | 14.7 | 1 | AV | JXL1 | 03/15/10 09:52 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.03 | mg/kg | | 0.131 | 0.525 | 0.525 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 884000 | ug/Kg | *N | 8790 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.31 | mg/kg | U | 0.656 | 1.31 | 1.31 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 257 | ug/Kg | J | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 105000 | ug/Kg | | 9610 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0887 | mg/kg | J | 0.0787 | 0.262 | 0.262 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 47.9 | mg/kg | * | 0.0866 | 0.262 | 0.262 | 10 | MS | RMJ | 03/26/10 02:19 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 11700 | ug/Kg | * | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 42500 | ug/Kg | * | 453 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.516 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.54 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.577 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899018

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8012

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 94.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 2970000 | ug/Kg | * | 6080 | 17900 | 17900 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 894 | ug/Kg | U | 295 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.979 | mg/kg | | 0.183 | 0.913 | 0.913 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 36400 | ug/Kg | * | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.489 | mg/kg | | 0.0183 | 0.0913 | 0.0913 | 2 | MS | RMJ | 03/25/10 02:12 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 447 | ug/Kg | U | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 825000 | ug/Kg | * | 7150 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 4870 | ug/Kg | * | 134 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1910 | ug/Kg | | 134 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-50-8 | Copper U,14d | 3260 | ug/Kg | * | 268 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 8430000 | ug/Kg | * | 7150 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 6010 | ug/Kg | | 224 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 623000 | ug/Kg | *N | 7600 | 26800 | 26800 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 272000 | ug/Kg | * | 179 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 11.3 | ug/kg | U | 3.83 | 11.3 | 11.3 | 1 | AV | JXL | 03/15/10 09:54 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.73 | mg/kg | | 0.0913 | 0.365 | 0.365 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 589000 | ug/Kg | *N | 5720 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 0.913 | mg/kg | U | 0.456 | 0.913 | 0.913 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 130 | ug/Kg | J | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 94400 | ug/Kg | | 6260 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.183 | mg/kg | U | 0.0548 | 0.183 | 0.183 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.03 | mg/kg | * | 0.012 | 0.0365 | 0.0365 | 2 | MS | RMJ | 03/25/10 06:33 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8810 | ug/Kg | * | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 35400 | ug/Kg | * | 295 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.593 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.581 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.565 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10



METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899019

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8008

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3090000 | ug/Kg | * | 6970 | 20500 | 20500 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony UJ,112a | 1030 | ug/Kg | U | 338 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.877 | mg/kg | J | 0.214 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 36100 | ug/Kg | * | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.470 | mg/kg | | 0.0214 | 0.107 | 0.107 | 2 | MS | RMJ | 03/25/10 02:15 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 513 | ug/Kg | U | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 939000 | ug/Kg | * | 8200 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium J,14a | 5360 | ug/Kg | * | 154 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1900 | ug/Kg | | 154 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 4000 | ug/Kg | * | 308 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 7770000 | ug/Kg | * | 8200 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 5770 | ug/Kg | | 256 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 584000 | ug/Kg | *N | 8720 | 30800 | 30800 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 236000 | ug/Kg | * | 205 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 33.3 | ug/kg | | 4.11 | 12.1 | 12.1 | 1 | AV | JXL1 | 03/15/10 09:56 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.31 | mg/kg | | 0.107 | 0.428 | 0.428 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 602000 | ug/Kg | *N | 6560 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.07 | mg/kg | U | 0.535 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 513 | ug/Kg | U | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 104000 | ug/Kg | | 7180 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.214 | mg/kg | U | 0.0642 | 0.214 | 0.214 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.03 | mg/kg | * | 0.0141 | 0.0428 | 0.0428 | 2 | MS | RMJ | 03/25/10 06:36 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8330 | ug/Kg | * | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 34000 | ug/Kg | * | 338 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.547 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.524 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.557 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899020

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8005

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL


%SOLIDS: 82

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|------------------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5840000 | ug/Kg | * | 7430 | 21900 | 21900 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony J-,112a | 1020 | ug/Kg | J | 361 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.79 | mg/kg | | 0.243 | 1.22 | 1.22 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-39-3 | Barium J,110a | 74300 | ug/Kg | * | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 3.81 | mg/kg | | 0.0243 | 0.122 | 0.122 | 2 | MS | RMJ | 03/25/10 02:17 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 824 | ug/Kg | | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium J,110a | 2300000 | ug/Kg | * | 8750 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 12000 | ug/Kg | * | 164 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2100 | ug/Kg | | 164 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 88900 | ug/Kg | * | 328 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9270000 | ug/Kg | * | 8750 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 57300 | ug/Kg | | 273 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium J+,16b | 1030000 | ug/Kg | *N | 9290 | 32800 | 32800 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 265000 | ug/Kg | * | 219 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 4.94 | ug/kg | J | 4.92 | 14.5 | 14.5 | 1 | AV | JXL1 | 03/15/10 09:58 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.81 | mg/kg | | 0.122 | 0.486 | 0.486 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-09-7 | Potassium J+,16b | 937000 | ug/Kg | *N | 7000 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.22 | mg/kg | U | 0.608 | 1.22 | 1.22 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 168 | ug/Kg | J | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium U,14d | 85500 | ug/Kg | | 7650 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0756 | mg/kg | J | 0.0729 | 0.243 | 0.243 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 59 | mg/kg | * | 0.0802 | 0.243 | 0.243 | 10 | MS | RMJ | 03/26/10 02:22 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 10800 | ug/Kg | * | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 54800 | ug/Kg | * | 361 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.501 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.505 | g | 30 | mL | 03/12/10 | TXB3 |

SEB
4/29/10

| DATA VALIDATION COVER SHEET | |
|--|---|
| 5120-1 <p style="text-align: center;">Data Validation Cover Sheet</p> | Records Use only  |

| Section I. | | |
|---|--|--|
| REQUEST NUMBER: <u>10-2010</u> | VALIDATION DATE: <u>04/30/10</u> | LAB CODE: <u>GEL</u> |
| CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u> | | |
| VALIDATOR: <u>Susan Ball</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 type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES |
| | | <input type="checkbox"/> LCMSMS PERCHLORATES |
| | | <input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): <u>total cyanide only</u> | | |

| 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 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):

None.


Reviewed by: Mary Donovan

Level: I


Date: 04/30/10

VALIDATOR'S SIGNATURE: 


DATE: 04/30/10

| GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST | |
|--|---|
| 5120-2 General Chemistry Analytical Data Validation Checklist | Records Use only  Los Alamos NATIONAL LABORATORY EST. 1942 |

| Yes No N/A (Check One) | | | | Assign Qualifier Listed Below If Criterion = Yes | |
|---------------------------|-------------------------------------|-------------------------------------|--|---|---------------------|
| | | | | Non-detected Analyte | Detected 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 | |
|--|---|
| 5120-2 | Records Use only |
| General Chemistry Analytical Data Validation Checklist |  |

| 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 | Records Use only |
| General Chemistry Analytical Data Validation Checklist  | |

| 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"/> | 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 NQ, NQ (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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7896
Sample ID: 247899001
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 5.93%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 65.7 | 242 | ug/kg | 1 | AXC2 | 03/04/10 | 1413 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7894
Sample ID: 247899002
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 26.9%

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 | J | 101 | 87.8 | 323 | ug/kg | 1 | AXC2 | 03/04/10 | 1416 | 957578 | 1 |
|----------------|---|-----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7900
Sample ID: 247899003
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 8.17%

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 | 69.9 | 257 | ug/kg | 1 | AXC2 | 03/04/10 | 1423 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7898
Sample ID: 247899004
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 15.4%

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 | 77.3 | 284 | ug/kg | 1 | AXC2 | 03/04/10 | 1424 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

SEB
4/30/10

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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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7897
Sample ID: 247899005
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 16.2%

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 | 78.0 | 287 | ug/kg | 1 | AXC2 | 03/04/10 | 1425 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

SEB
4/30/10

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7895
Sample ID: 247899006
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 9.86%

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 | 74.0 | 272 | ug/kg | 1 | AXC2 | 03/04/10 | 1426 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7899
Sample ID: 247899007
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 18.4%

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 | 83.4 | 307 | ug/kg | 1 | AXC2 | 03/04/10 | 1427 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7893
Sample ID: 247899008
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 28%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 97.7 | 87.4 | 321 | ug/kg | 1 | AXC2 | 03/04/10 | 1428 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8011
Sample ID: 247899009
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 14.7%

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 | | 272 | 70.0 | 257 | ug/kg | 1 | AXC2 | 03/04/10 | 1429 | 957578 | 1 |
|----------------|--|-----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8004
Sample ID: 247899010
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 11.8%

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 | 72.7 | 267 | ug/kg | 1 | AXC2 | 03/04/10 | 1429 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8009
Sample ID: 247899011
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 23.5%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | AnalystDate | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | |
| Cyanide, Total | J | 149 | 79.4 | 292 | ug/kg | 1 | AXC2 03/04/10 | 1430 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8003
Sample ID: 247899012
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 24.7%

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 | 85.2 | 313 | ug/kg | 1 | AXC2 | 03/04/10 | 1431 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8007
Sample ID: 247899013
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 24.6%

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 | J | 129 | 88.4 | 325 | ug/kg | 1 | AXC2 | 03/04/10 | 1436 | 957578 | 1 |
|----------------|---|-----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8002
Sample ID: 247899014
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 8.04%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 63.7 | 234 | ug/kg | 1 | AXC2 | 03/04/10 | 1437 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8010
Sample ID: 247899015
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 10.6%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 74.6 | 274 | ug/kg | 1 | AXC2 | 03/04/10 | 1438 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8006
Sample ID: 247899016
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 7.09%

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 | 71.8 | 264 | ug/kg | 1 | AXC2 | 03/04/10 | 1438 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8001
Sample ID: 247899017
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 29.4%

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 | 89.2 | 328 | ug/kg | 1 | AXC2 | 03/04/10 | 1439 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8012
Sample ID: 247899018
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 5.71%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 70.7 | 260 | ug/kg | 1 | AXC2 | 03/04/10 | 1440 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8008
Sample ID: 247899019
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 10.9%

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 | 73.3 | 270 | ug/kg | 1 | AXC2 | 03/04/10 | 1441 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8005
Sample ID: 247899020
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 17.9%

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 | J | 108 | 78.1 | 287 | ug/kg | 1 | AXC2 | 03/04/10 | 1442 | 957578 | 1 |
|----------------|---|-----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

Tuesday, February 23, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2010

LOS ALAMOS

REQUEST NUMBER: 10-2010

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/25/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247899 %

| SAMPLE ID | CTNR | CTNR DESC | ORDER | PRESERV | MATRIX |
|--------------|------|-----------|---------------|---------|--------|
| RE15-10-7896 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7894 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7900 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7898 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7897 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7895 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7899 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7893 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8011 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8004 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8009 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8003 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8007 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8002 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8010 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8006 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8001 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8012 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8008 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8005 | 1 | POLY | Met+U+CLO4+CN | Ice | R |

Relinquished By:

Date

Time

Received By:

Date

Time

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

REQUEST NUMBER: 10-2010

Tuesday, February 23, 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: 10-2010

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/23/2010

TURNAROUND/REPORT DUE: 3/25/2010

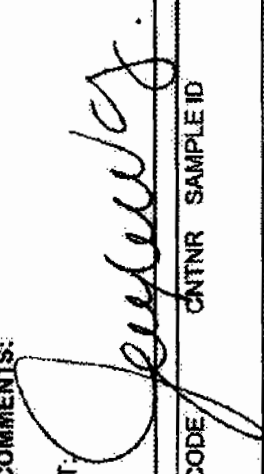
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



| PRIORITY | METHOD CODE | CNTR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|-------------|------|--------------|---------------|--------------|----------------------|
| | SW-846-8020 | | | | | |
| | | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |

Tuesday, February 23, 2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|-------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846.8020 | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846.8850 | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |

Tuesday, February 23, 2010

Page 3 of 4

REQUEST NUMBER: 10-2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846.6850 | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846.7471A | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846.9012A | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |

Tuesday, February 23, 2010

| PRIORITY | METHOD CODE | CNTR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|------|--------------|---------------|--------------|----------------------|
| | SW-846-9012A | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |

Final Page of REQUEST NUMBER 10-2010



March 02, 2010

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 Order: 247899
SDG: 10-2010

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 24, 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: 10-2010
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 247899
SDG: 10-2010

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 247899
SDG # : 10-2010**

March 02, 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 24, 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:

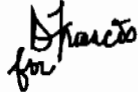
| <u>Laboratory ID</u> | <u>Client ID</u> |
|-----------------------------|-------------------------|
| 247899001 | RE15-10-7896 |
| 247899002 | RE15-10-7894 |
| 247899003 | RE15-10-7900 |
| 247899004 | RE15-10-7898 |
| 247899005 | RE15-10-7897 |
| 247899006 | RE15-10-7895 |
| 247899007 | RE15-10-7899 |
| 247899008 | RE15-10-7893 |
| 247899009 | RE15-10-8011 |
| 247899010 | RE15-10-8004 |
| 247899011 | RE15-10-8009 |
| 247899012 | RE15-10-8003 |
| 247899013 | RE15-10-8007 |
| 247899014 | RE15-10-8002 |
| 247899015 | RE15-10-8010 |
| 247899016 | RE15-10-8006 |
| 247899017 | RE15-10-8001 |
| 247899018 | RE15-10-8012 |
| 247899019 | RE15-10-8008 |
| 247899020 | RE15-10-8005 |

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.

A handwritten signature in black ink, appearing to read "for [unclear]", is positioned above the printed name.

Valerie Davis

Project Manager

List of current GEL Certifications as of 02 March 2010

| State | Certification |
|---------------------------|----------------------|
| 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

Tuesday, February 23, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2010

LOS ALAMOS

REQUEST NUMBER: 10-2010

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/25/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247899 %

| SAMPLE ID | CTNR | CTNR DESC | ORDER | PRESERV | MATRIX |
|--------------|------|-----------|---------------|---------|--------|
| RE15-10-7896 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7894 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7900 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7898 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7897 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7895 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7899 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-7893 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8011 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8004 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8009 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8003 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8007 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8002 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8010 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8006 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8001 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8012 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8008 | 1 | POLY | Met+U+CLO4+CN | Ice | R |
| RE15-10-8005 | 1 | POLY | Met+U+CLO4+CN | Ice | R |

Relinquished By:

Date Time

Received By:

Date Time

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

Tuesday, February 23, 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: 2/23/2010

TURNAROUND/REPORT DUE: 3/25/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

Page 1 of 4
REQUEST NUMBER: 10-2010

These Samples are on:
LANL Request Number: 10-2010
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|-------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846:6020 | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |

Tuesday, February 23, 2010

Page 2 of 4

REQUEST NUMBER: 10-2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|-------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846:6020 | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846:6850 | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |

Tuesday, February 23, 2010

Page 3 of 4
REQUEST NUMBER: 10-2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846:6850 | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846:7471A | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7897 | R | 2/18/2010 | |
| | | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |
| | SW-846:9012A | 1 | RE15-10-7893 | R | 2/18/2010 | |
| | | 1 | RE15-10-7894 | R | 2/18/2010 | |
| | | 1 | RE15-10-7895 | R | 2/18/2010 | |
| | | 1 | RE15-10-7896 | R | 2/18/2010 | |
| | | 1 | RE15-10-7907 | R | 2/18/2010 | |

Tuesday, February 23, 2010

| PRIORITY | METHOD CODE | CNTNR | SAMPLE ID | SAMPLE MATRIX | DATE SAMPLED | SPECIAL INSTRUCTIONS |
|----------|--------------|-------|--------------|---------------|--------------|----------------------|
| | SW-846.9012A | 1 | RE15-10-7898 | R | 2/18/2010 | |
| | | 1 | RE15-10-7899 | R | 2/18/2010 | |
| | | 1 | RE15-10-7900 | R | 2/18/2010 | |
| | | 1 | RE15-10-8001 | R | 2/18/2010 | |
| | | 1 | RE15-10-8002 | R | 2/18/2010 | |
| | | 1 | RE15-10-8003 | R | 2/18/2010 | |
| | | 1 | RE15-10-8004 | R | 2/18/2010 | |
| | | 1 | RE15-10-8005 | R | 2/18/2010 | |
| | | 1 | RE15-10-8006 | R | 2/18/2010 | |
| | | 1 | RE15-10-8007 | R | 2/18/2010 | |
| | | 1 | RE15-10-8008 | R | 2/18/2010 | |
| | | 1 | RE15-10-8009 | R | 2/18/2010 | |
| | | 1 | RE15-10-8010 | R | 2/18/2010 | |
| | | 1 | RE15-10-8011 | R | 2/18/2010 | |
| | | 1 | RE15-10-8012 | R | 2/18/2010 | |

Final Page of REQUEST NUMBER 10-2010



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

| | | | |
|-------------------------------------|-----|------------------------------|---|
| Client: LANL | | SDG/ARCO/Work Order: 10-2010 | |
| Received By: Mercedes Simmons | | Date Received: 2/24/10 | |
| 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: seals broken damaged container leaking container other (describe) |
| 2 | Samples requiring cold preservation within $0 \leq 6$ deg. C? | X | | | Preservation Method: ice bags blue ice dry ice none other 1-5C 11,13C |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: 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: 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: No time on Chain of Custody. |
| 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 1768 1C 7209 7850 1702 11C
 7209 7850 1757 1C 7209 7850 1713 13C
 7209 7850 1805 2C 7209 7850 1724 13C
 7209 7850 1790 3C
 7209 7850 1735 3C
 7209 7850 1746 4C
 7209 7850 1779 5C
 7209 7850 1780 5C

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 54.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 47.0 LB MAN
CAD: 0014176/CAFE2450

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of 2
TRK# 7209 7850 1768
NM MASTER NM
WED - 24FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
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TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
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12 of 772

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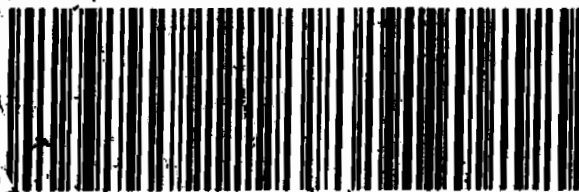
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2 of 2
TRK# 7209 7850 1757
NM MASTER NM
WED - 24FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

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PRIORITY OVERNIGHT

TRK# 7209 7850 1790
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTWT: 53.0 LB MAN
CAD: 0014176/CAFE2450

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTWT: 55.0 LB MAN
CAD: 0014176/CAFE2450

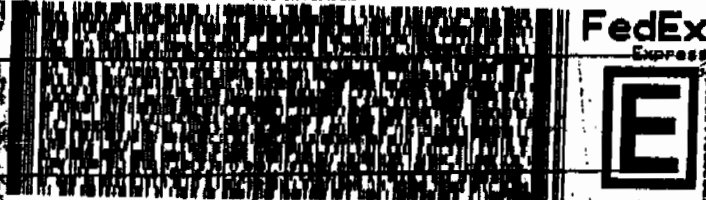
BILL SENDER

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CHARLESTON SC 29407
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REF: 68010AMR3A05329E00



2 of 2
MPSH 0263 7209 7850 1735
MatrN 7209 7850 1724 0201

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PRIORITY OVERNIGHT

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1 of 2
TRKH 0201 7209 7850 1746
NN MASTER NN

WED - 24FEB A1
PRIORITY OVERNIGHT

XX CHSA

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CHS



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TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

ACTWT: 53.0 LB MAN
CAD: 0014176/CAFE2450

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 68010AMR3A05529E00

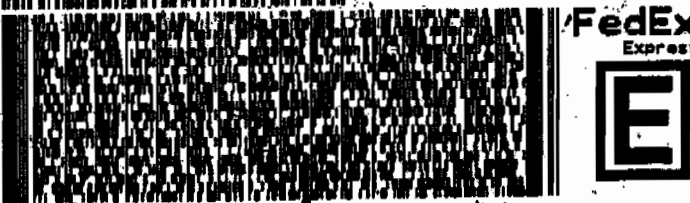
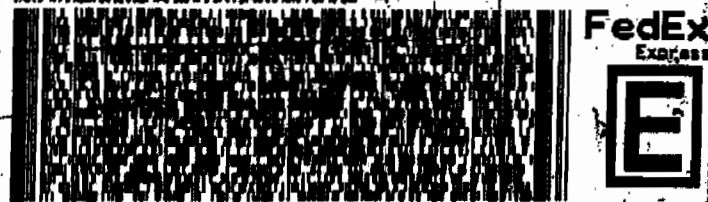
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: 68010AMR3A05529E00



2 of 2
MPSH 0263 7209 7850 1779
MatrN 7209 7850 1768 0201

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PRIORITY OVERNIGHT

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TRKH 0201 7209 7850 1780
NN MASTER NN

WED - 24FEB A1
PRIORITY OVERNIGHT

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CHS



ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
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TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 57.9 LB MAN
CRO: 0014176/CAPE2450
BILL SENDER

ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
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TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

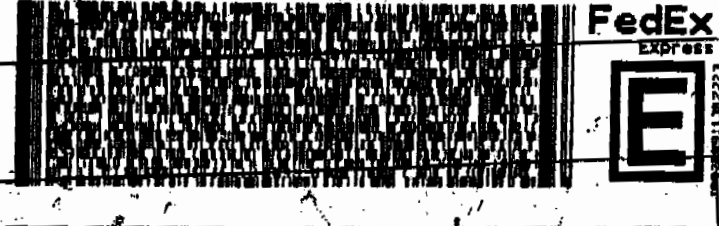
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BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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2 of 2
NPS# 7209 7850 1702
Matr# 7209 7850 1808 [6201]

WED - 24FEB A1
PRIORITY OVERNIGHT

TRKH 7209 7850 1713
[6201]

WED - 24FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 666-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 49.9 LB MAN
CRO: 0014176/CAPE2450
BILL SENDER

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REF: 60010AAREW0130DM00



1 of 2
TRKH 7209 7850 1724
[6201]
NN MASTER NN

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PRIORITY OVERNIGHT

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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 10-2010**

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: 958906

Prep Batch Number: 958899

Sample Analysis

| Sample ID | Client ID |
|------------------|--|
| 247899001 | RE15-10-7896 |
| 247899002 | RE15-10-7894 |
| 247899003 | RE15-10-7900 |
| 247899004 | RE15-10-7898 |
| 247899005 | RE15-10-7897 |
| 247899006 | RE15-10-7895 |
| 247899007 | RE15-10-7899 |
| 247899008 | RE15-10-7893 |
| 247899009 | RE15-10-8011 |
| 247899010 | RE15-10-8004 |
| 247899011 | RE15-10-8009 |
| 247899012 | RE15-10-8003 |
| 247899013 | RE15-10-8007 |
| 247899014 | RE15-10-8002 |
| 247899015 | RE15-10-8010 |
| 247899016 | RE15-10-8006 |
| 247899017 | RE15-10-8001 |
| 247899018 | RE15-10-8012 |
| 247899019 | RE15-10-8008 |
| 247899020 | RE15-10-8005 |
| 1202056491 | Interference Check Sample (ICS) |
| 1202056487 | Method Blank (MB) |
| 1202056488 | Laboratory Control Sample (LCS) |
| 1202056489 | 247899001(RE15-10-7896) Matrix Spike (MS) |
| 1202056490 | 247899001(RE15-10-7896) 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.

QC Sample Designation

Sample 247899001 (RE15-10-7896) was chosen for matrix spike and matrix spike duplicate analysis.

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

Re-extractions or re-analyses were not required in this SDG.

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 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: Pelt Steen Date: 3/19/2010

SAMPLE DATA SUMMARY

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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7896
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899001
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 24.1

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 05:49 | per0315085a |
| 14797-73-0 | Perchlorate-101 | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate-O(18) | | | 5.33 | ug/kg | | 1 | 16-MAR-10 05:49 | per0315085a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7894

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899002

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 73

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:14 | per0315088a |
| 14797-73-0 | Perchlorate-101 | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate-O(18) | | | 7.26 | ug/kg | | 1 | 16-MAR-10 06:14 | per0315088a |

[^] 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: 958892
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7900
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899003
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 91.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:22 | per0315089a |
| 14797-73-0 | Perchlorate-101 | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate-O(18) | | | 5.92 | ug/kg | | 1 | 16-MAR-10 06:22 | per0315089a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7898
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899004
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 85

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .591 | 2.36 | 0.616 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate Isotope Ratio | | | 2.57 | | | 1 | 16-MAR-10 06:30 | per0315090a |
| 14797-73-0 | Perchlorate-101 | .591 | 2.36 | 0.716 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate-O(18) | | | 6.60 | ug/kg | | 1 | 16-MAR-10 06:30 | per0315090a |

[^] 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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7897

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899005

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 84

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:02 | per0315094a |
| 14797-73-0 | Perchlorate-101 | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate-O(18) | | | 6.22 | ug/kg | | 1 | 16-MAR-10 07:02 | per0315094a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7895

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899006

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 90.1

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:10 | per0315095a |
| 14797-73-0 | Perchlorate-101 | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate-O(18) | | | 5.97 | ug/kg | | 1 | 16-MAR-10 07:10 | per0315095a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7899
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899007
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 % Solids: 82

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:18 | per0315096a |
| 14797-73-0 | Perchlorate-101 | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate-O(18) | | | 6.75 | ug/kg | | 1 | 16-MAR-10 07:18 | per0315096a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7893
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899008
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 72

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:26 | per0315097a |
| 14797-73-0 | Perchlorate-101 | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate-O(18) | | | 7.54 | ug/kg | | 1 | 16-MAR-10 07:26 | per0315097a |

[^] 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8011

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899009

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 85

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:34 | per0315098a |
| 14797-73-0 | Perchlorate-101 | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate-O(18) | | | 6.44 | ug/kg | | 1 | 16-MAR-10 07:34 | per0315098a |

[^] 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: 958892
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8004
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899010
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 88
 Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:43 | per0315099a |
| 14797-73-0 | Perchlorate-101 | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate-O(18) | | | 6.43 | ug/kg | | 1 | 16-MAR-10 07:43 | per0315099a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8009

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899011

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 76

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:51 | per0315100a |
| 14797-73-0 | Perchlorate-101 | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate-O(18) | | | 7.23 | ug/kg | | 1 | 16-MAR-10 07:51 | per0315100a |

[^] 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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8003

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899012

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 75

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:59 | per0315101a |
| 14797-73-0 | Perchlorate-101 | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate-O(18) | | | 7.27 | ug/kg | | 1 | 16-MAR-10 07:59 | per0315101a |

[^] 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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8007
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899013
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 75

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:32 | per0315105a |
| 14797-73-0 | Perchlorate-101 | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate-O(18) | | | 7.46 | ug/kg | | 1 | 16-MAR-10 08:32 | per0315105a |

[^] 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 $\frac{\% \text{Solids}}{1}$

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8002

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899014

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 92

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:40 | per0315106a |
| 14797-73-0 | Perchlorate-101 | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate-O(18) | | | 5.75 | ug/kg | | 1 | 16-MAR-10 08:40 | per0315106a |

[^] 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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8010

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899015

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 89

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:48 | per0315107a |
| 14797-73-0 | Perchlorate-101 | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate-O(18) | | | 6.15 | ug/kg | | 1 | 16-MAR-10 08:48 | per0315107a |

[^] 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: 258892
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8006
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899016
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 22.9

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:56 | per0315108a |
| 14797-73-0 | Perchlorate-101 | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate-O(18) | | | 6.88 | ug/kg | | 1 | 16-MAR-10 08:56 | per0315108a |

[^] 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: 938892

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8001

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899017

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 71

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:04 | per0315109a |
| 14797-73-0 | Perchlorate-101 | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate-O(18) | | | 8.02 | ug/kg | | 1 | 16-MAR-10 09:04 | per0315109a |

[^] 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958899

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8012

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899018

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

% Solids: 94.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|-----|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:12 | per0315110a |
| 14797-73-0 | Perchlorate-101 | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate-O(18) | | | 5.60 | ug/kg | | 1 | 16-MAR-10 09:12 | per0315110a |

[^] 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8008

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899019

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 89

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:20 | per0315111a |
| 14797-73-0 | Perchlorate-101 | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate-O(18) | | | 6.23 | ug/kg | | 1 | 16-MAR-10 09:20 | per0315111a |

[^] 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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8005

Date Received: 24-FEB-10

GEL Job No (SDC): 10-2010

GEL Sample ID: 247899020

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 82

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:28 | per0315112a |
| 14797-73-0 | Perchlorate-101 | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate-O(18) | | | 6.46 | ug/kg | | 1 | 16-MAR-10 09:28 | per0315112a |

[^] 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): 10-2010

Extract Batch Code: 958899 Date Filtered: 08-MAR-10

Matrix: SOIL Sample ID: 1202056488

| Analyte [^] | True | Found | Units | %Rec | Q | Control Limits |
|---------------------------|------|-------|-------|------|---|----------------|
| Perchlorate | 2.00 | 2.19 | ug/kg | 109 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 2.97 | | | | - |
| Perchlorate-101 | 2.00 | 2.21 | ug/kg | 110 | | 70 - 130 |
| Perchlorate-O(18) | | 5.27 | 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.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG):

10-2010

Extract Batch Code: 958899

Date Filtered:

08-MAR-10

Matrix:

SOIL

Sample ID:

1202056491

| Analyte [^] | True | Found | Units | %Rec | Q | Control Limits |
|---------------------------|------|-------|-------|------|---|----------------|
| Perchlorate | 2.00 | 2.34 | ug/kg | 117 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 3.05 | | | | |
| Perchlorate-101 | 2.00 | 2.29 | ug/kg | 115 | | 70 - 130 |
| Perchlorate-O(18) | | 5.31 | 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.

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

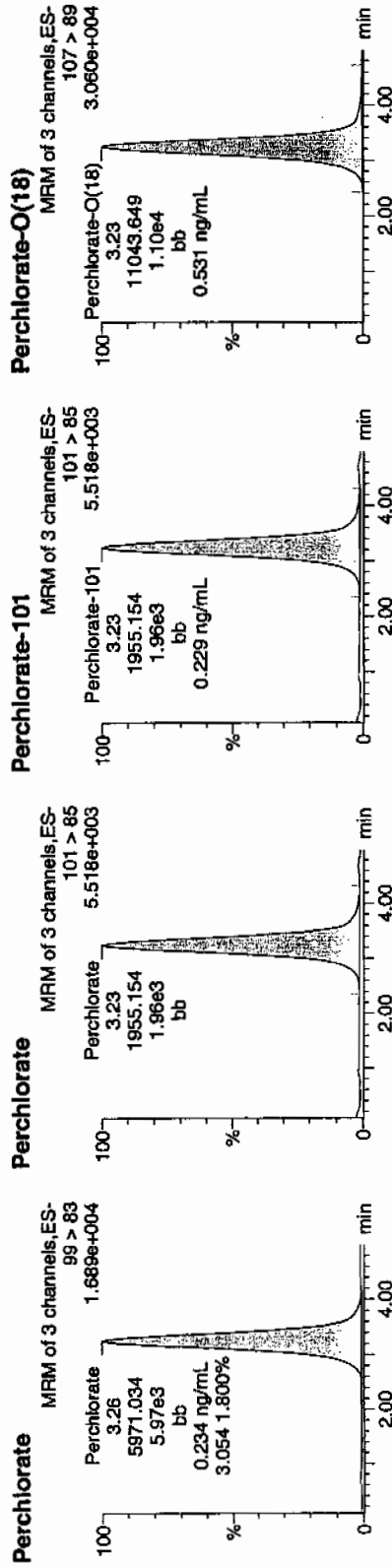
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315084a
Date: 16-Mar-2010
Time: 05:41:54
ID: 1202056491
Vial: 2:5,B

03-16-10

1955.154 | 5971.034 | 1955.154



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 1202056491 | Perchlorate | 99 > 83 | 3.26 | 5971.034 | 5971.034 | bb | | | 0.2343 | 117.14 | 17.14 | 1051.9... | 3.05 |
| 1202056491 | Perchlorate-101 | 101 > 85 | 3.23 | 1955.154 | 1955.154 | bb | | | 0.2294 | 114.72 | 14.72 | 590.828 | |
| 1202056491 | Perchlorate-O(18) | 107 > 89 | 3.23 | 11043.649 | 11043.649 | bb | | | 0.5307 | 106.14 | 6.14 | 1384.5... | |

$$\frac{5971.034}{1955.154} = 3.0540$$

WAT
3/16/10

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 958899

GEL Job No (SDG): 10-2010

Date Extracted: 08-MAR-10

GEL MS/PS ID: 1202056489

Client ID: RE15-10-7896

GEL MSD/PSD ID: 1202056490

QC Type: MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec | # | MSD Conc | MSD Rec | # | RPD | # | RPD Limit | Recovery Limit |
|---------------------------|-------------|-------------|-------|---------|--------|---|----------|---------|---|------|---|-----------|----------------|
| Perchlorate | 2.13 | 0.282 | ug/kg | 2.66 | 112 | | 2.5 | 104 | | 6.16 | | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 0.00 | | 3 | | | 2.93 | | | 0 | | | - |
| Perchlorate-101 | 2.13 | 0.284 | ug/kg | 2.66 | 112 | | 2.55 | 107 | | 4.04 | | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.33 | ug/kg | 5.65 | | | 5.63 | | | .374 | | | - |

^ 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): 10-2010

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 | 15-MAR-10 | per0315001a | IPB001 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315001a | IPB001 |
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315002a | IPB001 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315002a | IPB001 |

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

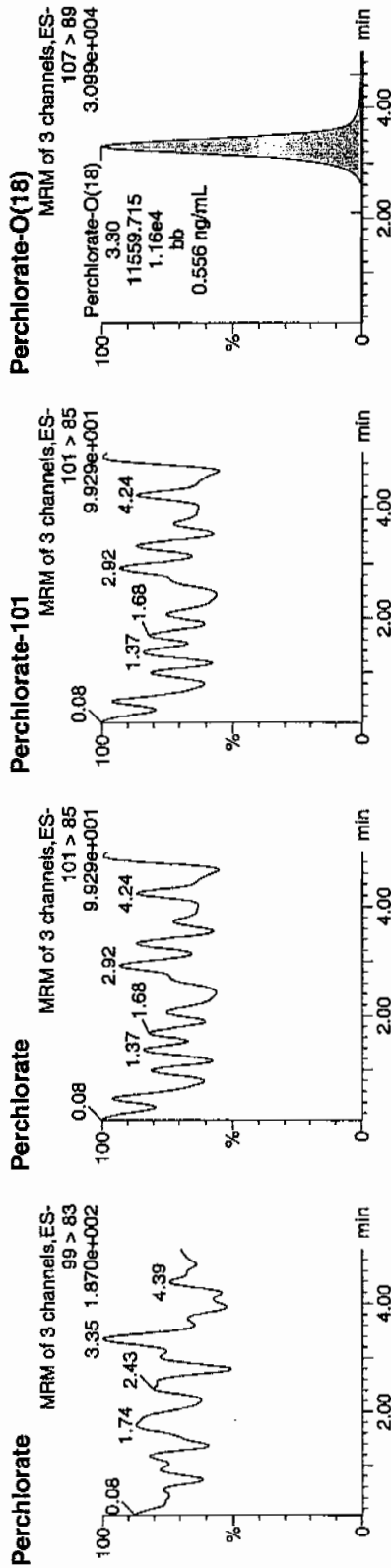
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031510a.mdb 16 Mar 2010 13:25:31
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031510a.cdb 16 Mar 2010 13:34:46

Name: per0315001a
Date: 15-Mar-2010
Time: 18:33:14
ID: IPB001
Vial: 1:1,A

03/16/10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| IPB001 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB001 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB001 | Perchlorate-O(18) | 107 > 89 | 3.30 | 11559.715 | 11559.715 | bb | | | 0.5555 | 111.10 | 11.10 | 3273.5... | |

*not
3/16/10*

Quantify Sample Report MassLynx 4.0 SP4

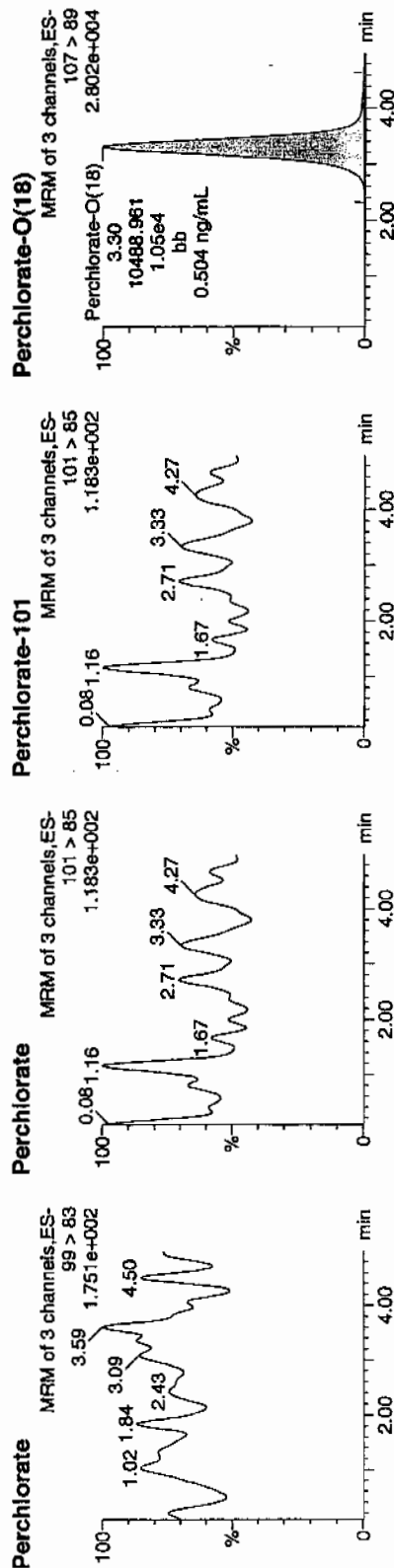
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
 Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315002a
 Date: 15-Mar-2010
 Time: 18:41:16
 ID: IPB001
 Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| IPB001 | Perchlorate | 99 > 83 | | | | | | | | | | | |
| IPB001 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB001 | Perchlorate-O(18) | 107 > 89 | 3.30 | 10488.961 | 10488.961 | bb | | | 0.5041 | 100.81 | 0.81 | 2327.8... | |

10488.961
3/16/10

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

Lab Code: GEL

Reporting Units: ug/kg

| Analyte | True | Found | %Rec | Date Analyzed | GEL File Id | GEL Sample ID |
|-----------------|------|-------|------|---------------|-------------|---------------|
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315008a | IPB002 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315008a | IPB002 |
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315010a | IPB003 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315010a | IPB003 |
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315016a | IPB004 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315016a | IPB004 |
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315018a | IPB005 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315018a | IPB005 |
| Perchlorate | 0.00 | 0 | NA | 15-MAR-10 | per0315031a | IPB006 |
| Perchlorate-101 | 0.00 | 0 | NA | 15-MAR-10 | per0315031a | IPB006 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315057a | IPB009 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315057a | IPB009 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315072a | IPB010 |

Perchlorate Continuing Calibration Blank

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GEL Job No.(SDG): 10-2010

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-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315072a | IPB010 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315076a | IPB011 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315076a | IPB011 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315080a | IPB012 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315080a | IPB012 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315092a | IPB013 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315092a | IPB013 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315103a | IPB014 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315103a | IPB014 |
| Perchlorate | 0.00 | 0 | NA | 16-MAR-10 | per0315114a | IPB015 |
| Perchlorate-101 | 0.00 | 0 | NA | 16-MAR-10 | per0315114a | IPB015 |

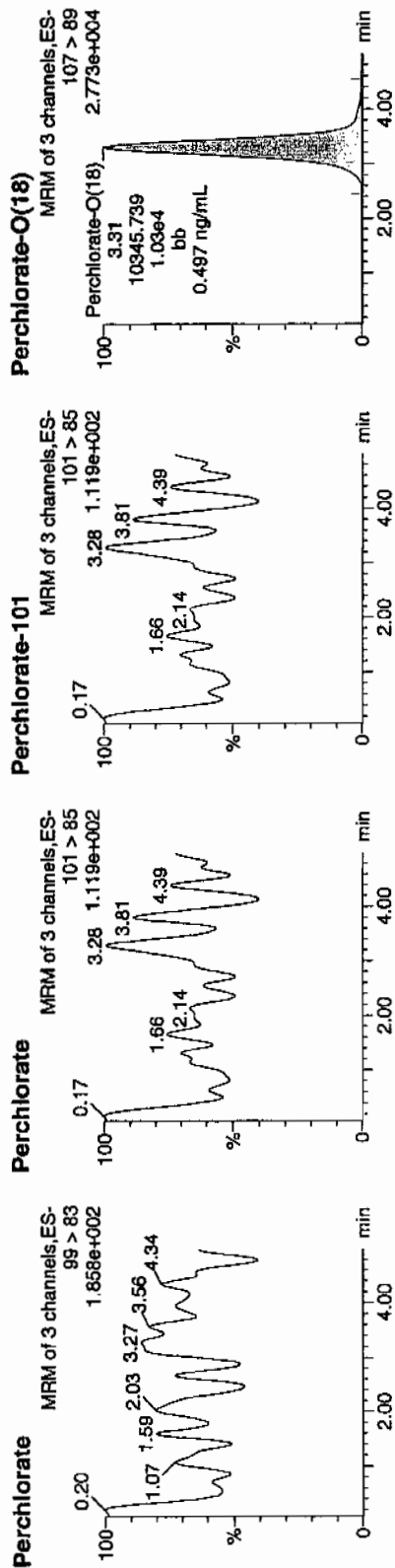
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315008a
Date: 15-Mar-2010
Time: 19:29:23
ID: IPB002
Vial: 1:1,A

03-16-10



| 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 | 3.31 | 10345.739 | 10345.739 | bb | | | 0.4972 | 99.43 | -0.57 | 892.464 | 0.00 |

4pt
3/15/10

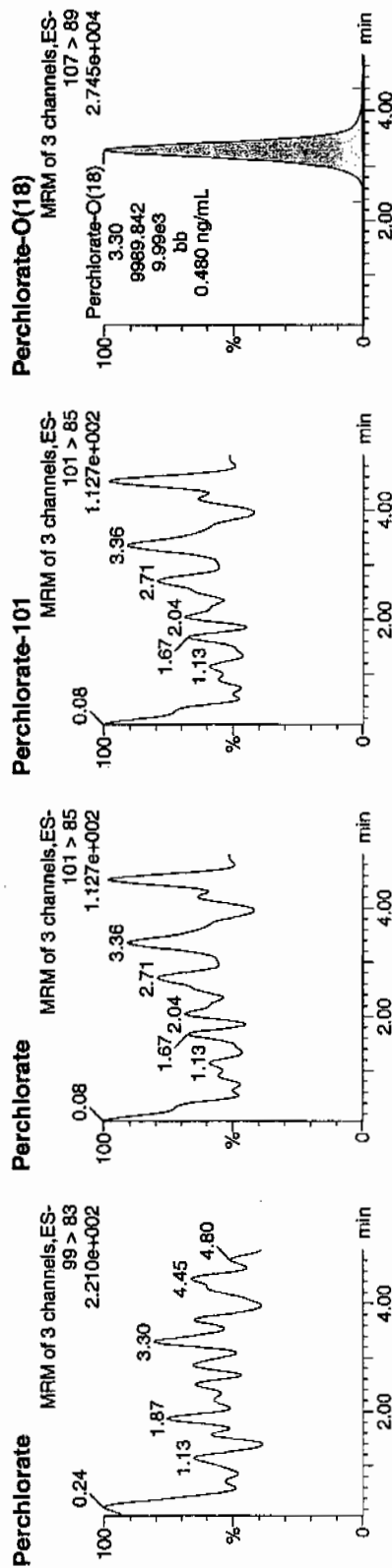
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315010a
Date: 15-Mar-2010
Time: 19:45:27
ID: IPB003
Vial: 1:1,A

0.03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|----------|----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| IPB003 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB003 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB003 | Perchlorate-O(18) | 107 > 89 | 3.30 | 9989.842 | 9989.842 | bb | | | 0.4801 | 96.01 | -3.99 | 1128.9... | |

107 > 89
3/18/10

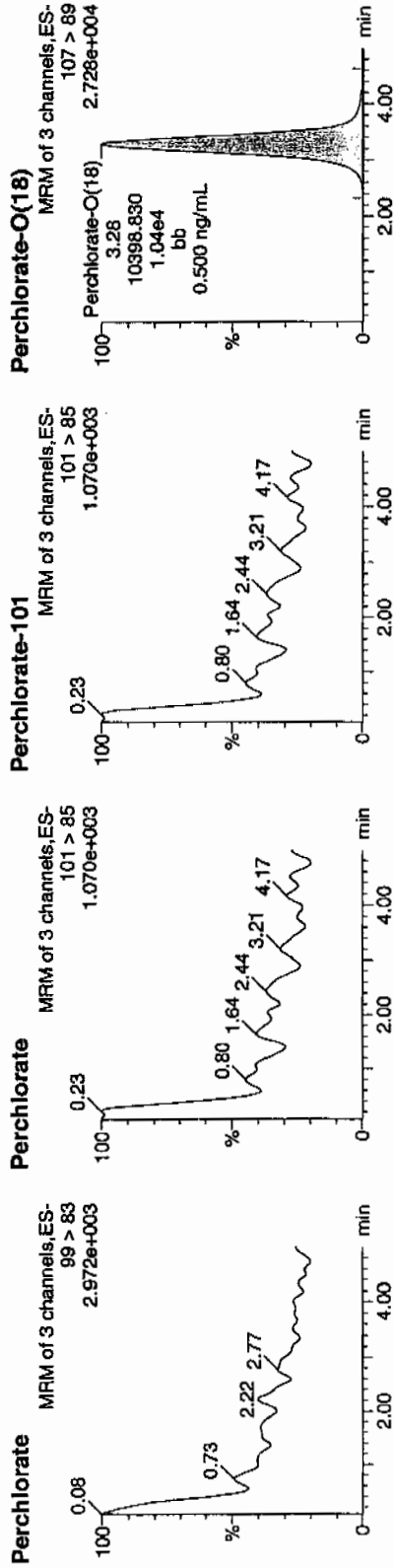
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315016a
Date: 15-Mar-2010
Time: 20:33:48
ID: IPB004
Vial: 1:1,A

Handwritten: 03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|-------|-------|-----------|-----------|
| IPB004 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB004 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB004 | Perchlorate-O(18) | 107 > 89 | 3.28 | 10398.830 | 10398.830 | bb | | | 0.4997 | 99.94 | -0.06 | 2851.5... | |

Handwritten: not 3/16/10

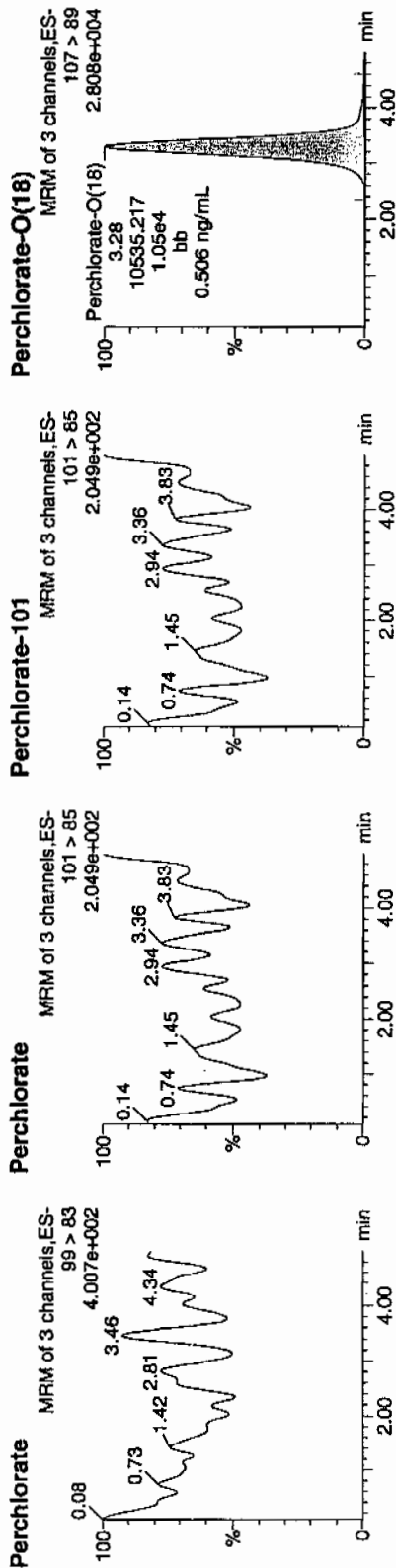
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315018a
Date: 15-Mar-2010
Time: 20:49:53
ID: IPB005
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| IPB005 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB005 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB005 | Perchlorate-O(18) | 107 > 89 | 3.28 | 10535.217 | 10535.217 | bb | | | 0.5063 | 101.26 | 1.26 | 2223.6... | |

MA7
3/16/10

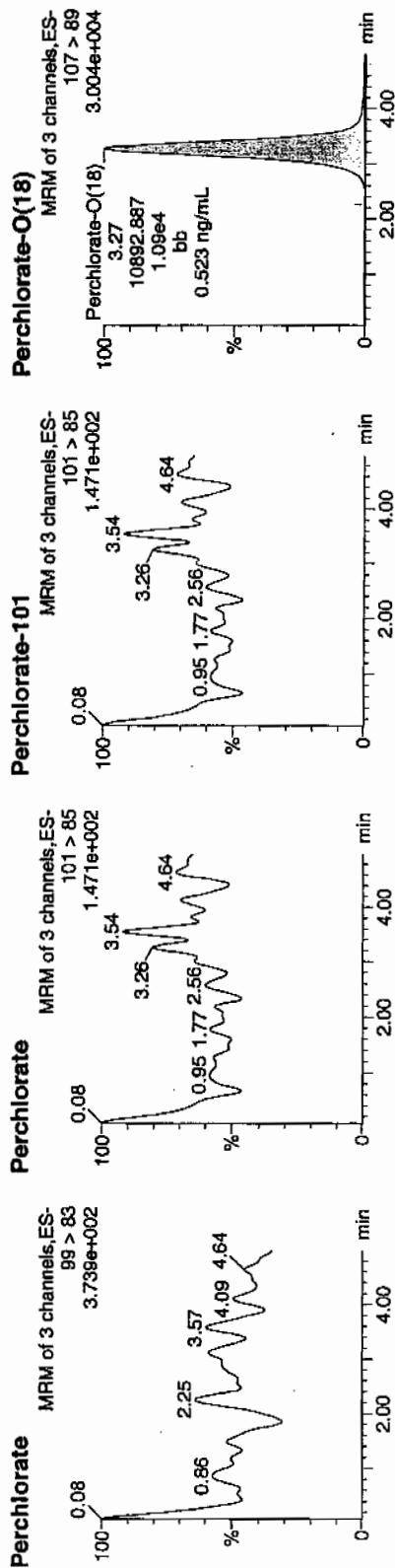
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315031a
Date: 15-Mar-2010
Time: 22:34:23
ID: IPB006
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|---------|-----------|
| IPB006 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB006 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB006 | Perchlorate-O(18) | 107 > 89 | 3.27 | 10892.887 | 10892.887 | bb | | | 0.5235 | 104.69 | 4.69 | 974.372 | |

4077
3/16/10

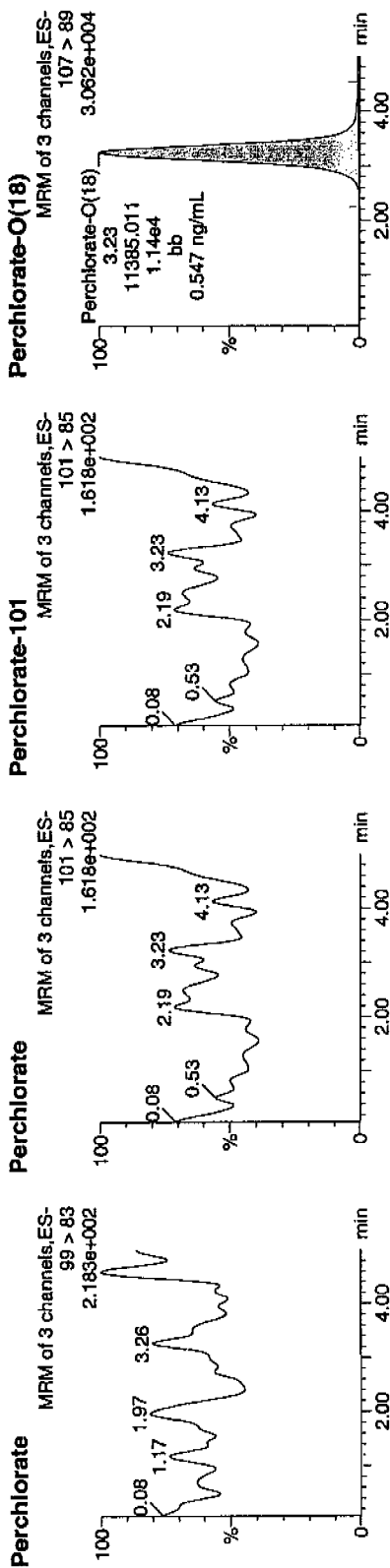
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\P perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315057a
Date: 16-Mar-2010
Time: 02:03:49
ID: IPB009
Vial: 1:1,A

0.547
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|------|-----------|
| IPB009 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB009 | Perchlorate-101 | 101 > 85 | 3.23 | 11385.011 | 11385.011 | bb | | | 0.5471 | 109.42 | ✓ | 9.42 | 1966.1... |
| IPB009 | Perchlorate-O(18) | 107 > 89 | 3.23 | 11385.011 | 11385.011 | bb | | | 0.5471 | 109.42 | ✓ | 9.42 | 1966.1... |

0.547
03-16-10

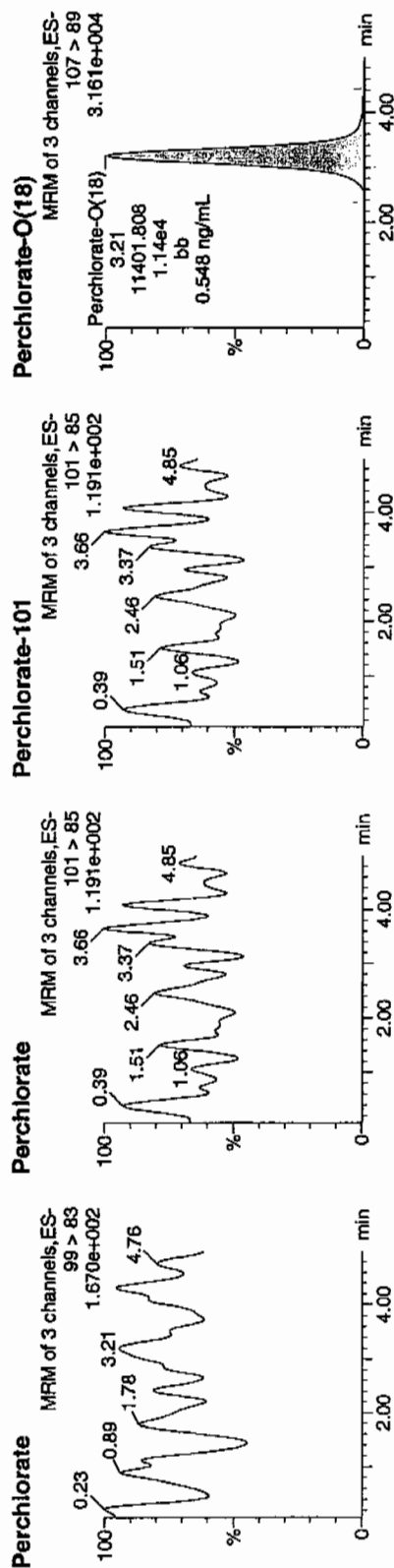
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315072a
Date: 16-Mar-2010
Time: 04:04:45
ID: IPB010
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | SN: Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|---------------|
| IPB010 | Perchlorate | 99 > 83 | | | | | | | | | | 0.00 |
| IPB010 | Perchlorate-101 | 101 > 85 | | | | | | | | | | |
| IPB010 | Perchlorate-O(18) | 107 > 89 | 3.21 | 11401.808 | 11401.808 | bb | | | 0.5479 | 109.58 | ✓ 9.58 | 5062.5... |

4.07
3/16/10

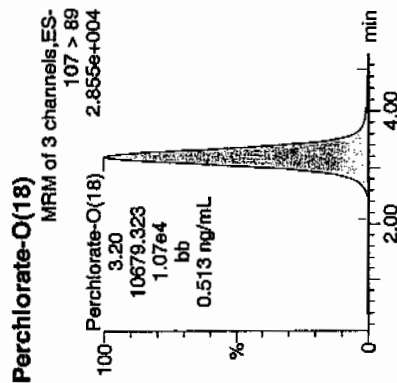
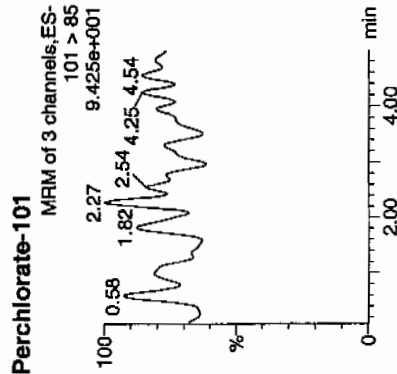
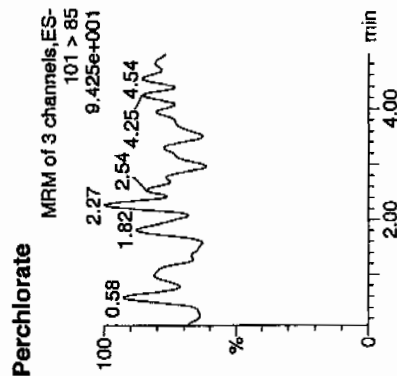
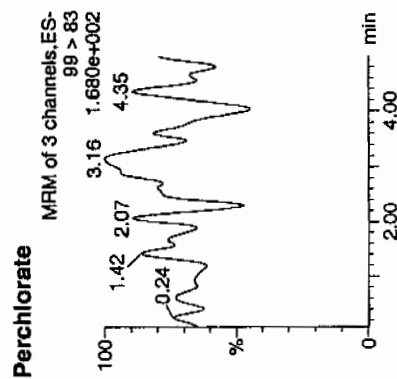
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315076a
Date: 16-Mar-2010
Time: 04:37:06
ID: IPB011
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| IPB011 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB011 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB011 | Perchlorate-O(18) | 107 > 89 | 3.20 | 10679.323 | 10679.323 | bb | | | 0.5132 | 102.64 | 2.64 | 1643.1... | |

not
3/16/10

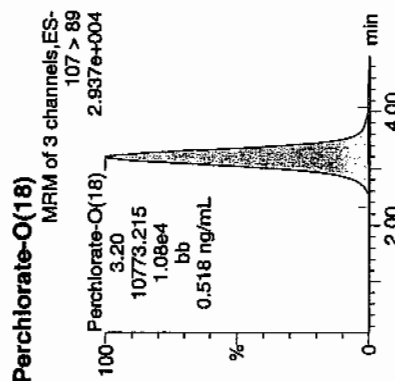
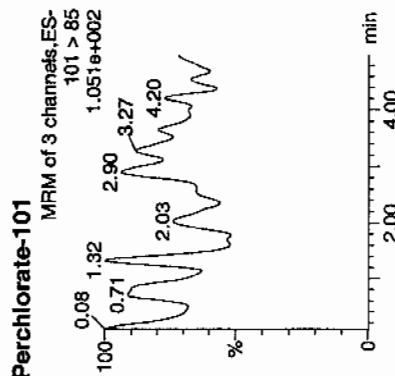
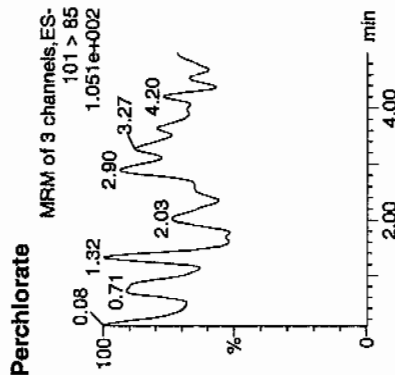
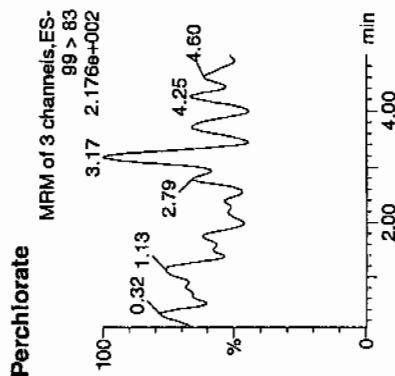
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315080a
Date: 16-Mar-2010
Time: 05:09:32
ID: IPB012
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| IPB012 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB012 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB012 | Perchlorate-O(18) | 107 > 89 | 3.20 | 10773.215 | 10773.215 | bb | | | 0.5177 | 103.54 | 3.54 | 1378.0... | |

4.077
3/16/10

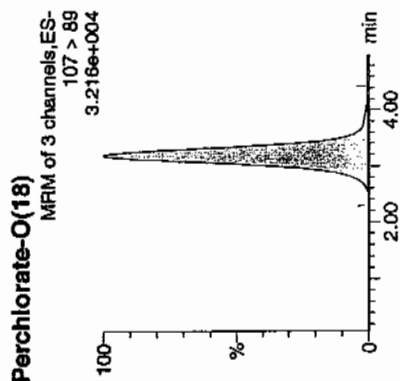
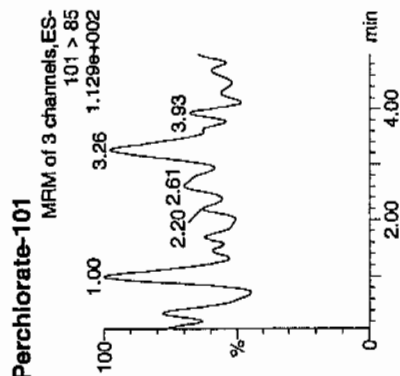
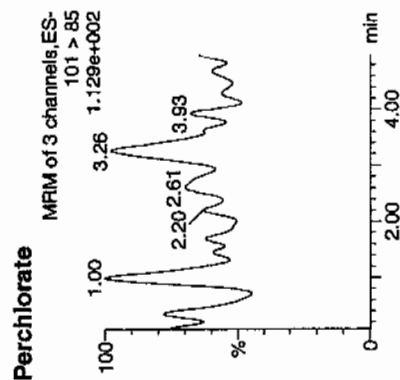
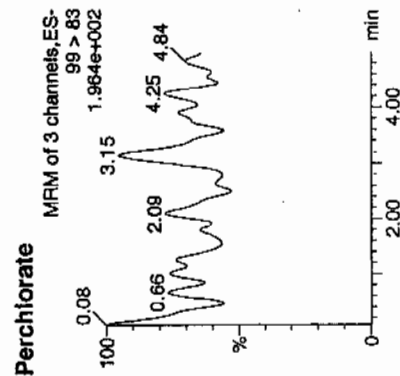
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315092a
Date: 16-Mar-2010
Time: 06:46:33
ID: IPB013
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| IPB013 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB013 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB013 | Perchlorate-O(18) | 107 > 89 | 3.18 | 11467.577 | 11467.577 | bb | | | 0.5511 | 110.22 | 10.22 | 6925.1... | |

3/16/10

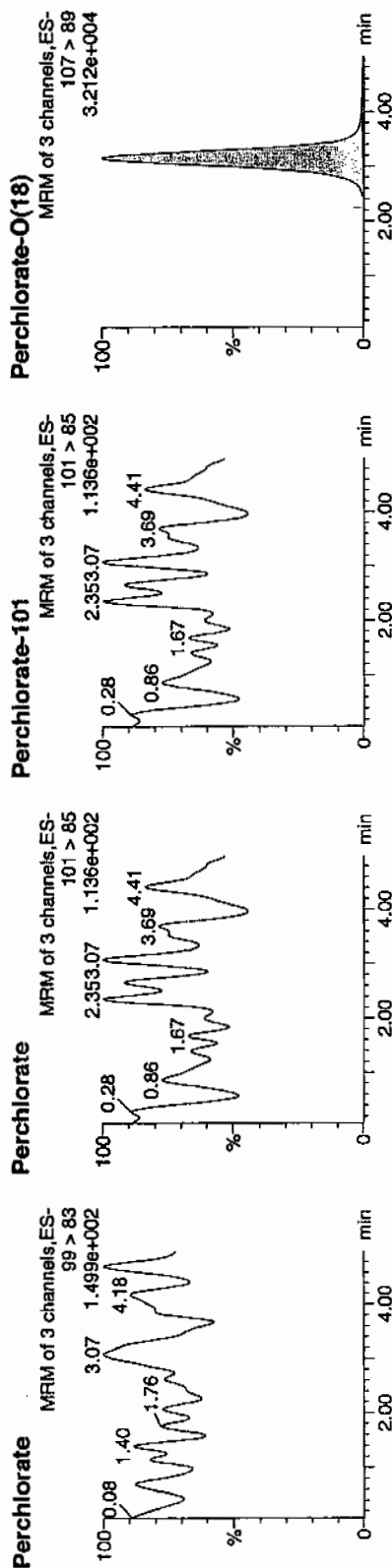
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315103a
Date: 16-Mar-2010
Time: 08:15:58
ID: IPB014
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|---------|-----------|
| IPB014 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB014 | Perchlorate-101 | 101 > 85 | | | | | | | | | | | |
| IPB014 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11666.901 | 11666.901 | bb | | | 0.5607 | 112.13 | 12.13 | 949.457 | |

4577
3/18/10

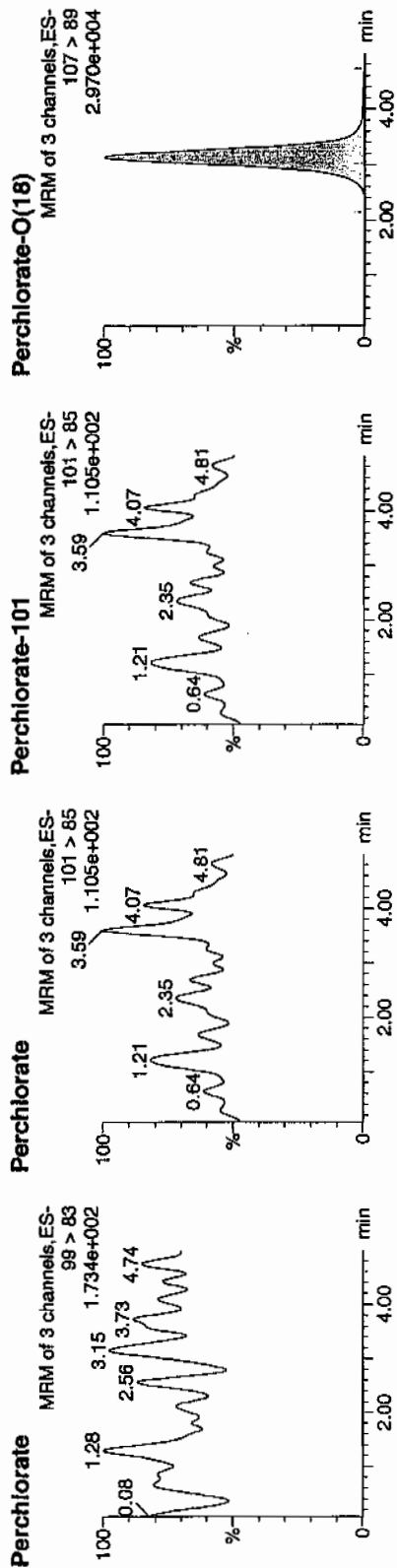
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315114a
Date: 16-Mar-2010
Time: 09:45:00
ID: IPB015
Vial: 1:1,A

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|--------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|------|-----------|
| IPB015 | Perchlorate | 99 > 83 | | | | | | | | | | | 0.00 |
| IPB015 | Perchlorate-101 | 101 > 85 | 3.15 | 10778.553 | 10778.553 | bb | | | 0.5180 | 103.59 | ✓ | 3.59 | 3407.8... |
| IPB015 | Perchlorate-O(18) | 107 > 89 | | | | | | | | | | | |

10077
3/16/10

Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;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.cal

Calibration Report - MS1 Static

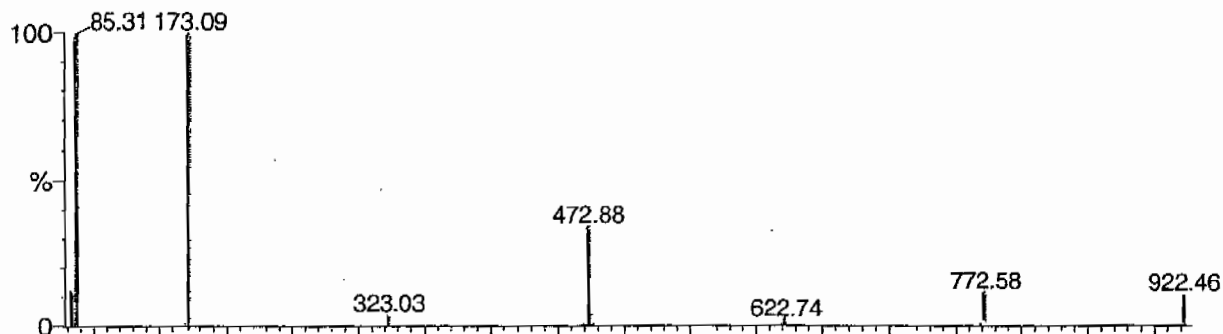
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

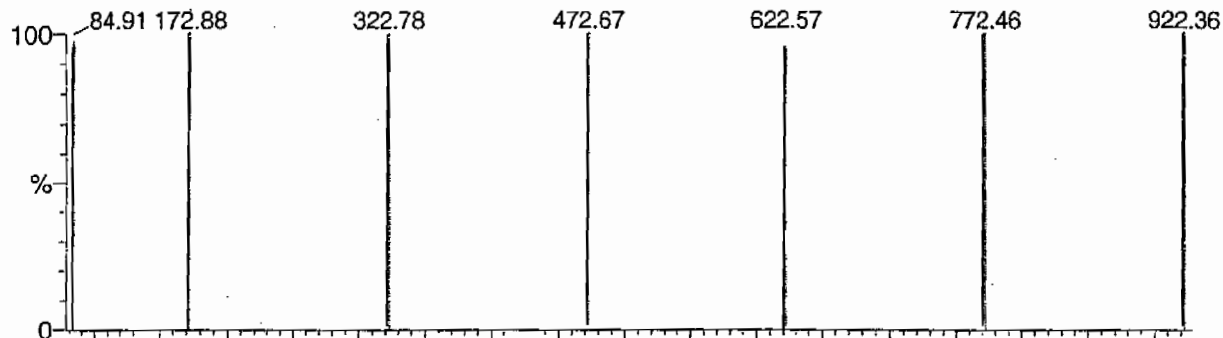
POINTS HIGHLIGHTED BY CURV 01-07-08

Data file: STATMS1 - Uncalibrated

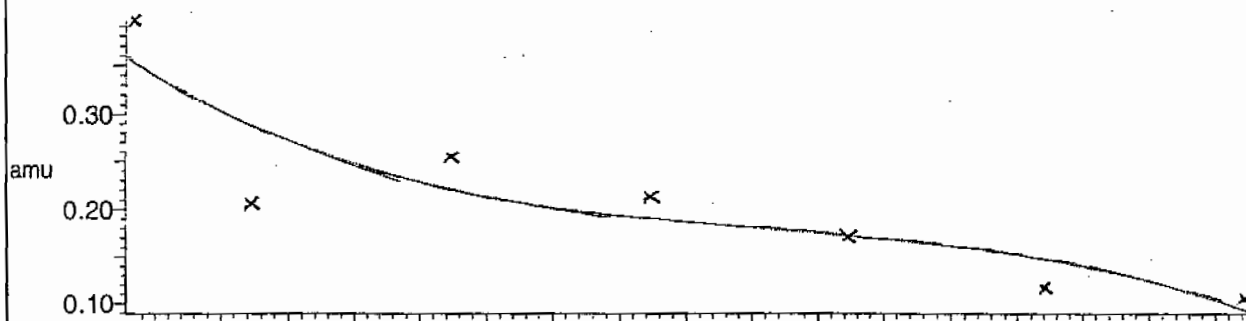
7 matches of 7 tested references



Reference file: Nairb

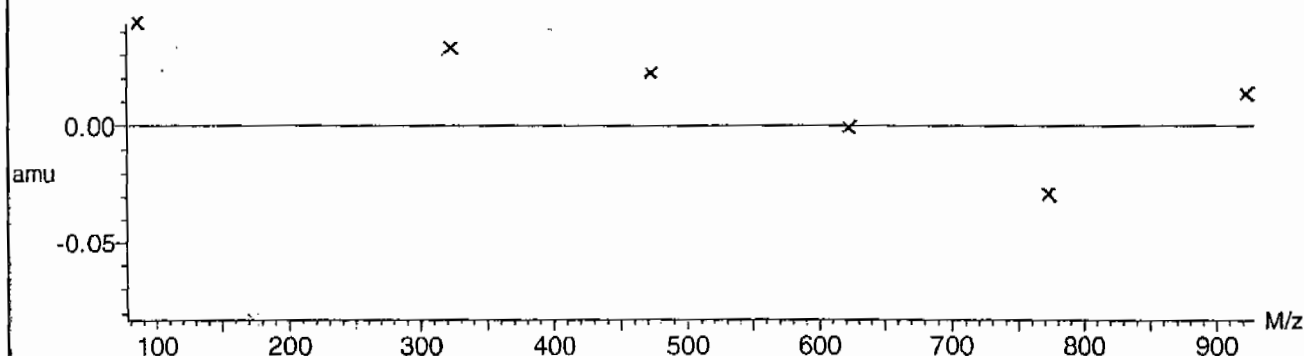


Mass difference (Raw - Ref mass)



Residuals

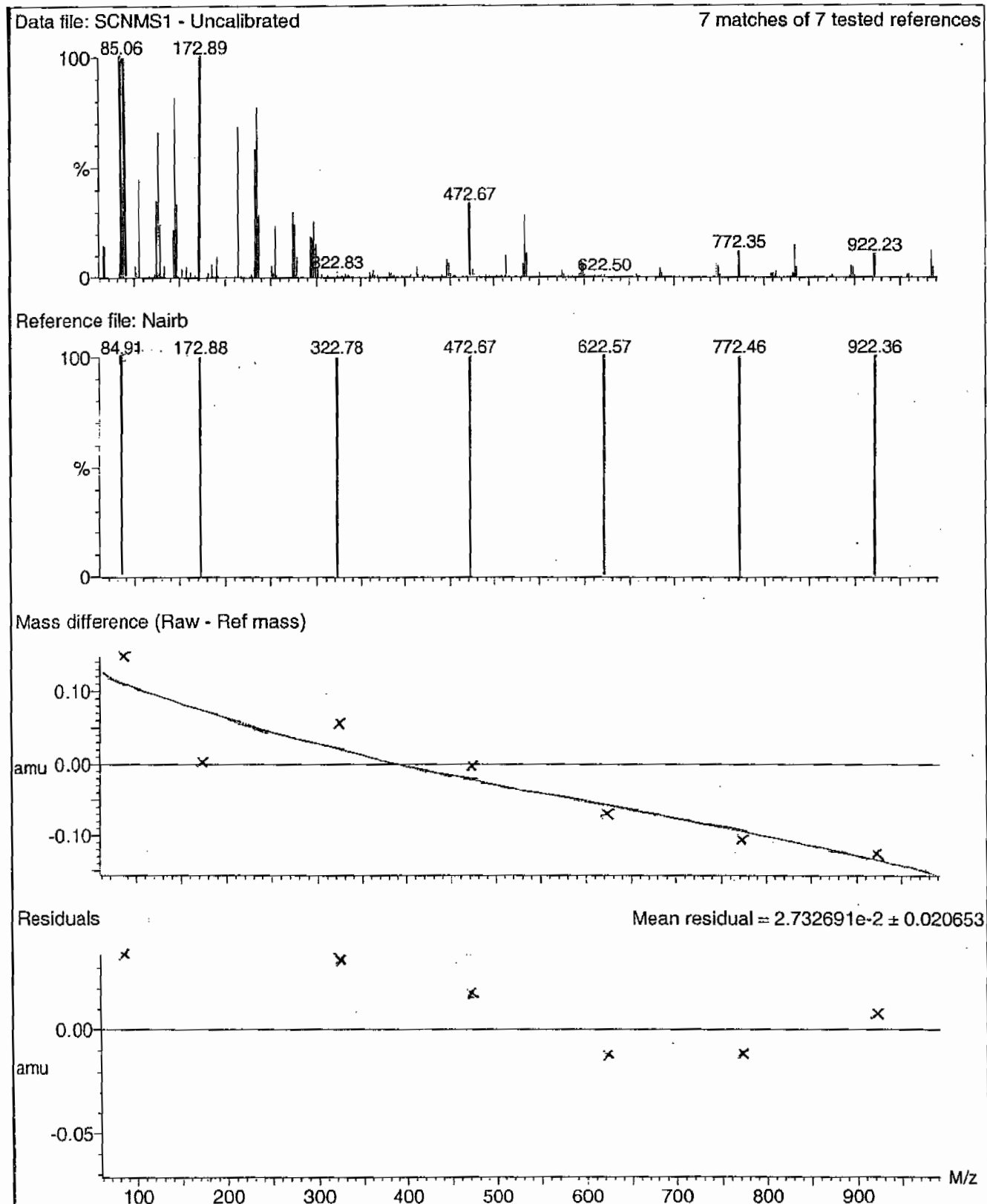
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

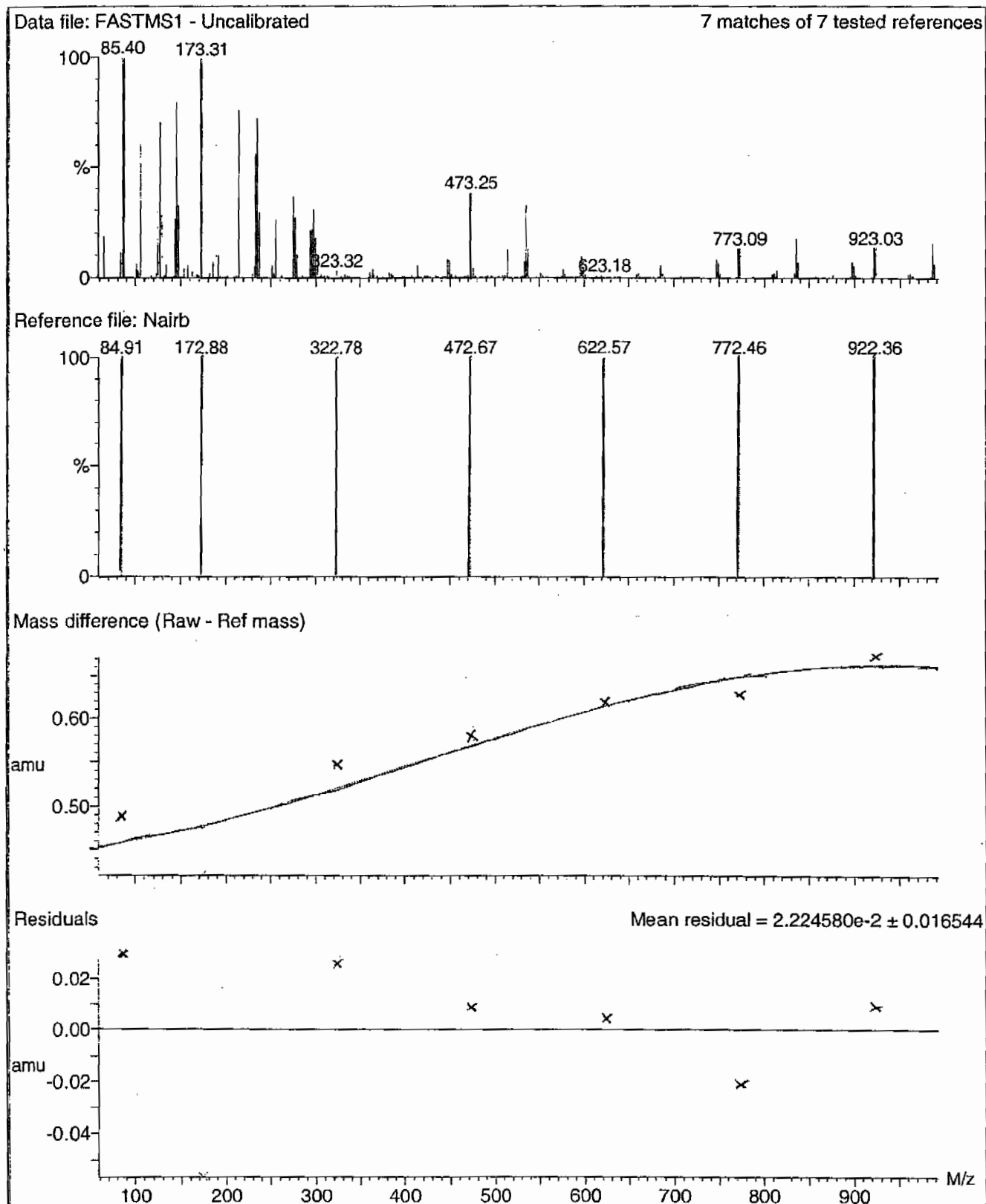
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

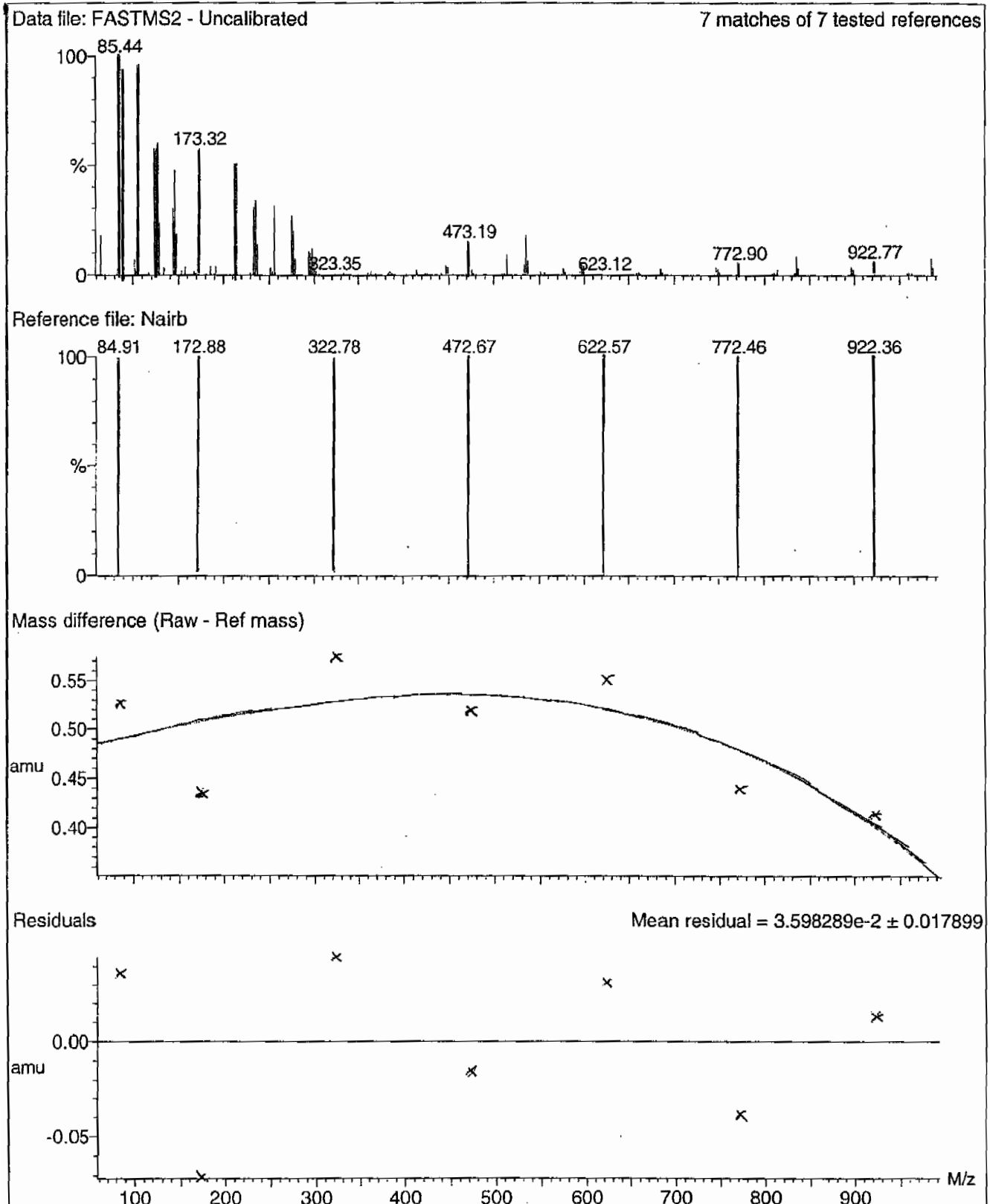
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



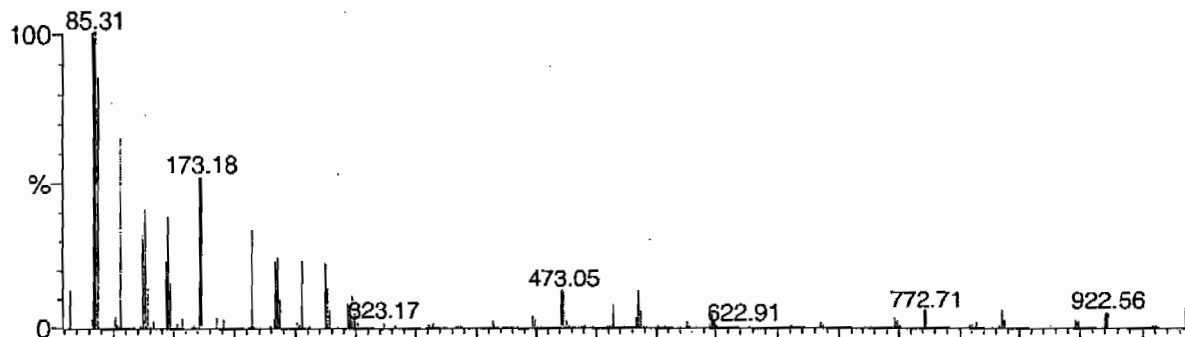
Calibration Report - MS2 Scanning

Page 1 of 1

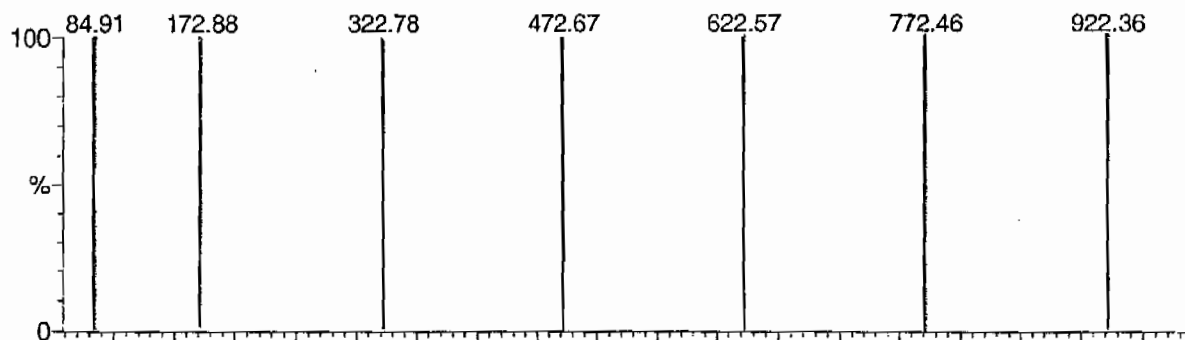
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

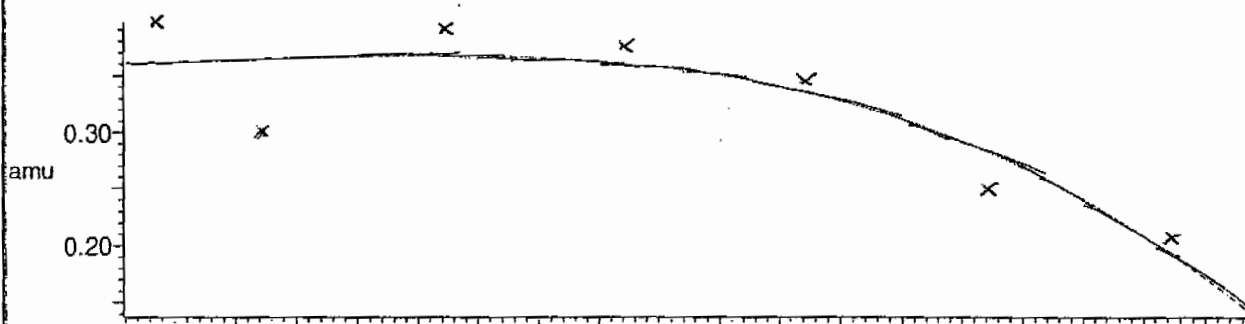
7 matches of 7 tested references



Reference file: Nairb

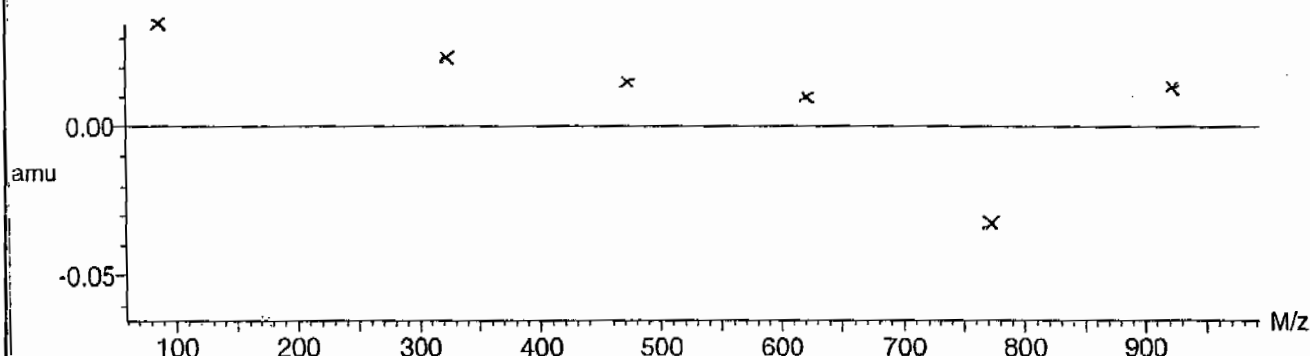


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.782494 \times 10^{-2} \pm 0.017442$



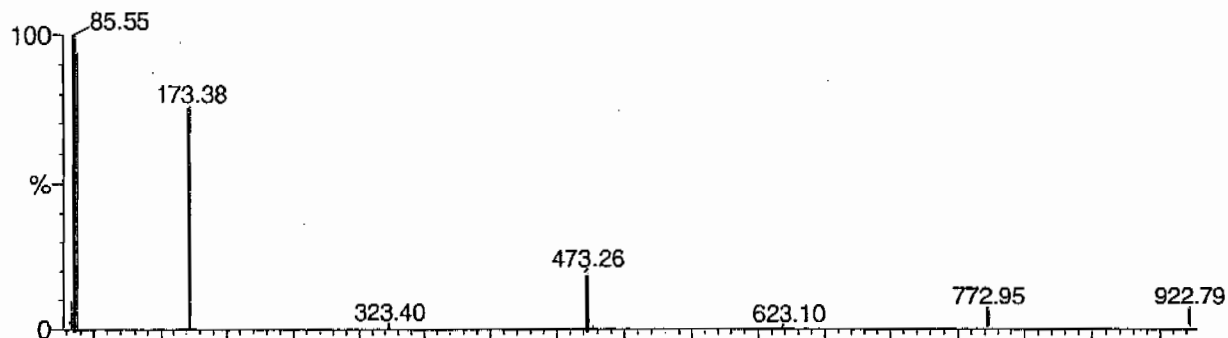
Calibration Report - MS2 Static

Page 1 of 1

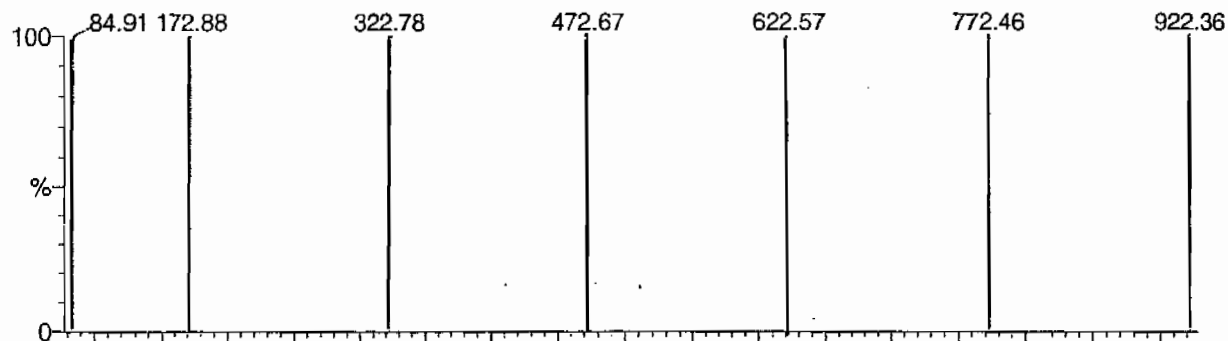
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

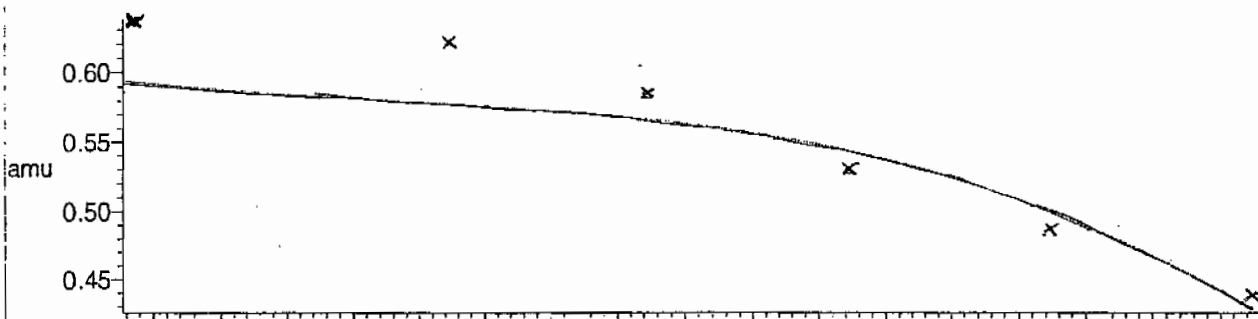
7 matches of 7 tested references



Reference file: Nairb

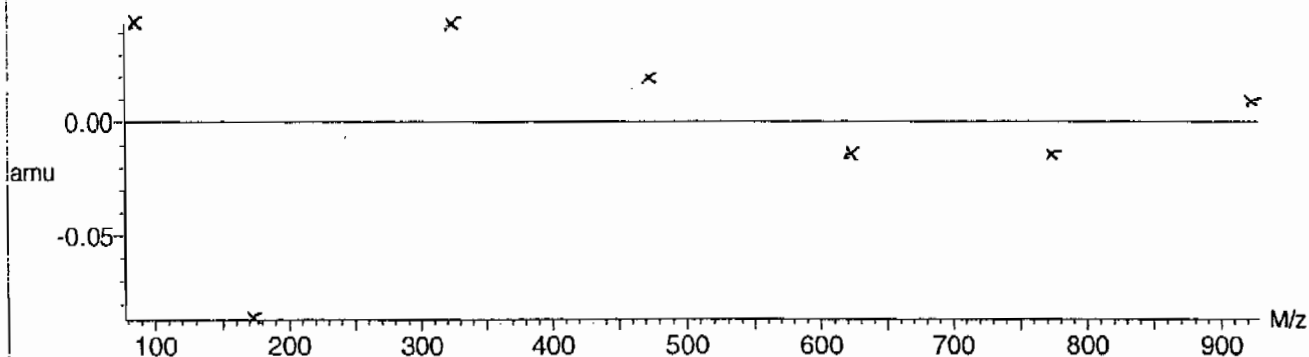


Mass difference (Raw - Ref mass)



Residuals

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



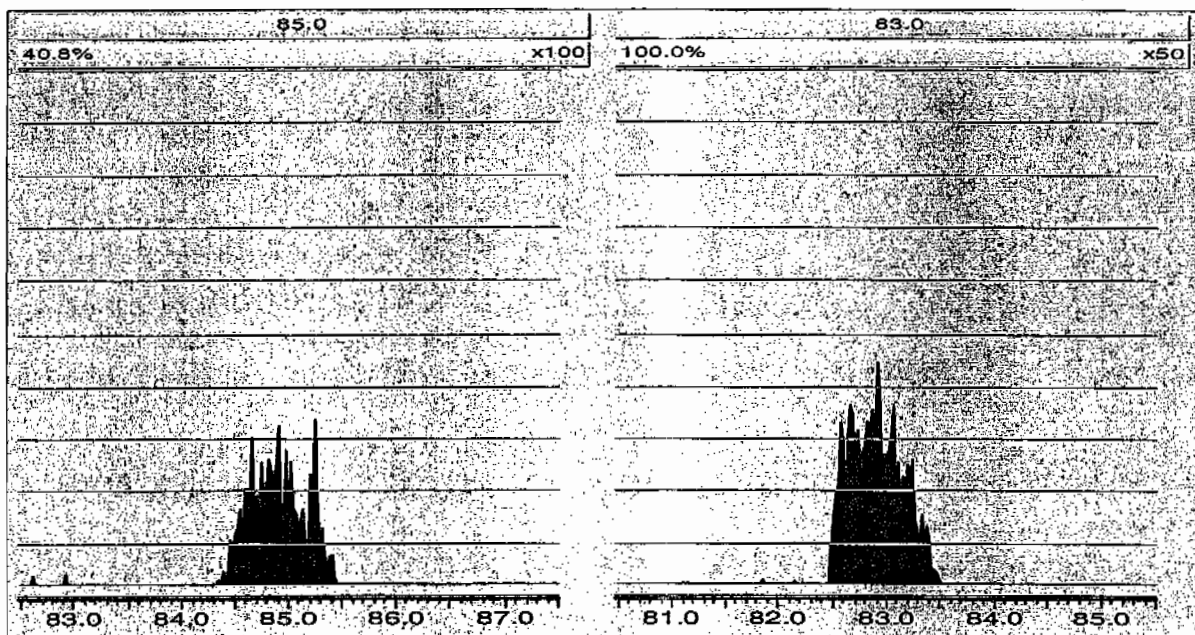
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, March 15, 2010 10:08:19 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-2010

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 0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|------------|-------|----------------|
| MidLevel Standard Area | per0315006a | 15-MAR-10 | 10371.7 | | | | |
| Lower Area Limit | | | 5185.85 | | | | |
| Upper Area Limit | | | 20743.4 | | | | |
| 1202056487 | per0315082a | 16-MAR-10 05:25 | 10504.2 | 3.2 | 3.20962 | 1.003 | |
| 1202056488 | per0315083a | 16-MAR-10 05:33 | 10973.4 | 3.18 | 3.20957 | 1.009 | |
| 1202056491 | per0315084a | 16-MAR-10 05:41 | 11043.6 | 3.23 | 3.25917 | 1.009 | |
| 247899001 | per0315085a | 16-MAR-10 05:49 | 10440.5 | 3.18 | 3.20955 | 1.009 | |
| 1202056489 | per0315086a | 16-MAR-10 05:58 | 11056.5 | 3.18 | 3.20958 | 1.009 | |
| 1202056490 | per0315087a | 16-MAR-10 06:06 | 11015.3 | 3.18 | 3.20957 | 1.009 | |
| 247899002 | per0315088a | 16-MAR-10 06:14 | 11045.3 | 3.18 | 3.19712 | 1.005 | |
| 247899003 | per0315089a | 16-MAR-10 06:22 | 11310.9 | 3.18 | 3.19708 | 1.005 | |

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-2010

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 0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|------------|-------|----------------|
| MidLevel Standard Area | per0315006a | 15-MAR-10 | 10371.7 | | | | |
| Lower Area Limit | | | 5185.85 | | | | |
| Upper Area Limit | | | 20743.4 | | | | |
| 247899004 | per0315090a | 16-MAR-10 06:30 | 11629.9 | 3.18 | 3.1971 | 1.005 | |
| 247899005 | per0315094a | 16-MAR-10 07:02 | 10842.8 | 3.17 | 3.19708 | 1.009 | |
| 247899006 | per0315095a | 16-MAR-10 07:10 | 11203.1 | 3.17 | 3.18462 | 1.005 | |
| 247899007 | per0315096a | 16-MAR-10 07:18 | 11450.2 | 3.16 | 3.15983 | 1 | |
| 247899008 | per0315097a | 16-MAR-10 07:26 | 11303.4 | 3.16 | 3.18463 | 1.008 | |
| 247899009 | per0315098a | 16-MAR-10 07:34 | 11430 | 3.16 | 3.17233 | 1.004 | |
| 247899010 | per0315099a | 16-MAR-10 07:43 | 11795.5 | 3.16 | 3.17238 | 1.004 | |
| 247899011 | per0315100a | 16-MAR-10 07:51 | 11502.4 | 3.15 | 3.17228 | 1.007 | |

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-2010

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 0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|------------|-------|----------------|
| MidLevel Standard Area | per0315006a | 15-MAR-10 | 10371.7 | | | | |
| Lower Area Limit | | | 5185.85 | | | | |
| Upper Area Limit | | | 20743.4 | | | | |
| 247899012 | per0315101a | 16-MAR-10 07:59 | 11391.6 | 3.15 | 3.17232 | 1.007 | |
| 247899013 | per0315105a | 16-MAR-10 08:32 | 11717.6 | 3.15 | 3.15987 | 1.003 | |
| 247899014 | per0315106a | 16-MAR-10 08:40 | 11009.3 | 3.15 | 3.1723 | 1.007 | |
| 247899015 | per0315107a | 16-MAR-10 08:48 | 11436.4 | 3.14 | 3.14738 | 1.002 | |
| 247899016 | per0315108a | 16-MAR-10 08:56 | 13293.6 | 3.14 | 3.15983 | 1.006 | |
| 247899017 | per0315109a | 16-MAR-10 09:04 | 11777.3 | 3.15 | 3.15982 | 1.003 | |
| 247899018 | per0315110a | 16-MAR-10 09:12 | 10990.9 | 3.15 | 3.15982 | 1.003 | |
| 247899019 | per0315111a | 16-MAR-10 09:20 | 11562.2 | 3.14 | 3.13503 | .998 | |

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

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 0.98-1.02 |
|------------------------|-------------|-----------------|---------|------|------------|-------|----------------|
| MidLevel Standard Area | per0315006a | 15-MAR-10 | 10371.7 | | | | |
| Lower Area Limit | | | 5185.85 | | | | |
| Upper Area Limit | | | 20743.4 | | | | |
| 247899020 | per0315112a | 16-MAR-10 09:28 | 11032.1 | 3.12 | 3.14735 | 1.009 | |

SAMPLE DATA

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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7896
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899001
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 94.1

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 05:49 | per0315085a |
| 14797-73-0 | Perchlorate-101 | .532 | 2.13 | 0.532 | ug/kg | U | 1 | 16-MAR-10 05:49 | per0315085a |
| | Perchlorate-O(18) | | | 5.33 | ug/kg | | 1 | 16-MAR-10 05:49 | per0315085a |

[^] 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: Charlers W. Wilson

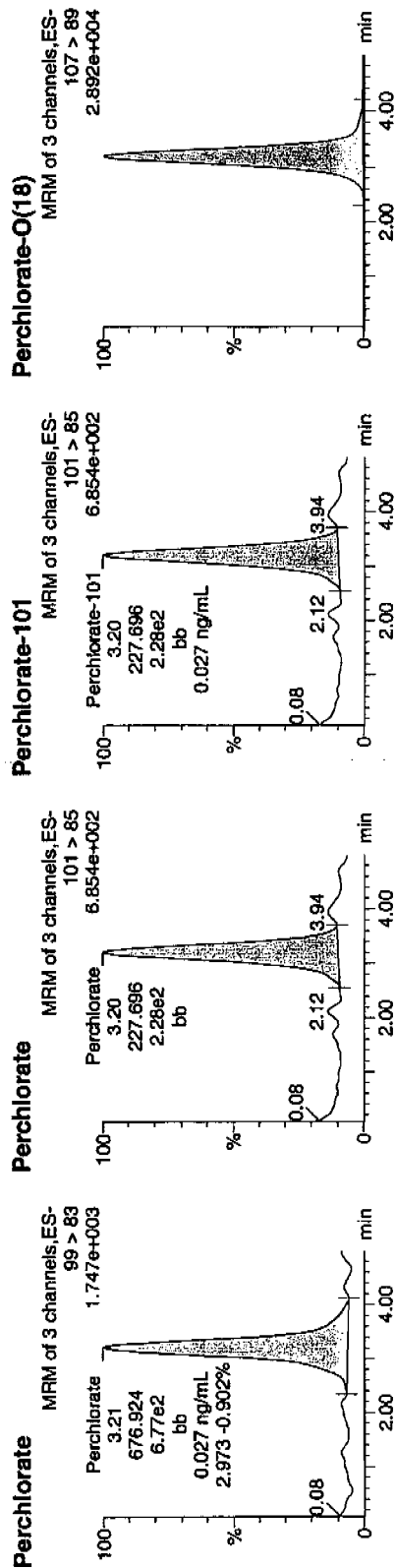
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315085a
Date: 16-Mar-2010
Time: 05:49:57
ID: 247899001
Vial: 2:5,C

03-16-10

1920-1958106 | 5070 | 1 |



| ID | Name | Trace | RT | Area | Response | Flags | Mod | Date | Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|-----|------|------|--------|--------|------|-----------|-----------|
| 247899001 | Perchlorate | 99 > 83 | 3.21 | 676.924 | 676.924 | bb | | | | 0.0266 | | | 14.194 | 2.97 |
| 247899001 | Perchlorate-101 | 101 > 85 | 3.20 | 227.696 | 227.696 | bb | | | | 0.0267 | | | 56.942 | |
| 247899001 | Perchlorate-O(18) | 107 > 89 | 3.18 | 10440.547 | 10440.547 | bb | | | | 0.5017 | 100.35 | 0.35 | 2091.1... | |

1477
3/16/10

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: 258899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7894

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899002

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 73

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:14 | per0315088a |
| 14797-73-0 | Perchlorate-101 | .684 | 2.74 | 0.684 | ug/kg | U | 1 | 16-MAR-10 06:14 | per0315088a |
| | Perchlorate-O(18) | | | 7.26 | ug/kg | | 1 | 16-MAR-10 06:14 | per0315088a |

[^] 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: Charfers W. Wilson

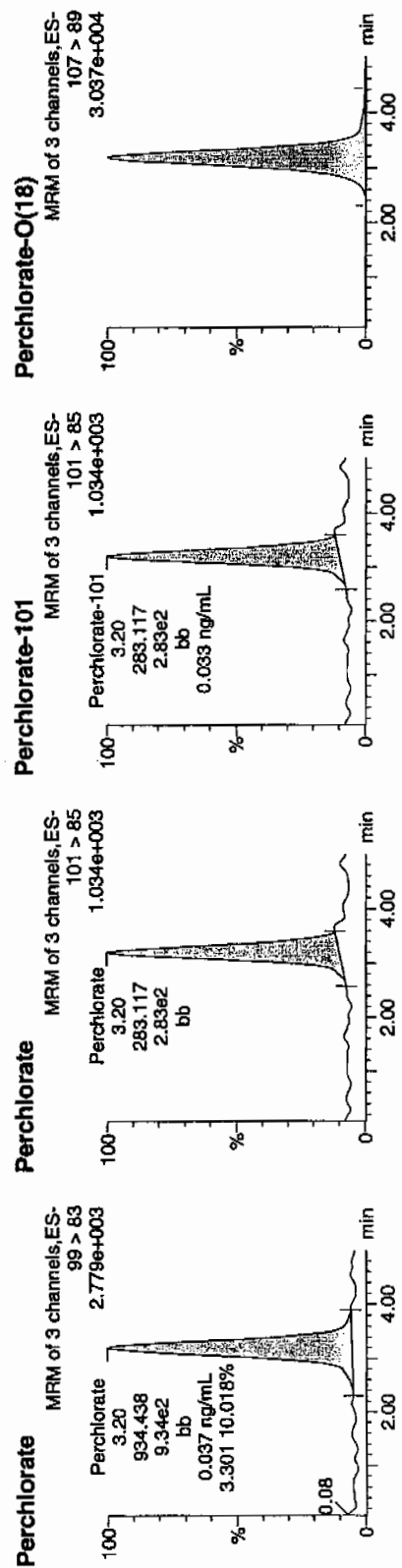
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315088a
Date: 16-Mar-2010
Time: 06:14:05
ID: 247899002
Vial: 2:5,F

33-16-10

LAN 453906 / 3000 / 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | IS/ION | Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-------|
| 247899002 | Perchlorate | 99 > 83 | 3.20 | 934.438 | 934.438 | bb | | | 0.0367 | | | 189.695 | 3.30 |
| 247899002 | Perchlorate-101 | 101 > 85 | 3.20 | 283.117 | 283.117 | bb | | | 0.0332 | | | 111.804 | |
| 247899002 | Perchlorate-O(18) | 107 > 89 | 3.18 | 11045.285 | 11045.285 | bb | | | 0.5308 | 106.16 | 6.16 | 5179.7... | |

111.804
3/16/10

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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7900
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899003
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 % Solids: 91.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 06:22 | per0315089a |
| 14797-73-0 | Perchlorate-101 | .545 | 2.18 | 0.545 | ug/kg | U | 1 | 16-MAR-10 06:22 | per0315089a |
| | Perchlorate-O(18) | | | 5.92 | ug/kg | | 1 | 16-MAR-10 06:22 | per0315089a |

[^] 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
 Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315089a

Date: 16-Mar-2010

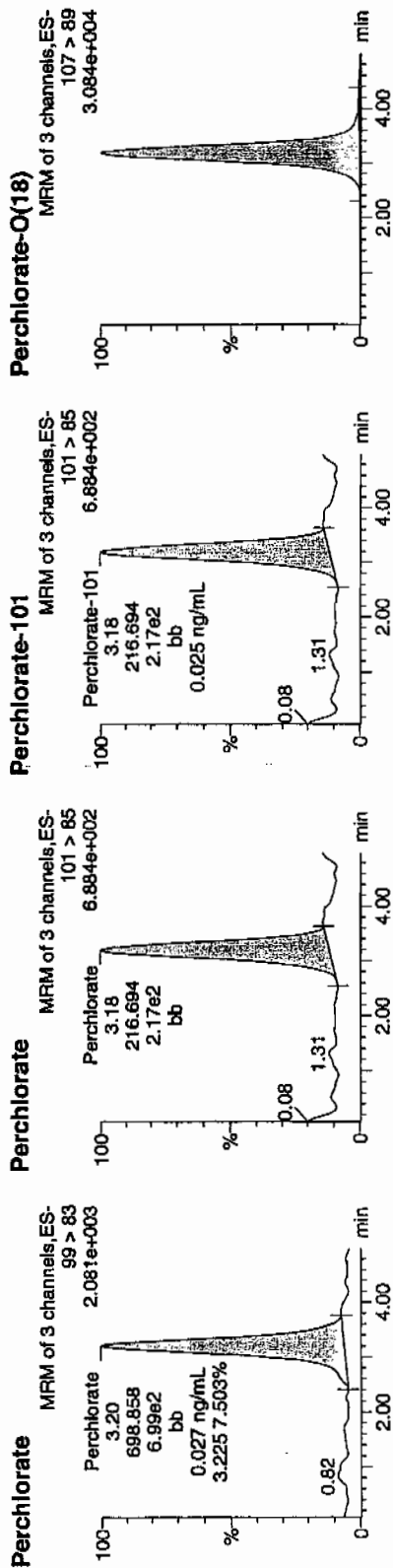
Time: 06:22:07

ID: 247899003

Vial: 2:6,A

03-16-10

LAN-1958906 | 5020 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|---------|-------|
| 247899003 | Perchlorate | 99 > 83 | 3.20 | 698.858 | 698.858 | bb | | | 0.0274 | | 70.148 | | 3.23 |
| 247899003 | Perchlorate-101 | 101 > 85 | 3.18 | 216.694 | 216.694 | bb | | | 0.0254 | | 26.561 | | |
| 247899003 | Perchlorate-Q(18) | 107 > 89 | 3.18 | 11310.887 | 11310.887 | bb | | | 0.5436 | 108.71 | 8.71 | 431.185 | |

3/15/10

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: 958892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7898

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899004

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 85

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .591 | 2.36 | 0.616 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate Isotope Ratio | | | 2.57 | | | 1 | 16-MAR-10 06:30 | per0315090a |
| 14797-73-0 | Perchlorate-101 | .591 | 2.36 | 0.716 | ug/kg | J | 1 | 16-MAR-10 06:30 | per0315090a |
| | Perchlorate-O(18) | | | 6.60 | ug/kg | | 1 | 16-MAR-10 06:30 | per0315090a |

[^] 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: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315090a

Date: 16-Mar-2010

Time: 06:30:11

ID: 247899004

Vial: 2:6,B

03/16/10

1620-1958906 | 5070 | 11

Perchlorate

MRM of 3 channels, ES-

99 > 83

3.882e+003

Perchlorate

1327.559

1.33e3

bb

0.052 ng/mL

2.572-14.258%

min

2.00

4.00

Perchlorate

MRM of 3 channels, ES-

101 > 85

1.470e+003

Perchlorate

516.107

5.16e2

bb

0.08

min

2.00

4.00

Perchlorate-101

MRM of 3 channels, ES-

101 > 85

1.470e+003

Perchlorate-101

516.107

5.16e2

bb

0.081 ng/mL

min

2.00

4.00

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

3.174e+004

Perchlorate-O(18)

0.0521

0.0606

0.5589

111.78

11.78

6699.2...

min

2.00

4.00

| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-------|
| 247899004 | Perchlorate | 99 > 83 | 3.20 | 1327.559 | 1327.559 | bb | | | 0.0521 | | | 250.760 | 2.57 |
| 247899004 | Perchlorate-101 | 101 > 85 | 3.18 | 516.107 | 516.107 | bb | | | 0.0606 | | | 85.868 | |
| 247899004 | Perchlorate-O(18) | 107 > 89 | 3.18 | 11629.915 | 11629.915 | bb | | | 0.5589 | 111.78 | 11.78 | 6699.2... | |

$$\frac{1327.559}{25487.2} = 0.0521$$

3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7897

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899005

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 84

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:02 | per0315094a |
| 14797-73-0 | Perchlorate-101 | .597 | 2.39 | 0.597 | ug/kg | U | 1 | 16-MAR-10 07:02 | per0315094a |
| | Perchlorate-O(18) | | | 6.22 | ug/kg | | 1 | 16-MAR-10 07:02 | per0315094a |

[^] 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

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

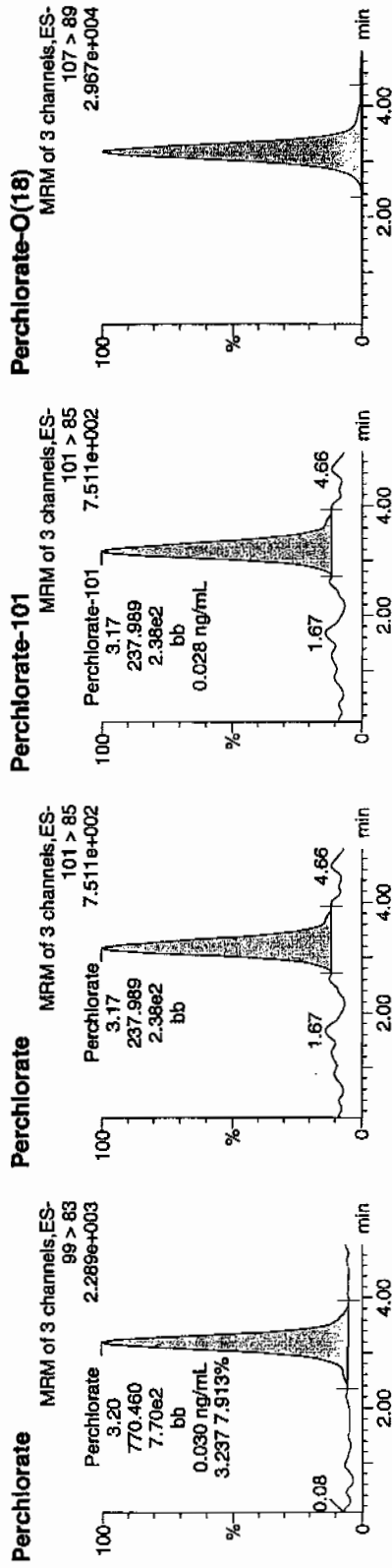
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315094a
Date: 16-Mar-2010
Time: 07:02:39
ID: 247899005
Vial: 2:6,C

03-16-10

1420-1958906 | 2000 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|---------|-----------|
| 247899005 | Perchlorate | 99 > 83 | 3.20 | 770.460 | 770.460 | bb | | | 0.0302 | - | | 139.870 | 3.24 |
| 247899005 | Perchlorate-101 | 101 > 85 | 3.17 | 237.989 | 237.989 | bb | | | 0.0279 | - | | 91.700 | |
| 247899005 | Perchlorate-O(18) | 107 > 89 | 3.17 | 10842.757 | 10842.757 | bb | | | 0.5211 | 104.21 | 4.21 | 402.702 | |

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3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7895

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899006

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

% Solids: 90.1

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:10 | per0315095a |
| 14797-73-0 | Perchlorate-101 | .555 | 2.22 | 0.555 | ug/kg | U | 1 | 16-MAR-10 07:10 | per0315095a |
| | Perchlorate-O(18) | | | 5.97 | ug/kg | | 1 | 16-MAR-10 07:10 | per0315095a |

[^] 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 $\frac{\% \text{ Solids}}{1}$

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315095a

Date: 16-Mar-2010

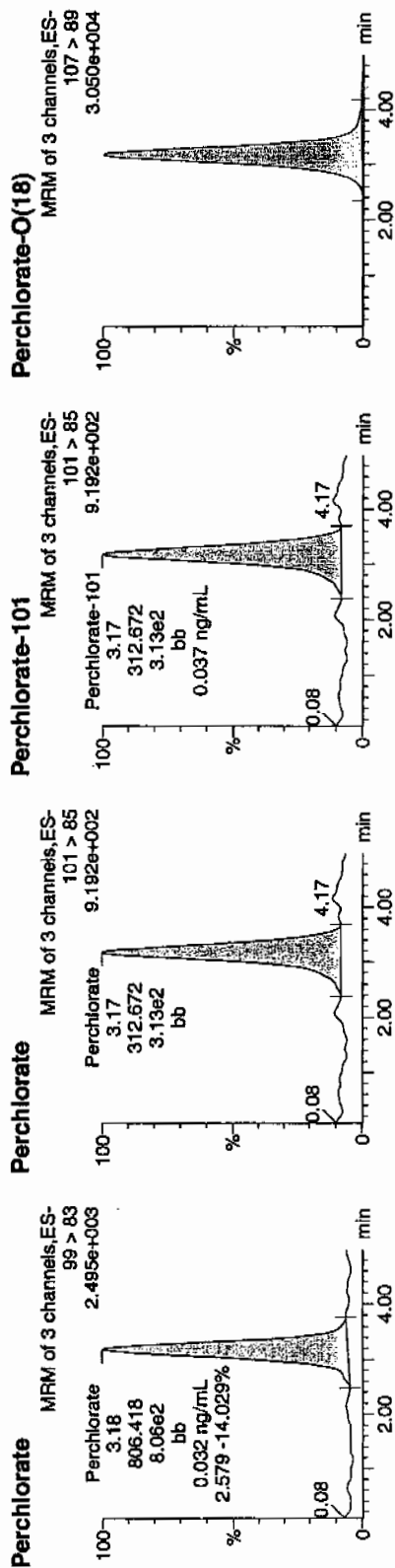
Time: 07:10:54

ID: 247899006

Vial: 2:6,D

03-16-10

1522 | 958906 | 5020 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| 247899006 | Perchlorate | 99 > 83 | 3.18 | 806.418 | 806.418 | bb | | | 0.0316 | | | 242.626 | 2.58 |
| 247899006 | Perchlorate-101 | 101 > 85 | 3.17 | 312.672 | 312.672 | bb | | | 0.0367 | | | 111.505 | |
| 247899006 | Perchlorate-O(18) | 107 > 89 | 3.17 | 11203.073 | 11203.073 | bb | | | 0.5384 | 107.67 | 7.67 | 1867.8... | |

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3/16/10

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: 258892
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7892
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899007
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 % Solids: 82

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:18 | per0315096a |
| 14797-73-0 | Perchlorate-101 | .613 | 2.45 | 0.613 | ug/kg | U | 1 | 16-MAR-10 07:18 | per0315096a |
| | Perchlorate-O(18) | | | 6.75 | ug/kg | | 1 | 16-MAR-10 07:18 | per0315096a |

[^] 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

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

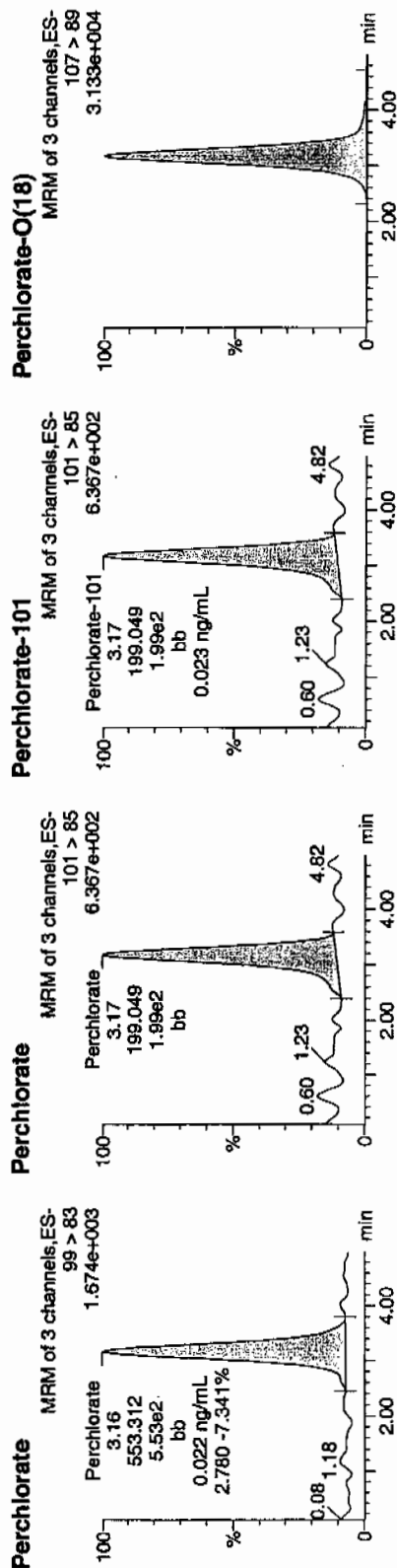
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315096a
Date: 16-Mar-2010
Time: 07:18:56
ID: 247899007
Vial: 2:6,E

0316-10

LAN-158906 | 5070 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 247899007 | Perchlorate | 99 > 83 | 3.16 | 553.312 | 553.312 | bb | | | 0.0217 | | | 73.011 | 2.78 |
| 247899007 | Perchlorate-101 | 101 > 85 | 3.17 | 199.049 | 199.049 | bb | | | 0.0234 | | | 50.082 | |
| 247899007 | Perchlorate-O(18) | 107 > 89 | 3.16 | 11450.229 | 11450.229 | bb | | | 0.5502 | 110.05 | 10.05 | 3872.8... | |

3/16/10

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: 258892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7893

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899008

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 72

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:26 | per0315097a |
| 14797-73-0 | Perchlorate-101 | .694 | 2.78 | 0.694 | ug/kg | U | 1 | 16-MAR-10 07:26 | per0315097a |
| | Perchlorate-O(18) | | | 7.54 | ug/kg | | 1 | 16-MAR-10 07:26 | per0315097a |

[^] 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\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315097a

Date: 16-Mar-2010

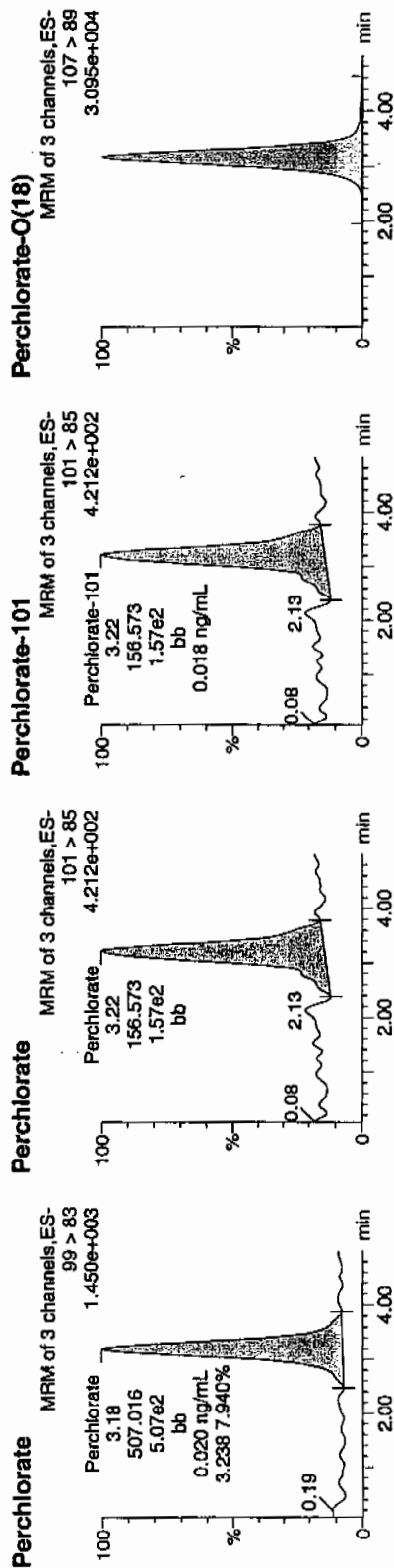
Time: 07:26:58

ID: 247899008

Vial: 2-6,F

0316-10

Law | 958906 | 5000 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod. | Date | Mod. | Time | ng/mL | %Rec | %Dev | IS/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|------|------|------|------|--------|--------|------|-----------|-----------|
| 247899008 | Perchlorate | 99 > 83 | 3.18 | 507.016 | 507.016 | bb | | | | | 0.0199 | | | 77.496 | 3.24 |
| 247899008 | Perchlorate-101 | 101 > 85 | 3.22 | 156.573 | 156.573 | bb | | | | | 0.0184 | | | 35.458 | |
| 247899008 | Perchlorate-Q(18) | 107 > 89 | 3.16 | 11303.438 | 11303.438 | bb | | | | | 0.5432 | 108.64 | 8.64 | 3064.5... | |

3/18/10

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: 258899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8011
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899009
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 85

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:34 | per0315098a |
| 14797-73-0 | Perchlorate-101 | .586 | 2.35 | 0.586 | ug/kg | U | 1 | 16-MAR-10 07:34 | per0315098a |
| | Perchlorate-O(18) | | | 6.44 | ug/kg | | 1 | 16-MAR-10 07:34 | per0315098a |

[^] 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 %Solids
 Aliquot

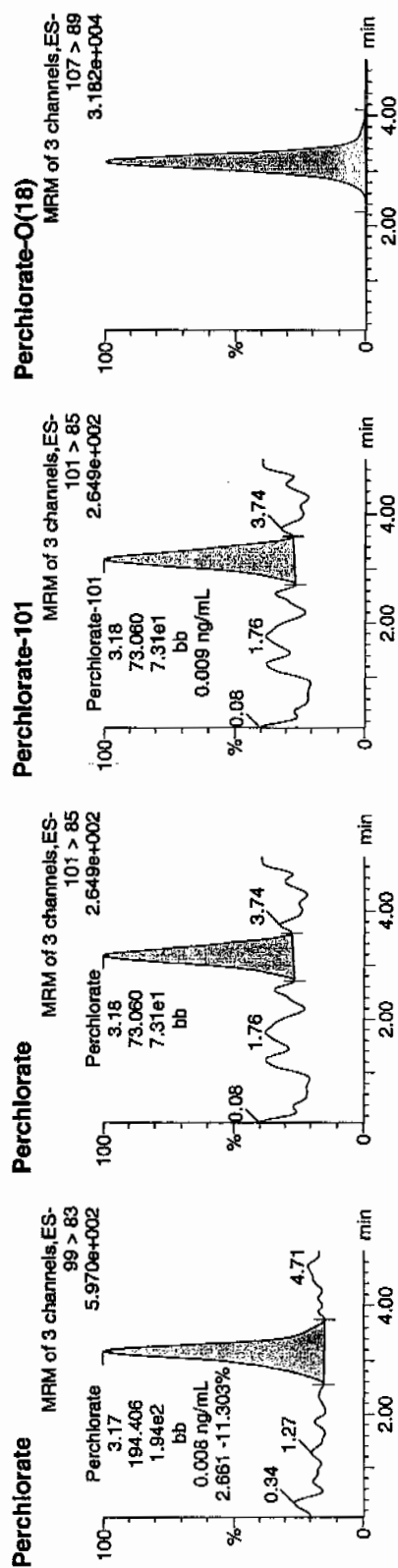
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315098a
Date: 16-Mar-2010
Time: 07:34:59
ID: 247899009
Vial: 2:7,A

Handwritten: 12-16-10
12-16-10 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|--------|-----------|
| 247899009 | Perchlorate | 99 > 83 | 3.17 | 194.406 | 194.406 | bb | | | 0.0076 | - | | 40.116 | 2.66 |
| 247899009 | Perchlorate-101 | 101 > 85 | 3.18 | 73.060 | 73.060 | bb | | | 0.0086 | | | 9.301 | |
| 247899009 | Perchlorate-O(18) | 107 > 89 | 3.16 | 11429.984 | 11429.984 | bb | | | 0.5493 | 109.86 | - | 9.86 | 3601.8... |

Handwritten: 12/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8004

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247892010

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 88

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:43 | per0315099a |
| 14797-73-0 | Perchlorate-101 | .567 | 2.27 | 0.567 | ug/kg | U | 1 | 16-MAR-10 07:43 | per0315099a |
| | Perchlorate-O(18) | | | 6.43 | ug/kg | | 1 | 16-MAR-10 07:43 | per0315099a |

[^] 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: Charfers W. Wilson

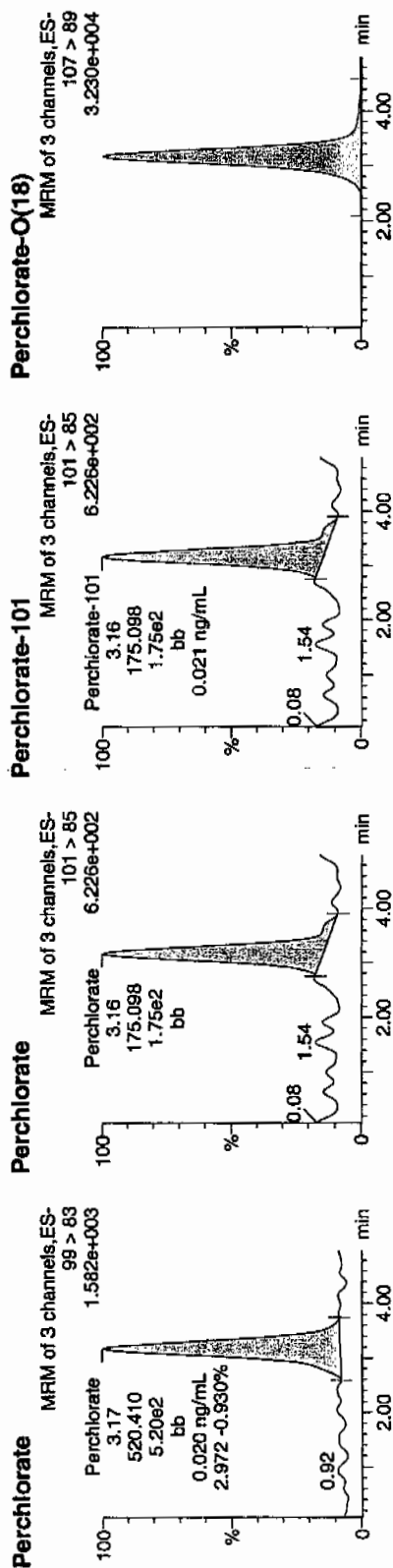
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315099a
Date: 16-Mar-2010
Time: 07:43:16
ID: 247899010
Vial: 2:7,B

622
03-16-10

15200958906 | 50000 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 247899010 | Perchlorate | 99 > 83 | 3.17 | 520.410 | 520.410 | bb | | | 0.0204 | | | 80.896 | 2.97 |
| 247899010 | Perchlorate-101 | 101 > 85 | 3.16 | 175.098 | 175.098 | bb | | | 0.0205 | | | 74.711 | |
| 247899010 | Perchlorate-O(18) | 107 > 89 | 3.16 | 11795.479 | 11795.479 | bb | | | 0.5668 | 113.37 | 13.37 | 1208.0... | |

3/16/10

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: 958892
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8002
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899011
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 % Solids: 76
 Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:51 | per0315100a |
| 14797-73-0 | Perchlorate-101 | .654 | 2.62 | 0.654 | ug/kg | U | 1 | 16-MAR-10 07:51 | per0315100a |
| | Perchlorate-O(18) | | | 7.23 | ug/kg | | 1 | 16-MAR-10 07:51 | per0315100a |

[^] 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\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315100a

Date: 16-Mar-2010

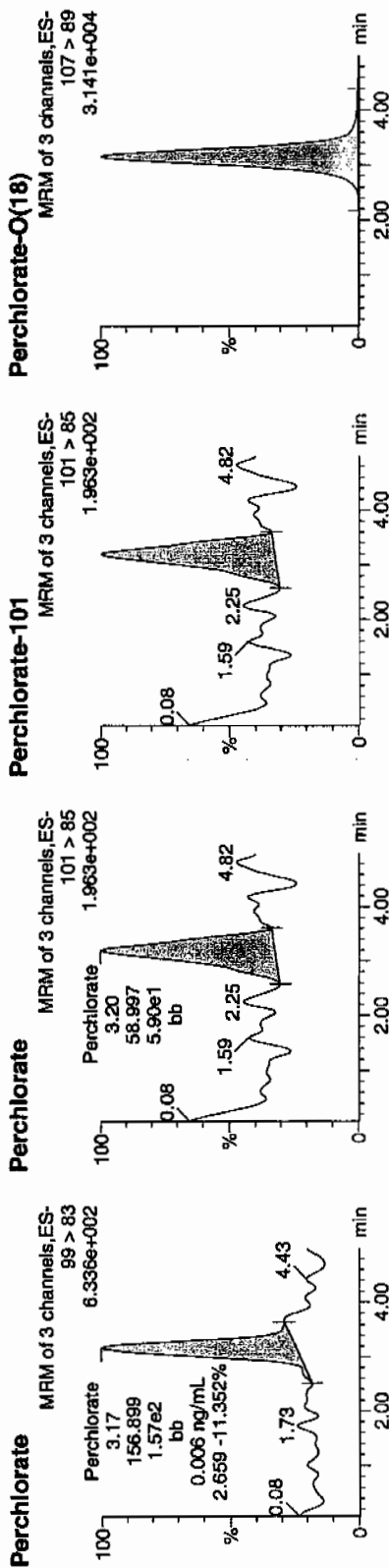
Time: 07:51:33

ID: 247899011

Vial: 2:7,C

33-16-10

12400 | 958906 | 5000 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|-----------|-----------|
| 247899011 | Perchlorate | 99 > 83 | 3.17 | 156.899 | 156.899 | bb | | | 0.0062 | - | 12.323 | 2.66 | |
| 247899011 | Perchlorate-101 | 101 > 85 | 3.20 | 58.997 | 58.997 | bb | | | 0.0069 | | 32.290 | | |
| 247899011 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11502.375 | 11502.375 | bb | | | 0.5528 | 110.55 | 10.55 | 5654.9... | |

3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8003

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899012

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

% Solids: 75

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 07:59 | per0315101a |
| 14797-73-0 | Perchlorate-101 | .664 | 2.66 | 0.664 | ug/kg | U | 1 | 16-MAR-10 07:59 | per0315101a |
| | Perchlorate-O(18) | | | 7.27 | ug/kg | | 1 | 16-MAR-10 07:59 | per0315101a |

[^] 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

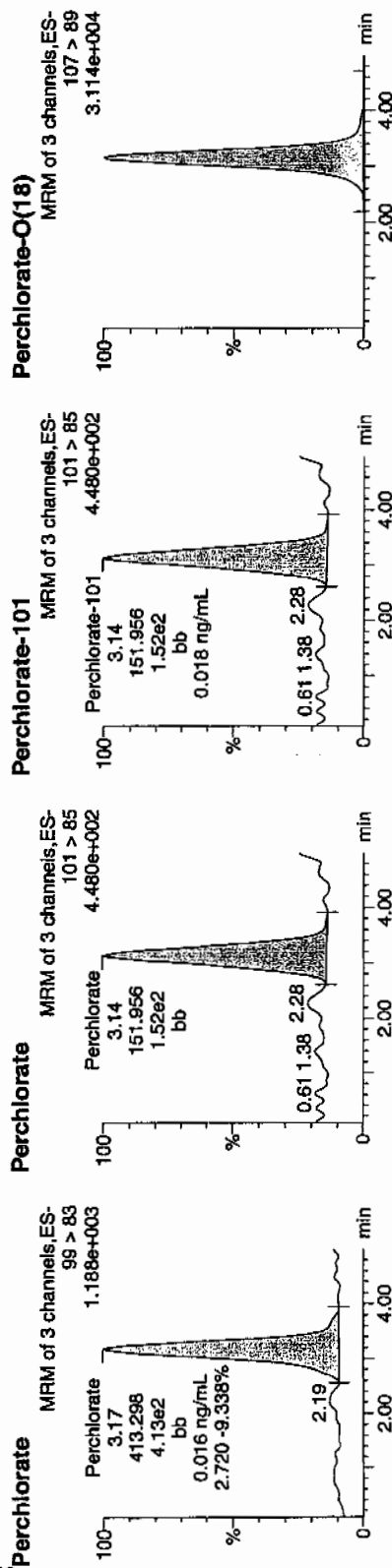
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315101a
Date: 16-Mar-2010
Time: 07:59:37
ID: 247899012
Vial: 2:7,D

6ms
03-16-10

1222 1958906 | 30020 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|---------|-----------|
| 247899012 | Perchlorate | 99 > 83 | 3.17 | 413.298 | 413.298 | bb | | | 0.0162 | | | 49.283 | 2.72 |
| 247899012 | Perchlorate-101 | 101 > 85 | 3.14 | 151.956 | 151.956 | bb | | | 0.0178 | | | 16.143 | |
| 247899012 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11391.568 | 11391.568 | bb | | | 0.5474 | 109.49 | 9.49 | 901.102 | |

11/17/10
3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8007

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899013

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 75

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:32 | per0315105a |
| 14797-73-0 | Perchlorate-101 | .663 | 2.65 | 0.663 | ug/kg | U | 1 | 16-MAR-10 08:32 | per0315105a |
| | Perchlorate-O(18) | | | 7.46 | ug/kg | | 1 | 16-MAR-10 08:32 | per0315105a |

[^] 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\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
 Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315105a

Date: 16-Mar-2010

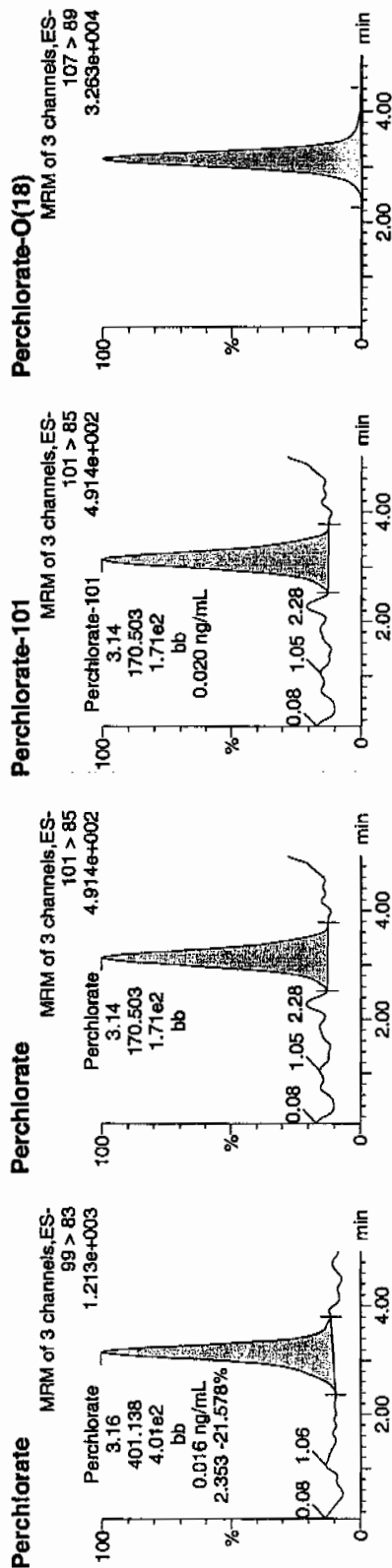
Time: 08:32:02

ID: 247899013

Vial: 2:7,E

and
 05-16-10

1958906 | 5000 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | % Rec | % Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|---------|-----------|
| 247899013 | Perchlorate | 99 > 83 | 3.16 | 401.138 | 401.138 | bb | | | 0.0157 | | | 69.067 | 2.35 |
| 247899013 | Perchlorate-101 | 101 > 85 | 3.14 | 170.503 | 170.503 | bb | | | 0.0200 | | | 75.627 | |
| 247899013 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11717.645 | 11717.645 | bb | | | 0.5631 | 112.62 | 12.62 | 346.570 | |

μm
 3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8002

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899014

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 92

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:40 | per0315106a |
| 14797-73-0 | Perchlorate-101 | .544 | 2.17 | 0.544 | ug/kg | U | 1 | 16-MAR-10 08:40 | per0315106a |
| | Perchlorate-O(18) | | | 5.75 | ug/kg | | 1 | 16-MAR-10 08:40 | per0315106a |

[^] 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: Charfers W. Wilson

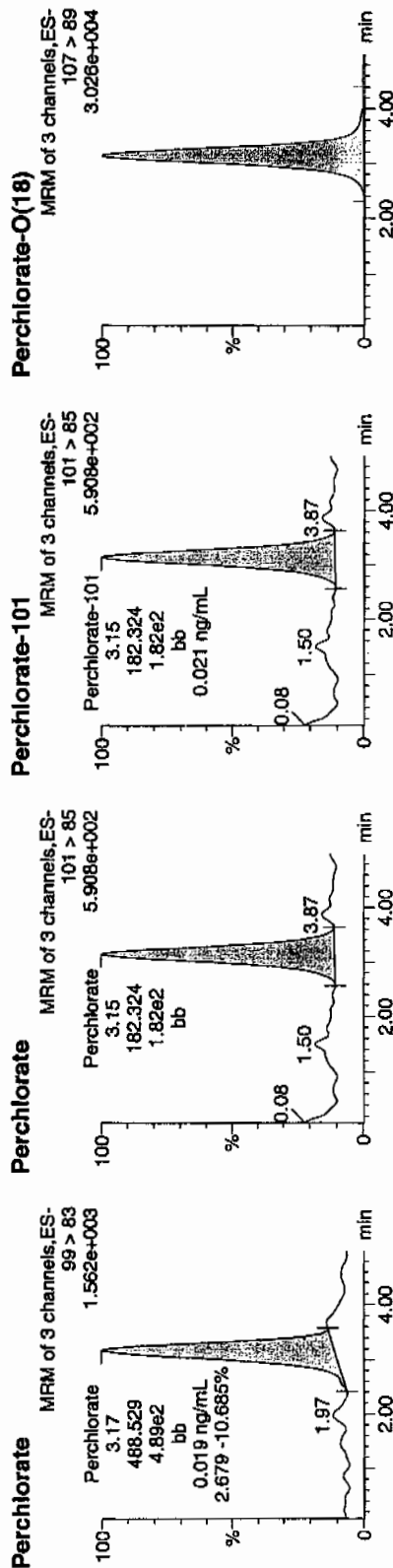
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315106a
Date: 16-Mar-2010
Time: 08:40:17
ID: 247899014
Vial: 2:7,F

03-16-10

LANC | 958106 | 50020 | 11



| ID | Name | Trace | RT | Area | Response | Flag | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|------|----------|----------|--------|---------|------|---------|-----------|
| 247899014 | Perchlorate | 99 > 83 | 3.17 | 488.529 | 488.529 | bb | | | 0.0192 | 110.090 | 2.68 | | |
| 247899014 | Perchlorate-101 | 101 > 85 | 3.15 | 182.324 | 182.324 | bb | | | 0.0214 | 51.490 | | | |
| 247899014 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11009.255 | 11009.255 | bb | | | 0.5291 | 105.81 | 5.81 | 678.533 | |

107
318/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-8010

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958899

Extraction Type: Solid Prep

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899015

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 89

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate Isotope Ratio | | | | | | | | |
| 14797-73-0 | Perchlorate-101 | .559 | 2.24 | 0.559 | ug/kg | U | 1 | 16-MAR-10 08:48 | per0315107a |
| | Perchlorate-O(18) | | | 6.15 | ug/kg | | 1 | 16-MAR-10 08:48 | per0315107a |

[^] 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 $\frac{1}{\text{Aliquot}}$ %Solids

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

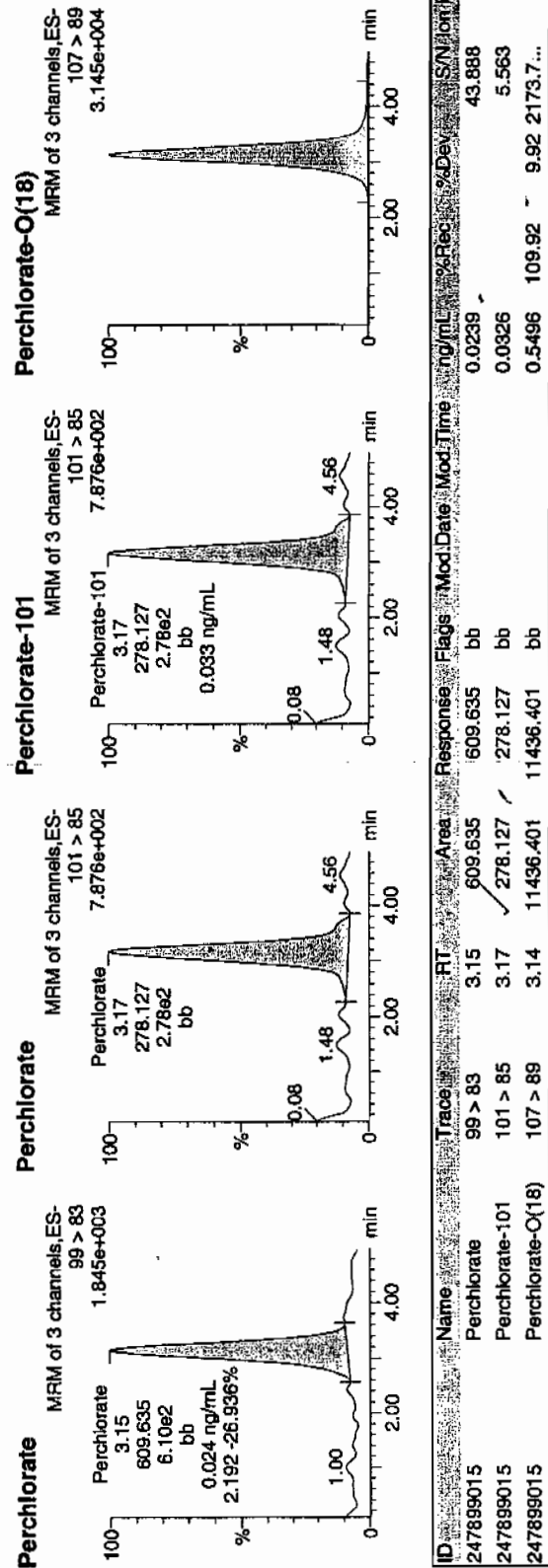
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315107a
Date: 16-Mar-2010
Time: 08:48:19
ID: 247899015
Vial: 2:8,A

03-16-10

15722 | 458404 | 30750 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| 247899015 | Perchlorate | 99 > 83 | 3.15 | 609.635 | 609.635 | bb | | | 0.0239 | | | 43.888 | 2.19 |
| 247899015 | Perchlorate-101 | 101 > 85 | 3.17 | 278.127 | 278.127 | bb | | | 0.0326 | | | 5.563 | |
| 247899015 | Perchlorate-O(18) | 107 > 89 | 3.14 | 11436.401 | 11436.401 | bb | | | 0.5496 | 109.92 | 9.92 | 2173.7... | |

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20.0500
1477
3/16/10

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: 958892
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8006
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899016
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 92.9

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 08:56 | per0315108a |
| 14797-73-0 | Perchlorate-101 | .538 | 2.15 | 0.538 | ug/kg | U | 1 | 16-MAR-10 08:56 | per0315108a |
| | Perchlorate-O(18) | | | 6.88 | ug/kg | | 1 | 16-MAR-10 08:56 | per0315108a |

[^] 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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

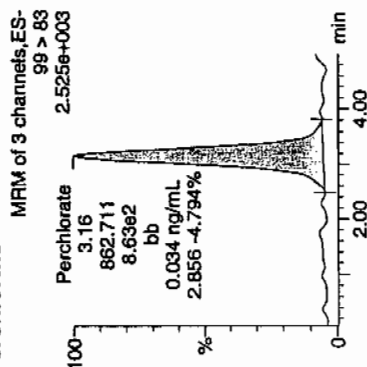
Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315108a
Date: 16-Mar-2010
Time: 08:56:24
ID: 247899016
Vial: 2:8,B

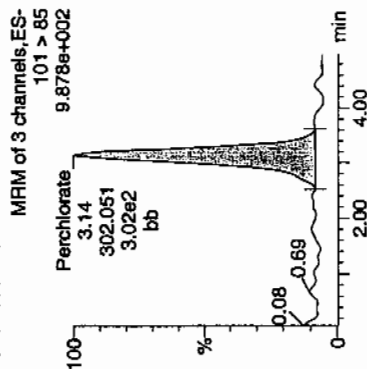
LANU | 958906 | 5070 | 11

03-16-10

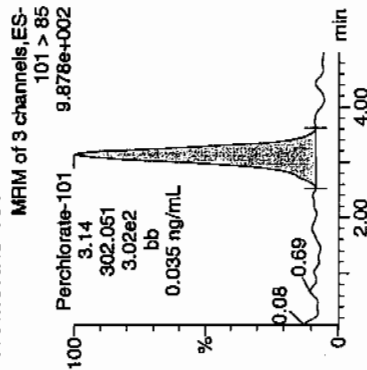
Perchlorate



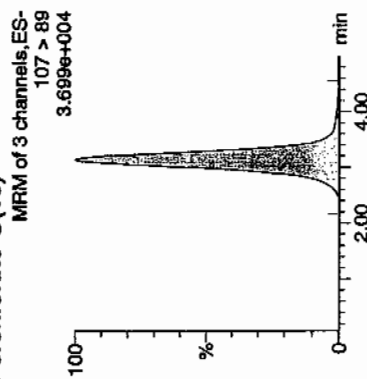
Perchlorate



Perchlorate-101



Perchlorate-O(18)



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|---------|-----------|
| 247899016 | Perchlorate | 99 > 83 | 3.16 | 862.711 | 862.711 | bb | | | 0.0338 | - | | 75.307 | 2.86 |
| 247899016 | Perchlorate-101 | 101 > 85 | 3.14 | 302.051 | 302.051 | bb | | | 0.0354 | | | 204.991 | |
| 247899016 | Perchlorate-O(18) | 107 > 89 | 3.14 | 13293.586 | 13293.586 | bb | | | 0.6388 | 127.77 | 27.77 | 403.785 | |

not
3/16/10

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: 958892
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8001
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899017
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 % Solids: 71

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:04 | per0315109a |
| 14797-73-0 | Perchlorate-101 | .708 | 2.83 | 0.708 | ug/kg | U | 1 | 16-MAR-10 09:04 | per0315109a |
| | Perchlorate-O(18) | | | 8.02 | ug/kg | | 1 | 16-MAR-10 09:04 | per0315109a |

[^] 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: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315109a

Date: 16-Mar-2010

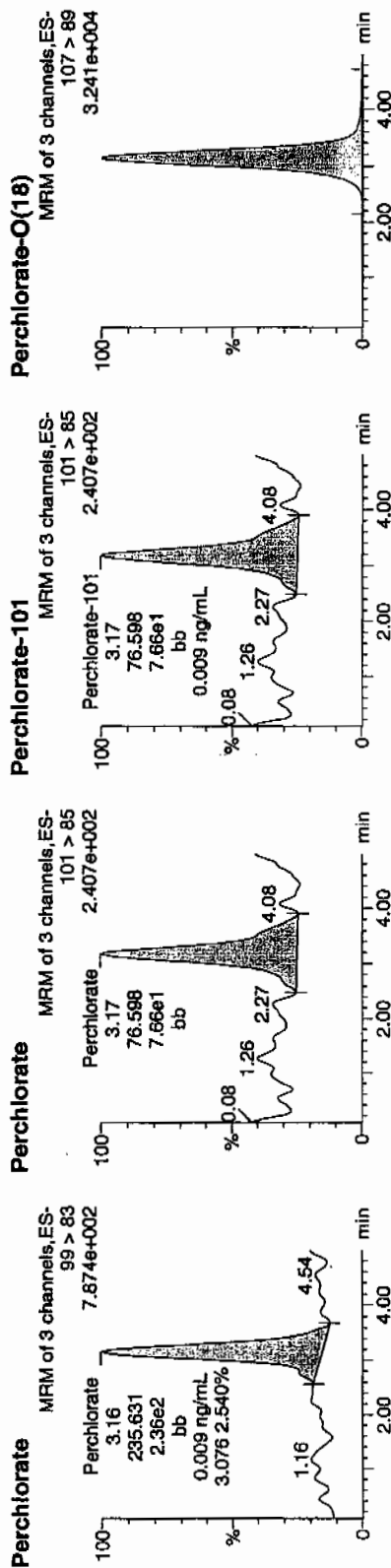
Time: 09:04:28

ID: 247899017

Vial: 2:8,C

16720 | 958906 | 30720 | 11

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 247899017 | Perchlorate | 99 > 83 | 3.16 | 235.631 | 235.631 | bb | | | 0.0092 | | | 24.059 | 3.08 |
| 247899017 | Perchlorate-101 | 101 > 85 | 3.17 | 76.598 | 76.598 | bb | | | 0.0090 | | | 17.168 | |
| 247899017 | Perchlorate-O(18) | 107 > 89 | 3.15 | 11777.346 | 11777.346 | bb | | | 0.5660 | 113.19 | 13.19 | 4989.8... | |

1077
3/15/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8012

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 247899018

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 94.3

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|-----|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:12 | per0315110a |
| 14797-73-0 | Perchlorate-101 | .53 | 2.12 | 0.530 | ug/kg | U | 1 | 16-MAR-10 09:12 | per0315110a |
| | Perchlorate-O(18) | | | 5.60 | ug/kg | | 1 | 16-MAR-10 09:12 | per0315110a |

[^] 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

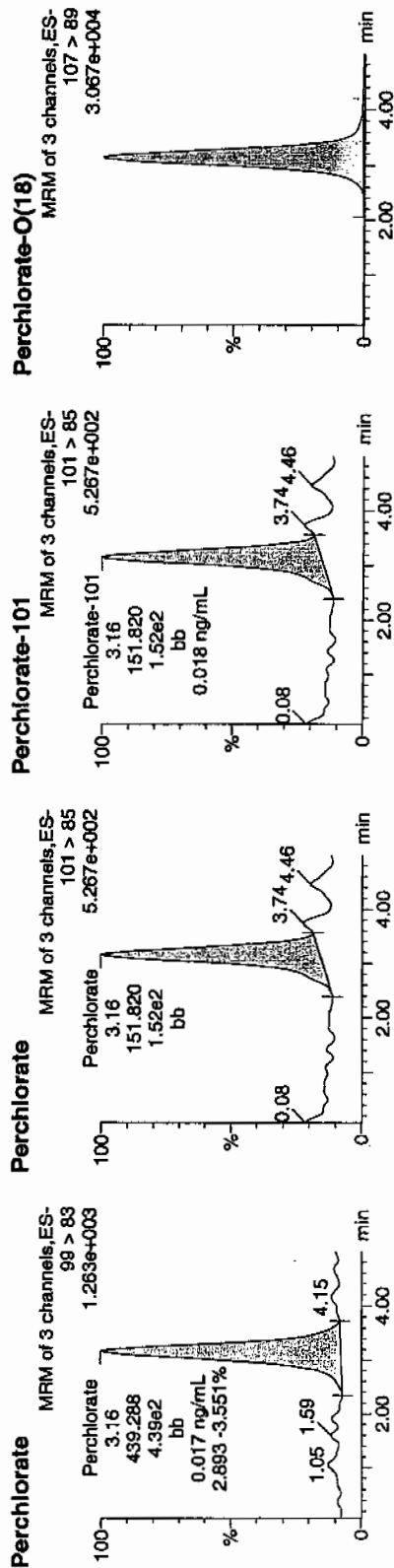
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315110a
Date: 16-Mar-2010
Time: 09:12:32
ID: 247899018
Vial: 2:8,D

03-16-10

LANC 1958906 | 5075 | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| 247899018 | Perchlorate | 99 > 83 | 3.16 | 439.288 | 439.288 | bb | | | 0.0172 | | | 57.451 | 2.89 |
| 247899018 | Perchlorate-101 | 101 > 85 | 3.16 | 151.820 | 151.820 | bb | | | 0.0178 | | | 9.921 | |
| 247899018 | Perchlorate-O(18) | 107 > 89 | 3.15 | 10990.947 | 10990.947 | bb | | | 0.5282 | 105.64 | 5.64 | 1383.2... | |

3/16/10

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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8008
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899019
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 89

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:20 | per0315111a |
| 14797-73-0 | Perchlorate-101 | .561 | 2.24 | 0.561 | ug/kg | U | 1 | 16-MAR-10 09:20 | per0315111a |
| | Perchlorate-O(18) | | | 6.23 | ug/kg | | 1 | 16-MAR-10 09:20 | per0315111a |

[^] 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\per031510a.qld

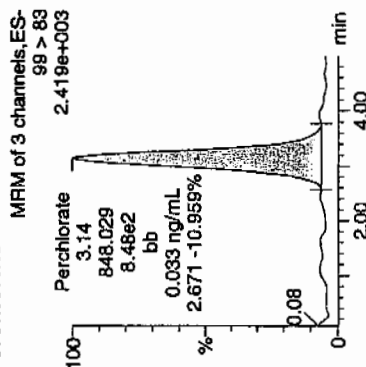
Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315111a
Date: 16-Mar-2010
Time: 09:20:36
ID: 247899019
Vial: 2:8,E

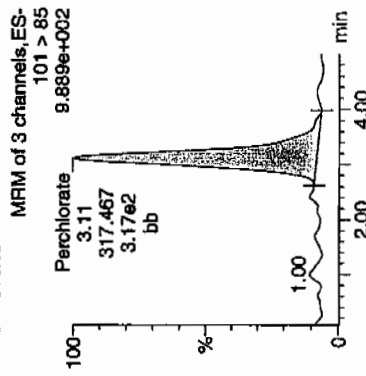
1922-1958906 / 30320111

03-16-10

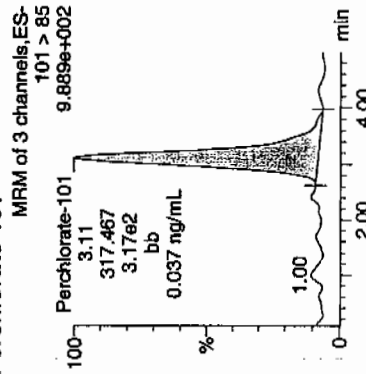
Perchlorate



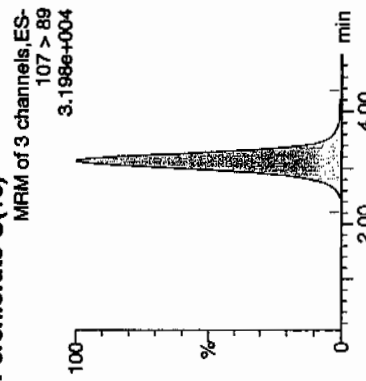
Perchlorate



Perchlorate-101



Perchlorate-O(18)



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 247899019 | Perchlorate | 99 > 83 | 3.14 | 848.029 | 848.029 | bb | | | 0.0333 | | | 96.952 | 2.67 |
| 247899019 | Perchlorate-101 | 101 > 85 | 3.11 | 317.467 | 317.467 | bb | | | 0.0373 | | | 84.759 | |
| 247899019 | Perchlorate-O(18) | 107 > 89 | 3.14 | 11562.217 | 11562.217 | bb | | | 0.5556 | 111.13 | 11.13 | 2614.4... | |

3/16/10

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: 958899
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8005
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 247899020
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 82

Concentrated Extract Volume: 20.0

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 09:28 | per0315112a |
| 14797-73-0 | Perchlorate-101 | .609 | 2.44 | 0.609 | ug/kg | U | 1 | 16-MAR-10 09:28 | per0315112a |
| | Perchlorate-O(18) | | | 6.46 | ug/kg | | 1 | 16-MAR-10 09:28 | per0315112a |

[^] 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 %Solids
 Aliquot

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

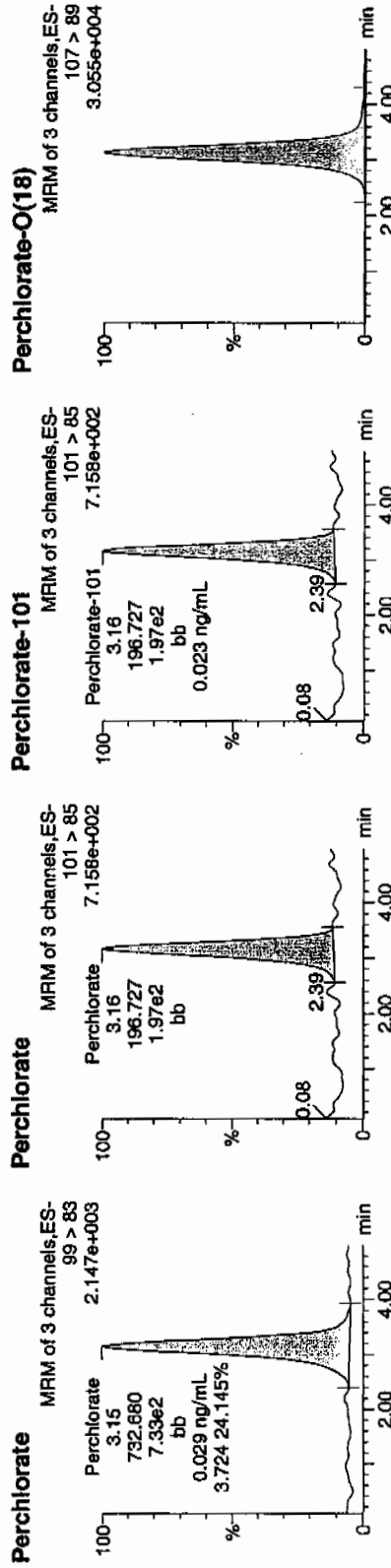
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315112a
Date: 16-Mar-2010
Time: 09:28:39
ID: 247899020
Vial: 2:8.F

1958406 | 3070 | 11

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| 247899020 | Perchlorate | 99 > 83 | 3.15 | 732.680 | 732.680 | bb | | | 0.0287 | | | 81.169 | 3.72 |
| 247899020 | Perchlorate-101 | 101 > 85 | 3.16 | 196.727 | 196.727 | bb | | | 0.0231 | | | 139.137 | |
| 247899020 | Perchlorate-O(18) | 107 > 89 | 3.12 | 11032.058 | 11032.058 | bb | | | 0.5302 | 106.03 | 6.03 | 4747.7... | |

1477
3/16/10

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2010

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 15-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

Coefficient of Determination:

Calibration Curve: 25487.2

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-2010

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 15-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: 8521.432

Response Type: External Standard

Curve Type: RF

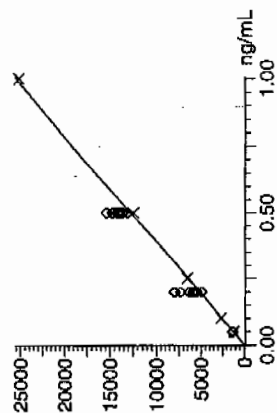
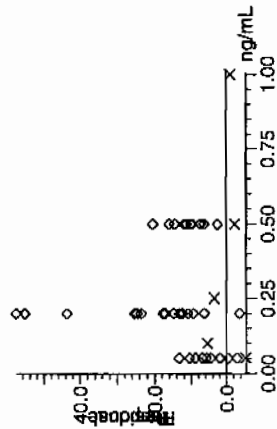
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

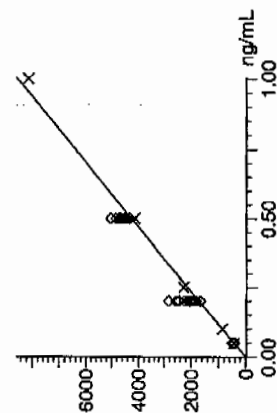
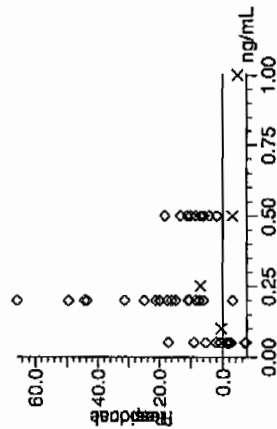
Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031510a.mdb 16 Mar 2010 13:25:31
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031510a.cdb 16 Mar 2010 13:34:46

Compound name: Perchlorate ✓
Response Factor: 25487.2 ✓
RRF SD: 1123.86, % Relative SD: 4.40951 ✓
Response type: External Std, Area
Curve type: RF ✓



300-1610

Compound name: Perchlorate-101 ✓
Response Factor: 8521.43 ✓
RRF SD: 376.793, % Relative SD: 4.42172 ✓
Response type: External Std, Area
Curve type: RF ✓



16477
3/13/10

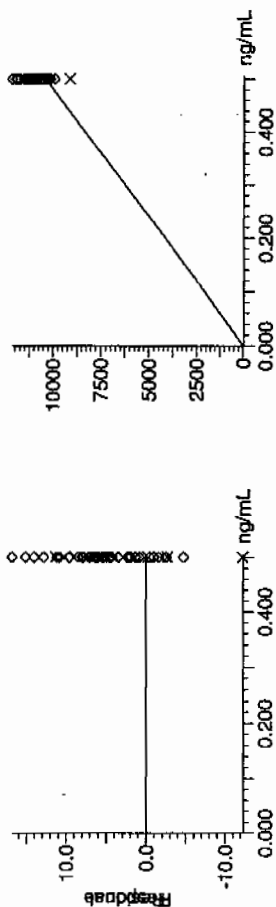
Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Compound name: Perchlorate-O(18) ✓
Response Factor: 20809.2 ✓
RRF SD: 1806.05, % Relative SD: 8.67909 ✓
Response type: External Std, Area ✓
Curve type: RF ✓



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

Lab Code: GEL

Reporting Units: ug/kg

| Analyte | True | Found | %Rec | Date Analyzed | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate | .5 | .53 | 106.37 | 15-MAR-10 19:37 | per0315009a |
| Perchlorate Isotope Ratio | | 3.13 | | 15-MAR-10 19:37 | per0315009a |
| Perchlorate-101 | .5 | .51 | 101.77 | 15-MAR-10 19:37 | per0315009a |

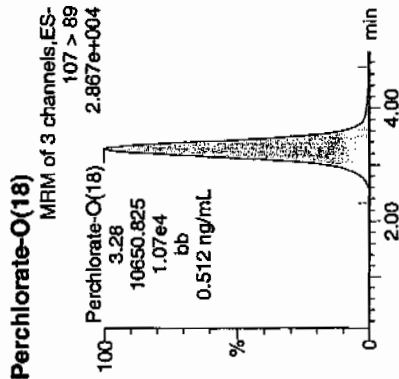
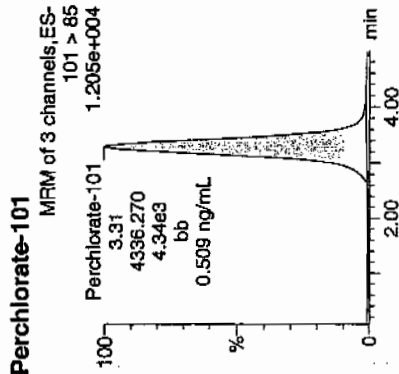
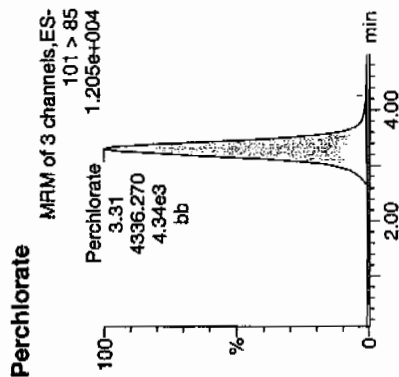
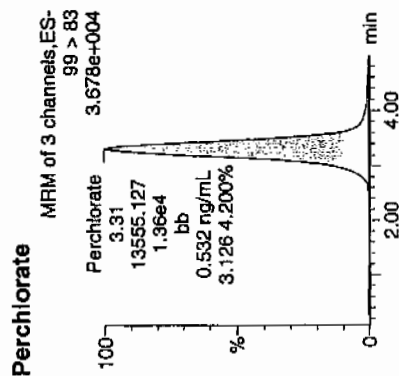
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315009a
Date: 15-Mar-2010
Time: 19:37:25
ID: WCL100309-06ICV
Vial: 1:2,A

Per
333
03-16-D



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | Do/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| WCL100309-06ICV | Perchlorate | 99 > 83 | 3.31 | 13555.127 | 13555.127 | bb | | | 0.5318 | 106.37 | 6.37 | 1956.6... | 3.13 |
| WCL100309-06ICV | Perchlorate-101 | 101 > 85 | 3.31 | 4336.270 | 4336.270 | bb | | | 0.5089 | 101.77 | 1.77 | 577.229 | |
| WCL100309-06ICV | Perchlorate-O(18) | 107 > 89 | 3.28 | 10650.825 | 10650.825 | bb | | | 0.5118 | 102.37 | 2.37 | 701.476 | |

$$\frac{13555.127}{25487.2} = 0.5318$$

WCL
3/16/10

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

Lab Code: GEL

Reporting Units: ug/kg

| Analyte | True | Found | %Rec | Date Analyzed | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate | .5 | .54 | 107.53 | 15-MAR-10 20:41 | per0315017a |
| Perchlorate Isotope Ratio | | 3.03 | | 15-MAR-10 20:41 | per0315017a |
| Perchlorate-101 | .5 | .53 | 105.97 | 15-MAR-10 20:41 | per0315017a |
| Perchlorate | .5 | .56 | 111.13 | 15-MAR-10 22:26 | per0315030a |
| Perchlorate Isotope Ratio | | 3.14 | | 15-MAR-10 22:26 | per0315030a |
| Perchlorate-101 | .5 | .53 | 105.72 | 15-MAR-10 22:26 | per0315030a |
| Perchlorate | .5 | .56 | 111.59 | 16-MAR-10 01:55 | per0315056a |
| Perchlorate Isotope Ratio | | 3.03 | | 16-MAR-10 01:55 | per0315056a |
| Perchlorate-101 | .5 | .55 | 110.03 | 16-MAR-10 01:55 | per0315056a |
| Perchlorate | .5 | .55 | 110.26 | 16-MAR-10 03:56 | per0315071a |
| Perchlorate Isotope Ratio | | 3.11 | | 16-MAR-10 03:56 | per0315071a |
| Perchlorate-101 | .5 | .53 | 105.91 | 16-MAR-10 03:56 | per0315071a |
| Perchlorate | .5 | .55 | 109.62 | 16-MAR-10 05:01 | per0315079a |

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

Lab Code: GEL

Reporting Units: ug/kg

| | | | | | | |
|---------------------------|----|--|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio | | | 3.15 | | 16-MAR-10 05:01 | per0315079a |
| Perchlorate-101 | .5 | | .52 | 104.13 | 16-MAR-10 05:01 | per0315079a |
| Perchlorate | .5 | | .56 | 112.05 | 16-MAR-10 06:38 | per0315091a |
| Perchlorate Isotope Ratio | | | 3.09 | | 16-MAR-10 06:38 | per0315091a |
| Perchlorate-101 | .5 | | .54 | 108.43 | 16-MAR-10 06:38 | per0315091a |
| Perchlorate | .5 | | .57 | 114.52 | 16-MAR-10 08:07 | per0315102a |
| Perchlorate Isotope Ratio | | | 3.09 | | 16-MAR-10 08:07 | per0315102a |
| Perchlorate-101 | .5 | | .56 | 111 | 16-MAR-10 08:07 | per0315102a |
| Perchlorate | .5 | | .51 | 102.64 | 16-MAR-10 09:36 | per0315113a |
| Perchlorate Isotope Ratio | | | 2.89 | | 16-MAR-10 09:36 | per0315113a |
| Perchlorate-101 | .5 | | .53 | 106.41 | 16-MAR-10 09:36 | per0315113a |

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315017a

Date: 15-Mar-2010

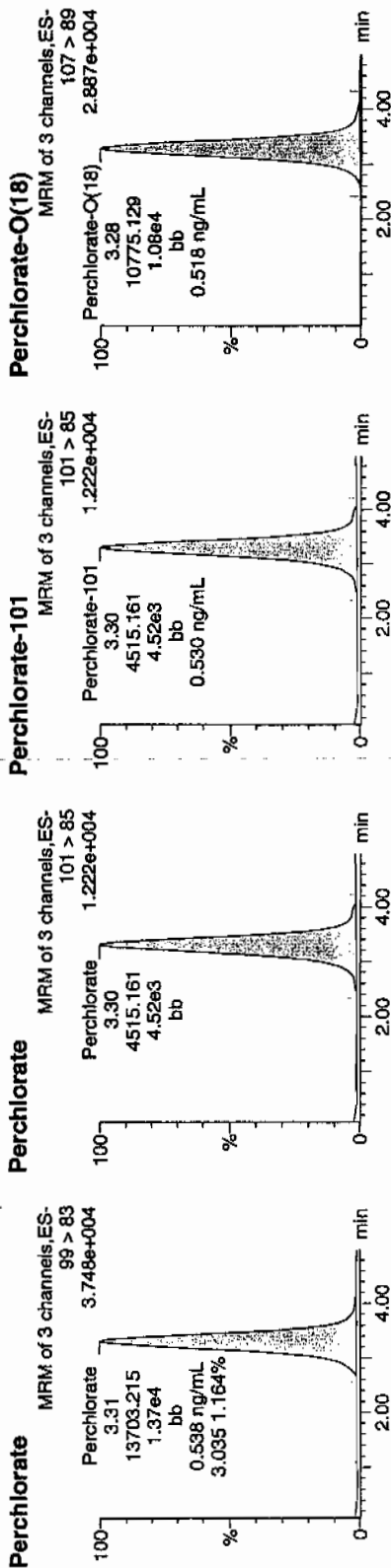
Time: 20:41:50

ID: WCL100309-0610V *CLV*

Vial: 1:2,A

03-16-10

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|---------|-----------|
| WCL100309-061CV | Perchlorate | 99 > 83 | 3.31 | 13703.215 | 13703.215 | bb | | | 0.5377 | 107.53 | 7.53 | 590.609 | 3.03 |
| WCL100309-061CV | Perchlorate-101 | 101 > 85 | 3.30 | 4515.161 | 4515.161 | bb | | | 0.5299 | 105.97 | 5.97 | 628.908 | |
| WCL100309-061CV | Perchlorate-Q(18) | 107 > 89 | 3.28 | 10775.129 | 10775.129 | bb | | | 0.5178 | 103.56 | 3.56 | 624.079 | |

MTT 3/16/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315030a

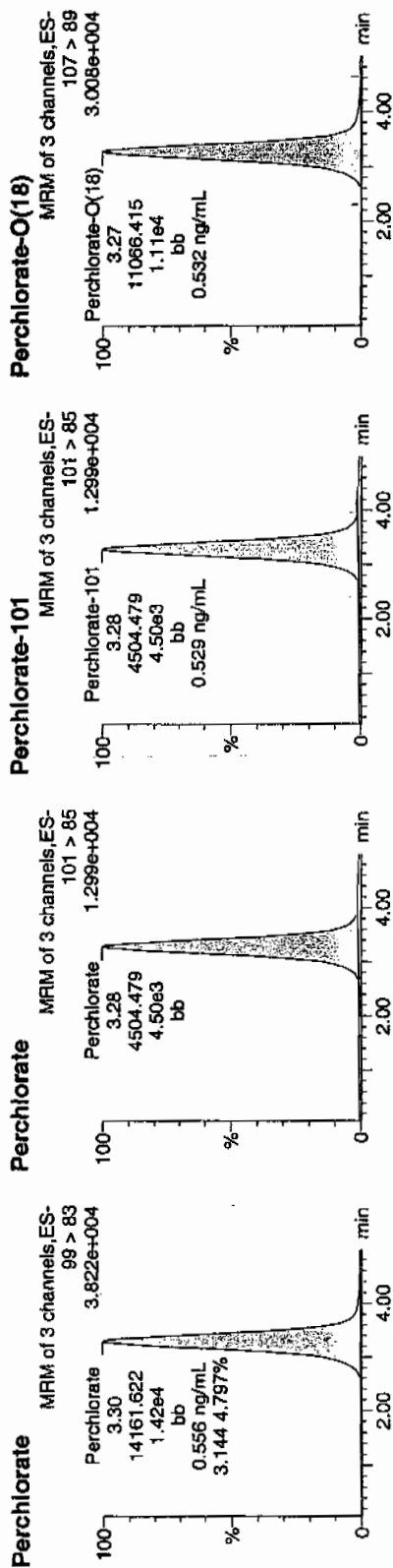
Date: 15-Mar-2010

Time: 22:26:20

ID: WCL100309-06CCV

Vial: 1:2,A

Pass and 03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.30 | 14161.622 | 14161.622 | bb | | | 0.5556 | 111.13 | 11.13 | 710.196 | 3.14 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.28 | 4504.479 | 4504.479 | bb | | | 0.5286 | 105.72 | 5.72 | 140.135 | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.27 | 11066.415 | 11066.415 | bb | | | 0.5318 | 106.36 | 6.36 | 2036.9... | |

4477 3/16/10

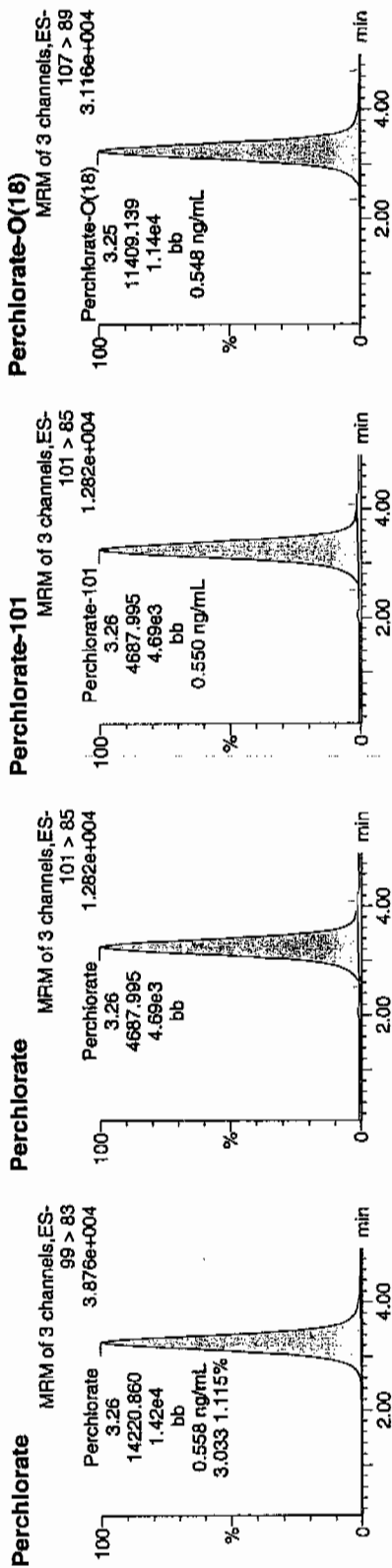
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315056a
Date: 16-Mar-2010
Time: 01:55:32
ID: WCL100309-06CCV
Vial: 1:2,A

Per
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.26 | 14220.860 | 14220.860 | bb | | | 0.5580 | 111.59 | 11.59 | 1093.3... | 3.03 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.26 | 4687.995 | 4687.995 | bb | | | 0.5501 | 110.03 | 10.03 | 1560.5... | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.25 | 11409.139 | 11409.139 | bb | | | 0.5483 | 109.65 | 9.65 | 2473.9... | |

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3/16/10

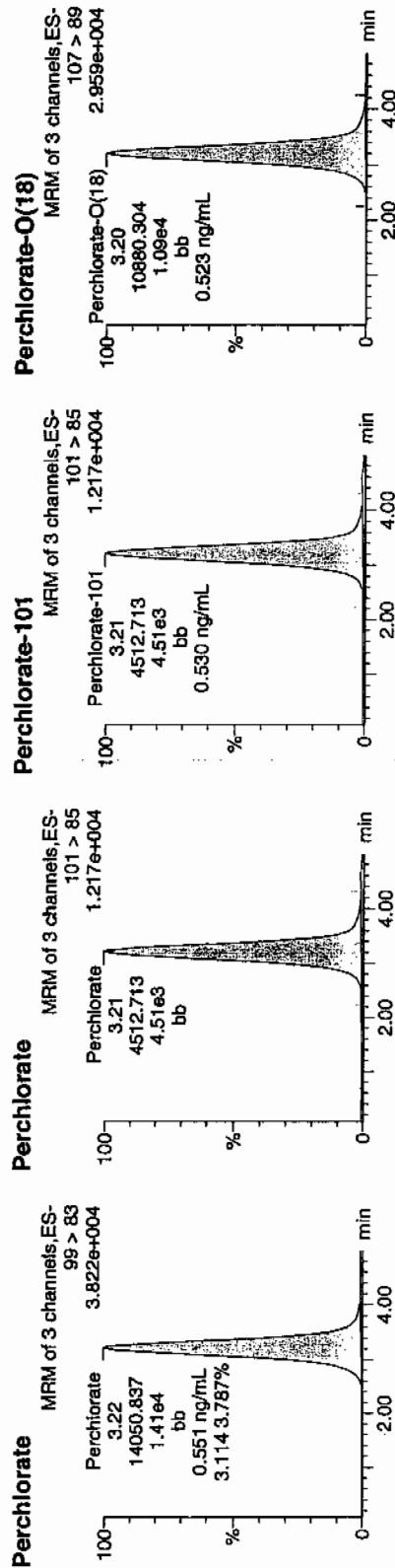
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315071a
Date: 16-Mar-2010
Time: 03:56:28
ID: WCL100309-06CCV
Vial: 1:2,A

Run
0.003
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.22 | 14050.837 | 14050.837 | bb | | | 0.5513 | 110.26 | 10.26 | 2623.1... | 3.11 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.21 | 4512.713 | 4512.713 | bb | | | 0.5296 | 105.91 | 5.91 | 448.549 | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.20 | 10880.304 | 10880.304 | bb | | | 0.5229 | 104.57 | 4.57 | 1776.5... | |

3/16/10

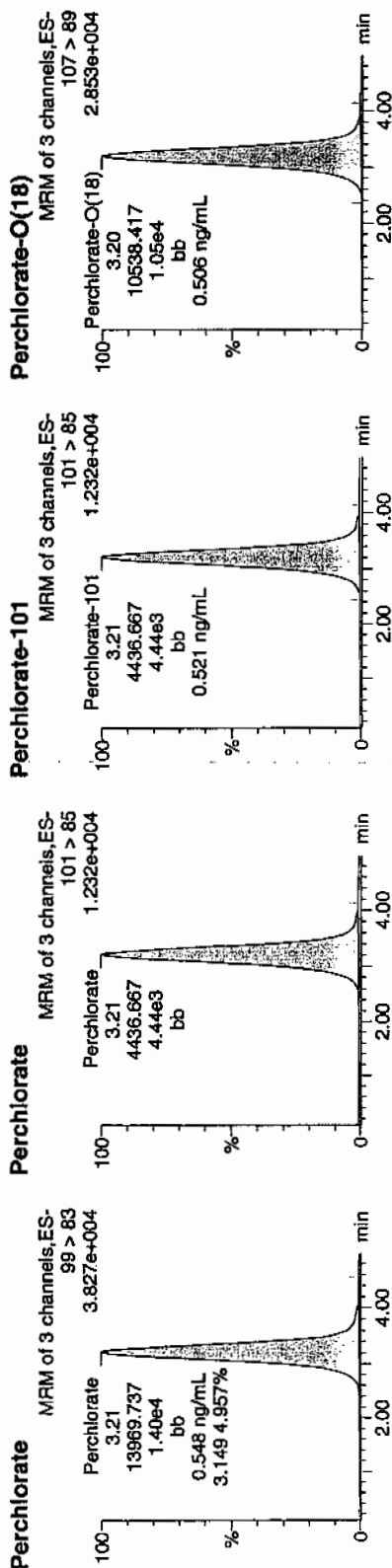
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315079a
Date: 16-Mar-2010
Time: 05:01:29
ID: WCL100309-06CCV
Vial: 1:2,A

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and
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.21 | 13969.737 | 13969.737 | bb | | | 0.548 | 109.62 | 9.62 | 2049.1... | 3.15 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.21 | 4436.667 | 4436.667 | bb | | | 0.5206 | 104.13 | 4.13 | 783.807 | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.20 | 10538.417 | 10538.417 | bb | | | 0.5064 | 101.29 | 1.29 | 1337.5... | |

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3/16/10

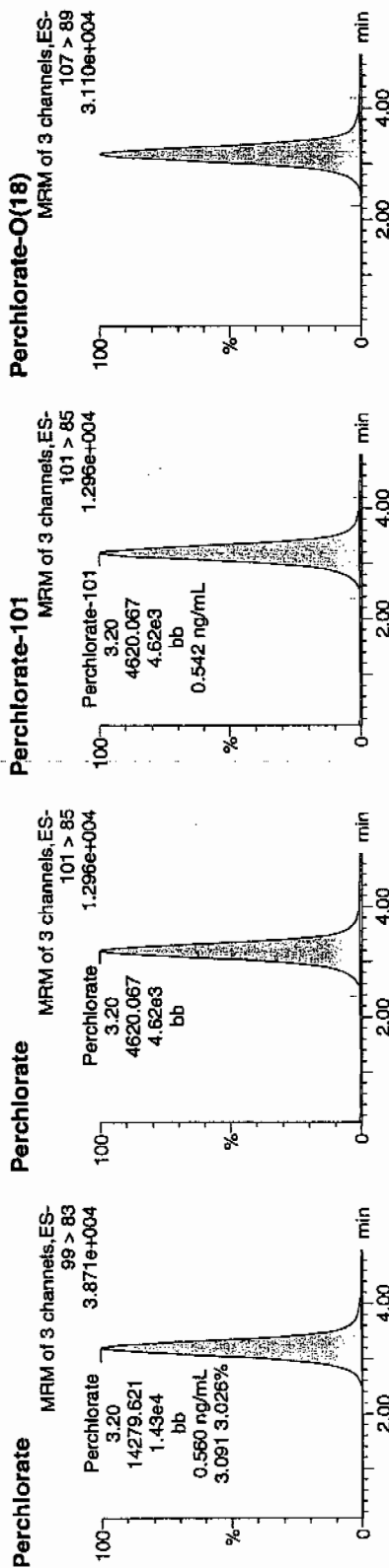
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315091a
Date: 16-Mar-2010
Time: 06:38:15
ID: WCL100309-06CCV
Vial: 1:2,A

*Pure
ans
03-16-10*



| ID | Name | Trace | RT | Area | Response | Flags | Mod. Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|-----------|--------|--------|-------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.20 | 14279.621 | 14279.621 | bb | | 0.5603 | 112.05 | 12.05 | 2938.5... | 3.09 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.20 | 4620.067 | 4620.067 | bb | | 0.5422 | 108.43 | 8.43 | 724.773 | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.18 | 11283.271 | 11283.271 | bb | | 0.5422 | 108.44 | 8.44 | 1958.1... | |

*not
3/16/10*

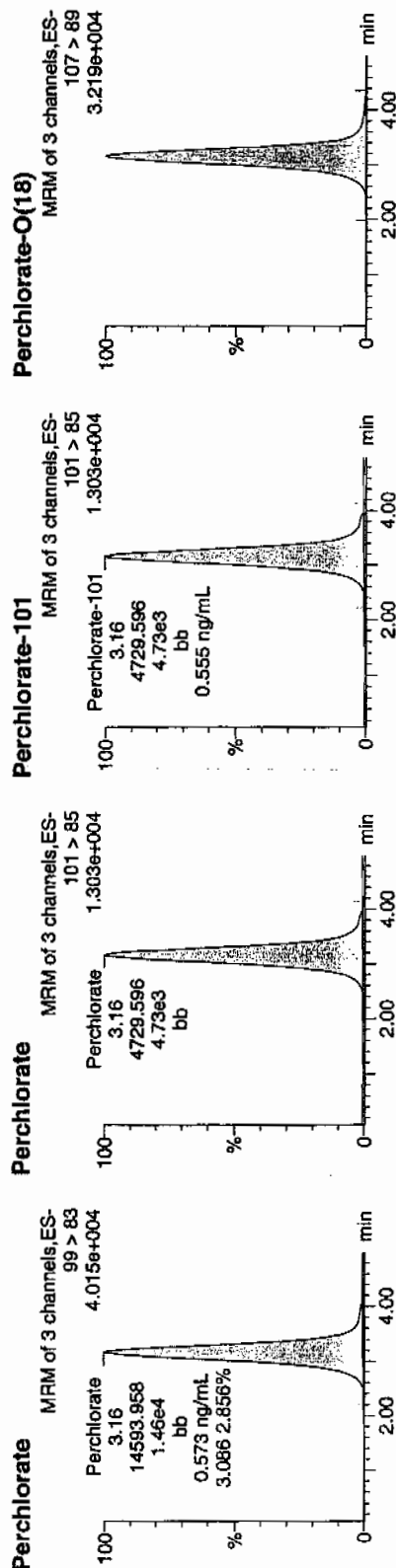
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315102a
Date: 16-Mar-2010
Time: 08:07:40
ID: WCL100309-06CCV
Vial: 1:2,A

Per
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.16 | 14593.958 | 14593.958 | bb | | 0.5726 | 114.52 | 14.52 | 650.691 | 3.09 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.16 | 4729.596 | 4729.596 | bb | | 0.5550 | 111.00 | 11.00 | 1320.1... | |
| WCL100309-06CCV | Perchlorate-O(18) | 107 > 89 | 3.15 | 11737.268 | 11737.268 | bb | | 0.5640 | 112.81 | 12.81 | 1855.7... | |

3/16/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315113a

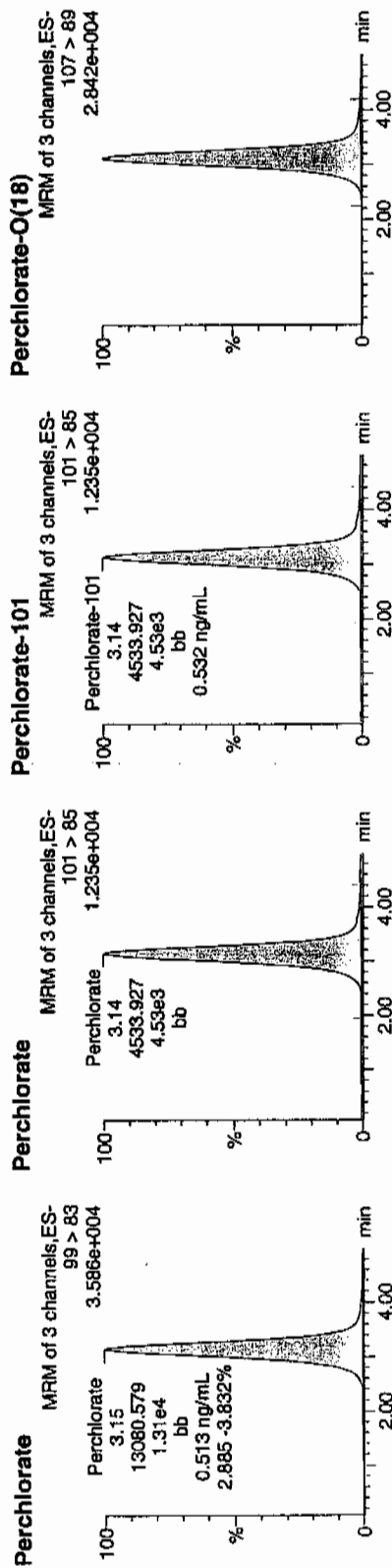
Date: 16-Mar-2010

Time: 09:36:42

ID: WCL100309-06CCV

Vial: 1:2,A

Per and
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-------|
| WCL100309-06CCV | Perchlorate | 99 > 83 | 3.15 | 13080.579 | 13080.579 | bb | | | 0.5132 | 102.64 | 2.64 | 1181.9... | 2.89 |
| WCL100309-06CCV | Perchlorate-101 | 101 > 85 | 3.14 | 4533.927 | 4533.927 | bb | | | 0.5321 | 106.41 | 6.41 | 1307.8... | |
| WCL100309-06CCV | Perchlorate-Q(18) | 107 > 89 | 3.12 | 10307.627 | 10307.627 | bb | | | 0.4953 | 99.07 | -0.93 | 2910.5... | |

MTT
3/16/10

Perchlorate MDL Verification

GEL Job No.(SDG): 10-2010

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

| Analyte | True | Found | %Rec | Date Analyzed | GEL File Id |
|---------------------------|------|-------|--------|-----------------|-------------|
| Perchlorate | .05 | .05 | 101.81 | 15-MAR-10 19:53 | per0315011a |
| Perchlorate Isotope Ratio | | 3.28 | | 15-MAR-10 19:53 | per0315011a |
| Perchlorate-101 | .05 | .05 | 92.72 | 15-MAR-10 19:53 | per0315011a |
| Perchlorate | .05 | .05 | 97.01 | 15-MAR-10 20:57 | per0315019a |
| Perchlorate Isotope Ratio | | 2.93 | | 15-MAR-10 20:57 | per0315019a |
| Perchlorate-101 | .05 | .05 | 99.18 | 15-MAR-10 20:57 | per0315019a |
| Perchlorate | .05 | .05 | 105.87 | 15-MAR-10 22:42 | per0315032a |
| Perchlorate Isotope Ratio | | 2.91 | | 15-MAR-10 22:42 | per0315032a |
| Perchlorate-101 | .05 | .05 | 108.99 | 15-MAR-10 22:42 | per0315032a |
| Perchlorate | .05 | .06 | 110.49 | 16-MAR-10 02:11 | per0315058a |
| Perchlorate Isotope Ratio | | 3.36 | | 16-MAR-10 02:11 | per0315058a |

Perchlorate MDL Verification

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

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-2010Lab Code: GELReporting Units: ug/kg

| | | | | | |
|---------------------------|-----|------|--------|-----------------|-------------|
| Perchlorate-101 | .05 | .05 | 98.31 | 16-MAR-10 02:11 | per0315058a |
| Perchlorate | .05 | .05 | 99.52 | 16-MAR-10 04:12 | per0315073a |
| Perchlorate Isotope Ratio | | 3.19 | | 16-MAR-10 04:12 | per0315073a |
| Perchlorate-101 | .05 | .05 | 93.24 | 16-MAR-10 04:12 | per0315073a |
| Perchlorate | .05 | .05 | 106.98 | 16-MAR-10 05:17 | per0315081a |
| Perchlorate Isotope Ratio | | 3.04 | | 16-MAR-10 05:17 | per0315081a |
| Perchlorate-101 | .05 | .05 | 105.3 | 16-MAR-10 05:17 | per0315081a |
| Perchlorate | .05 | .05 | 108.79 | 16-MAR-10 06:54 | per0315093a |
| Perchlorate Isotope Ratio | | 3.32 | | 16-MAR-10 06:54 | per0315093a |
| Perchlorate-101 | .05 | .05 | 97.9 | 16-MAR-10 06:54 | per0315093a |
| Perchlorate | .05 | .06 | 113.38 | 16-MAR-10 08:24 | per0315104a |

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2010

Lab Code: GEL

Reporting Units: ug/kg

| | | | | | |
|---------------------------|-----|------|--------|-----------------|-------------|
| Perchlorate Isotope Ratio | | 2.9 | | 16-MAR-10 08:24 | per0315104a |
| Perchlorate-101 | .05 | .06 | 116.97 | 16-MAR-10 08:24 | per0315104a |
| Perchlorate | .05 | .05 | 101.95 | 16-MAR-10 09:53 | per0315115a |
| Perchlorate Isotope Ratio | | 3.02 | | 16-MAR-10 09:53 | per0315115a |
| Perchlorate-101 | .05 | .05 | 100.85 | 16-MAR-10 09:53 | per0315115a |

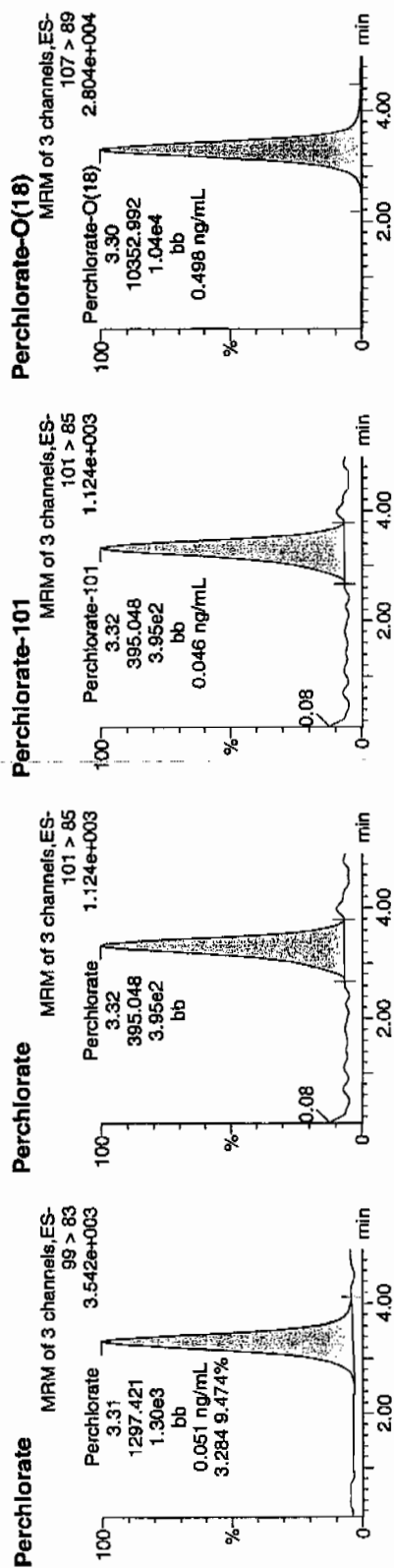
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315011a
Date: 15-Mar-2010
Time: 19:53:29
ID: WCL100309-07CRI
Vial: 1;2,B

Per
and
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.31 | 1297.421 | 1297.421 | bb | | | 0.0509 | 101.81 | 1.81 | 377.614 | 3.28 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.32 | 395.048 | 395.048 | bb | | | 0.0464 | 92.72 | -7.28 | 15.865 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.30 | 10352.992 | 10352.992 | bb | | | 0.4975 | 99.50 | -0.50 | 5299.6... | |

$$\frac{1297.421}{25487.2} = 0.0509$$

4477
3/16/10

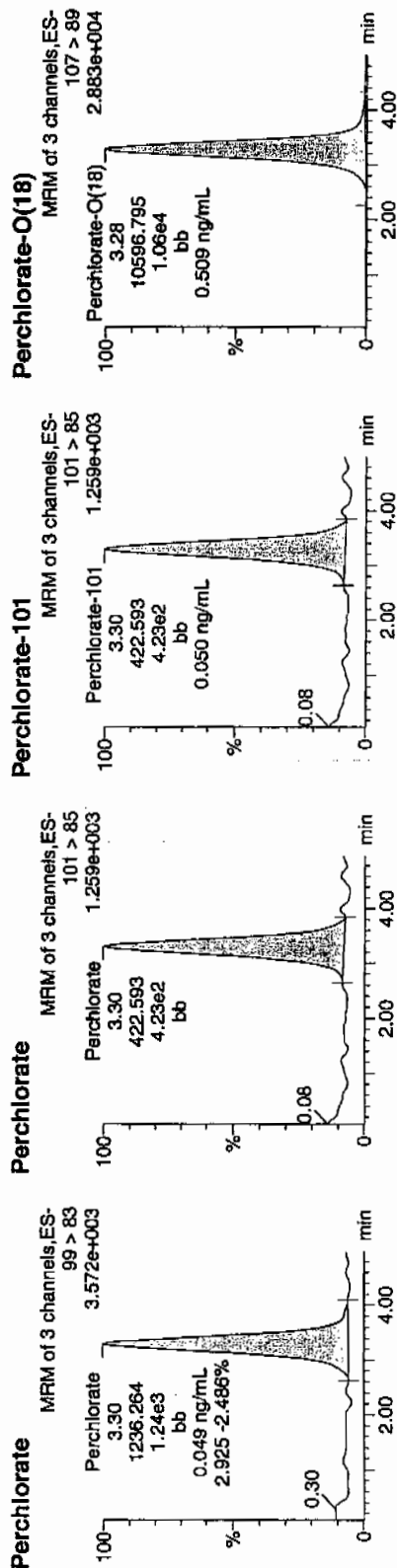
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315019a
Date: 15-Mar-2010
Time: 20:57:55
ID: WCL100309-07CRI
Vial: 1:2,B

Pure
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.30 | 1236.264 | 1236.264 | bb | | | 0.0485 | 97.01 | -2.99 | 71.571 | 2.93 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.30 | 422.593 | 422.593 | bb | | | 0.0496 | 99.18 | -0.82 | 134.536 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.28 | 10596.795 | 10596.795 | bb | | | 0.5092 | 101.85 | 1.85 | 3943.9... | |

3/16/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315032a

Date: 15-Mar-2010

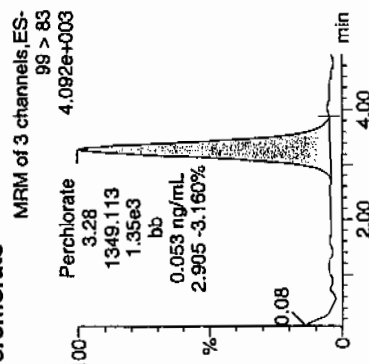
Time: 22:42:25

ID: WCL100309-07CRI

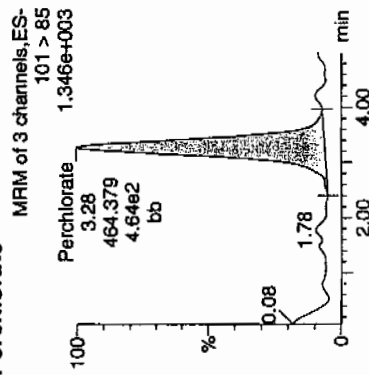
Vial: 1:2,B

Perp
and
0316-D

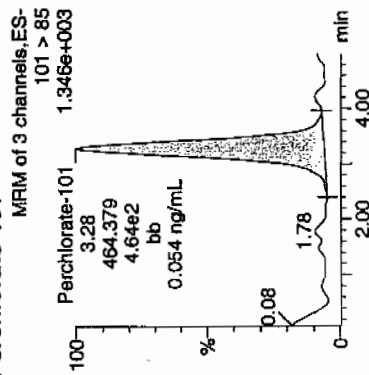
Perchlorate



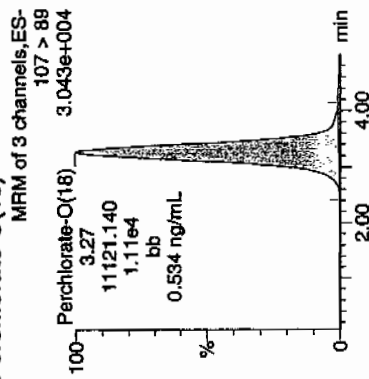
Perchlorate



Perchlorate-101



Perchlorate-O(18)



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.28 | 1349.113 | 1349.113 | bb | | | 0.0529 | 105.87 | 5.87 | 177.402 | 2.91 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.28 | 464.379 | 464.379 | bb | | | 0.0545 | 108.99 | 8.99 | 74.776 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.27 | 11121.140 | 11121.140 | bb | | | 0.5344 | 106.89 | 6.89 | 1033.3... | |

3/15/10

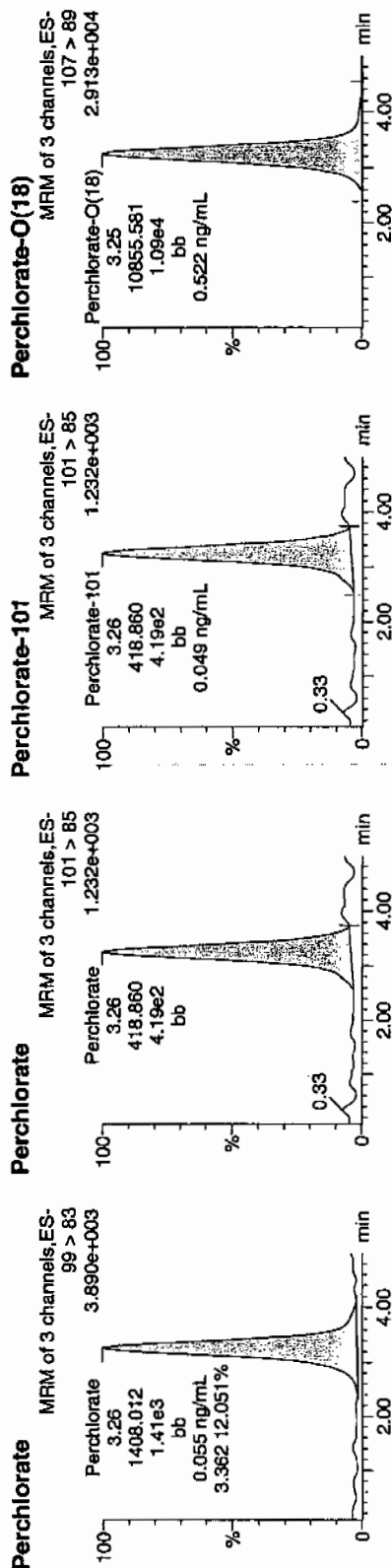
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315058a
Date: 16-Mar-2010
Time: 02:11:51
ID: WCL100309-07CRI
Vial: 1:2,B

Perp
WCL
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|--------|---------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.26 | 1408.012 | 1408.012 | bb | | | 0.0552 | 110.49 | -10.49 | 220.089 | 3.36 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.26 | 418.860 | 418.860 | bb | | | 0.0492 | 98.31 | -1.69 | 80.443 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.25 | 10855.581 | 10855.581 | bb | | | 0.5217 | 104.33 | -4.33 | 951.385 | |

WCL
3/16/10

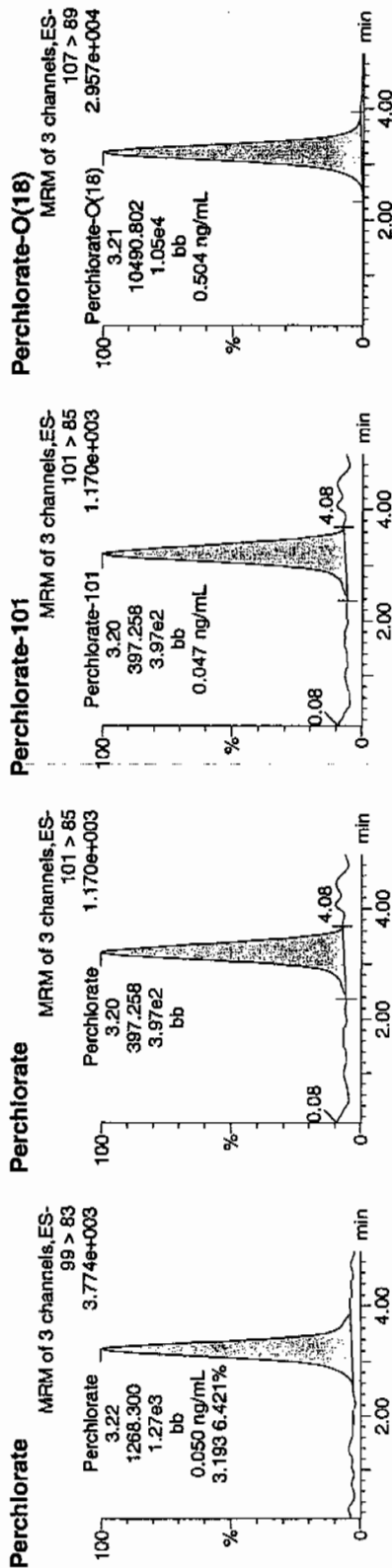
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315073a
Date: 16-Mar-2010
Time: 04:12:47
ID: WCL100309-07CRI
Vial: 1:2,B

Run
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.22 | 1268.300 | 1268.300 | bb | | | 0.0498 | 99.52 | -0.48 | 156.920 | 3.19 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.20 | 397.258 | 397.258 | bb | | | 0.0466 | 93.24 | -6.76 | 60.992 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.21 | 10490.802 | 10490.802 | bb | | | 0.5041 | 100.83 | 0.83 | 1989.6... | |

not
3/15/10

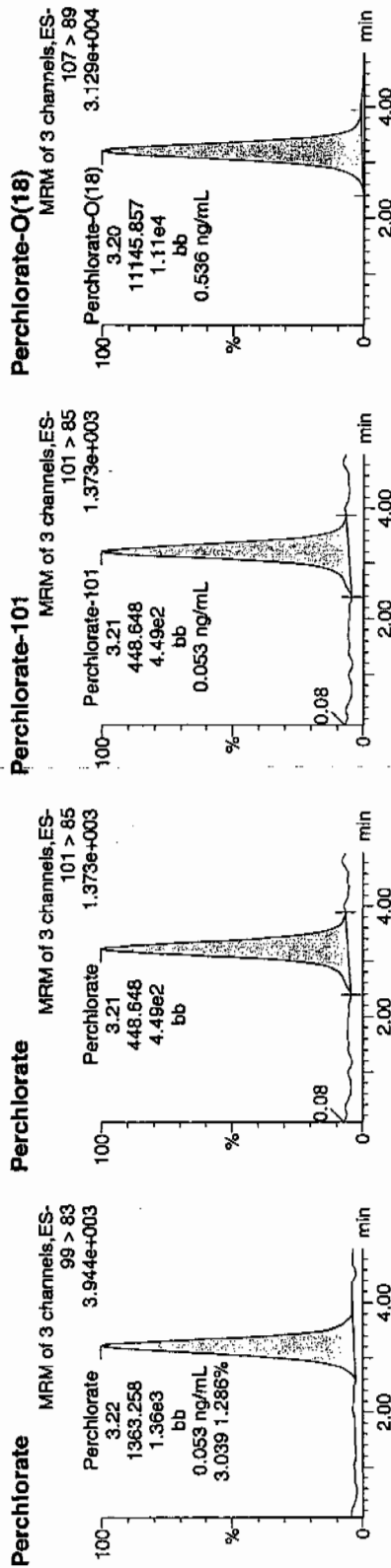
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315081a
Date: 16-Mar-2010
Time: 05:17:34
ID: WCL100309-07CRI
Vial: 1:2,B

Pure
and
02-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|---------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.22 | 1363.258 | 1363.258 | bb | | | 0.0535 | 106.98 | 6.98 | 215.846 | 3.04 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.21 | 448.648 | 448.648 | bb | | | 0.0526 | 105.30 | 5.30 | 75.616 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.20 | 11145.857 | 11145.857 | bb | | | 0.5356 | 107.12 | 7.12 | 856.711 | |

not
3/16/10

Quantify Sample Report MassLynx 4.0 SP4

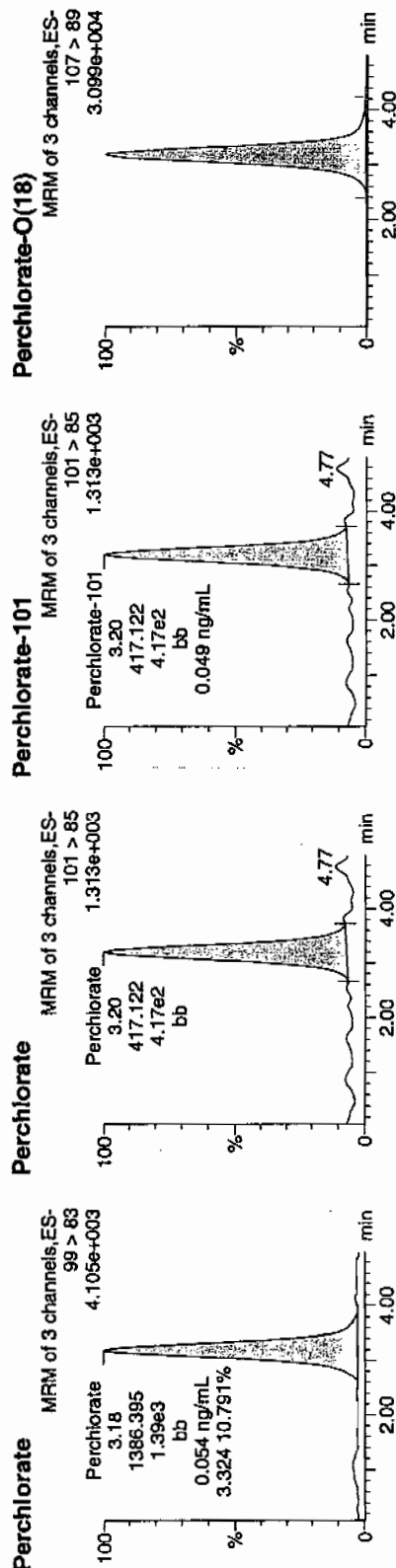
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
 Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315093a
 Date: 16-Mar-2010
 Time: 06:54:35
 ID: WCL100309-07CRI
 Vial: 1:2,B

Perchlorate
03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.18 | 1386.395 | 1386.395 | bb | | | 0.0544 | 108.79 | 8.79 | 90.163 | 3.32 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.20 | 417.122 | 417.122 | bb | | | 0.0489 | 97.90 | -2.10 | 84.410 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.18 | 11274.981 | 11274.981 | bb | | | 0.5418 | 108.37 | 8.37 | 3192.8... | |

per
3/16/10

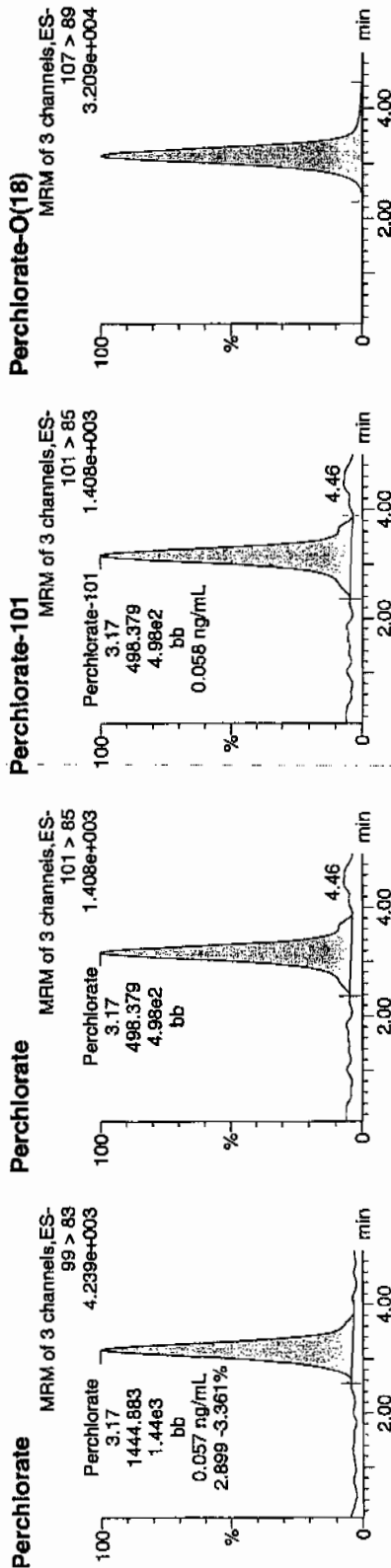
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315104a
Date: 16-Mar-2010
Time: 08:24:00
ID: WCL100309-07CRI
Vial: 1:2,B

Run and 03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|---------|--------|-------|-----------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.17 | 1444.883 | 1444.883 | bb | | | -0.0567 | 113.38 | 13.38 | 315.026 | 2.90 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.17 | 498.379 | 498.379 | bb | | | 0.0585 | 116.97 | 16.97 | 55.832 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.15 | 11567.709 | 11567.709 | bb | | | 0.5559 | 111.18 | 11.18 | 4981.7... | |

WAT 3/18/10

Quantify Sample Report MassLynx 4.0 SP4

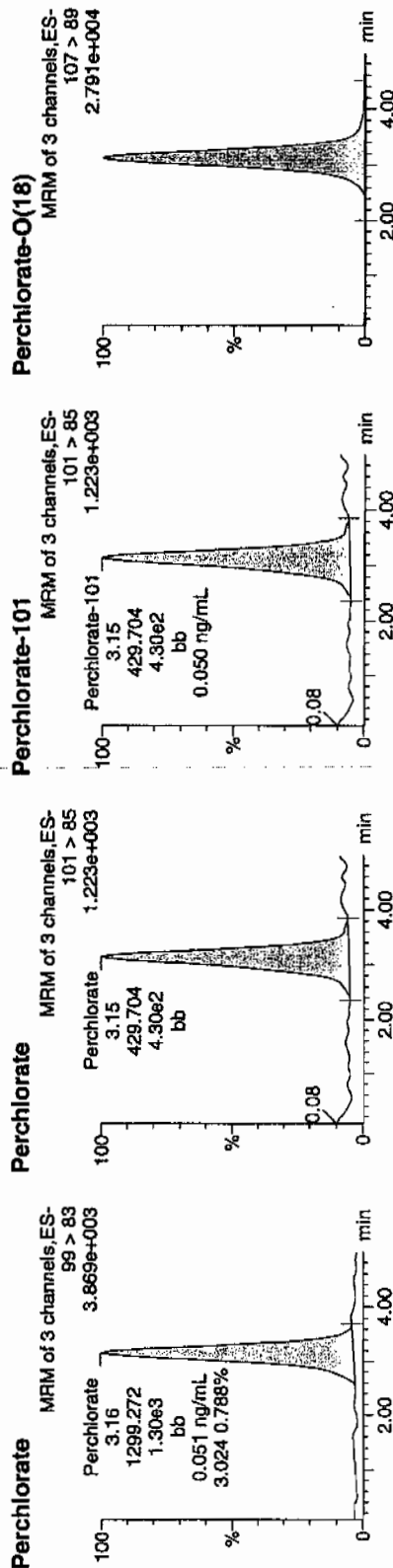
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
 Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315115a
 Date: 16-Mar-2010
 Time: 09:53:01
 ID: WCL100309-07CRI
 Vial: 1:2,B

03-16-10



| ID | Name | Trace | RT | Area | Response | Flags | Mod.Date | Mod.Time | ng/mL | %Rec | %Dev | S/N | Ion Ratio |
|-----------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|---------|-----------|
| WCL100309-07CRI | Perchlorate | 99 > 83 | 3.16 | 1299.272 | 1299.272 | bb | | | 0.0510 | 101.95 | 1.95 | 226.159 | 3.02 |
| WCL100309-07CRI | Perchlorate-101 | 101 > 85 | 3.15 | 429.704 | 429.704 | bb | | | 0.0504 | 100.85 | 0.85 | 130.094 | |
| WCL100309-07CRI | Perchlorate-O(18) | 107 > 89 | 3.13 | 10156.296 | 10156.296 | bb | | | 0.4881 | 97.61 | -2.39 | 877.993 | |

WAT
 3/16/10

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 08-MAR-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 1202056487

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 100

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .5 | 2 | 0.500 | ug/kg | U | 1 | 16-MAR-10 05:25 | per0315082a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-MAR-10 05:25 | per0315082a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 0.500 | ug/kg | U | 1 | 16-MAR-10 05:25 | per0315082a |
| | Perchlorate-O(18) | | | 5.05 | ug/kg | | 1 | 16-MAR-10 05:25 | per0315082a |

[^] 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\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315082a

Date: 16-Mar-2010

Time: 05:25:36

ID: 1202056487

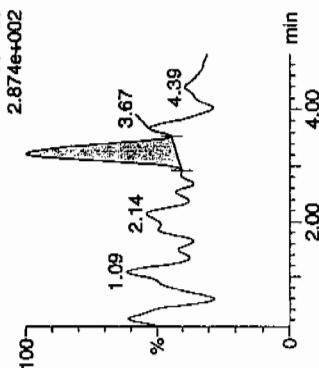
Vial: 2:4,F

03-16-10

1202056487

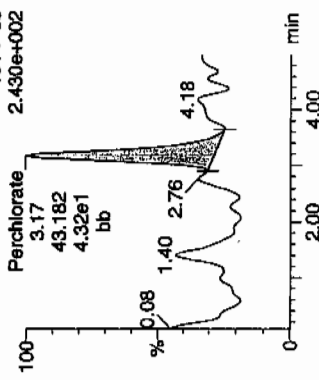
Perchlorate

MRM of 3 channels, ES-
99 > 83



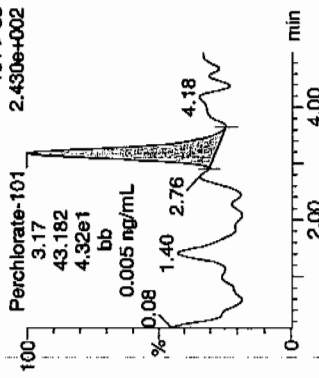
Perchlorate

MRM of 3 channels, ES-
101 > 85



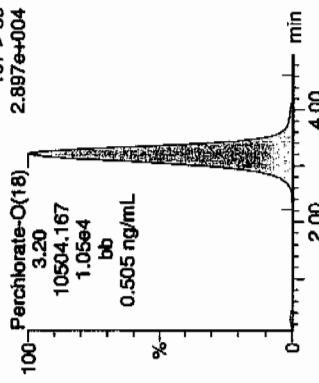
Perchlorate-101

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 | SN | Ion.Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|------|-----------|-----------|
| 1202056487 | Perchlorate | 99 > 83 | 3.21 | 50.025 | 50.025 | bb | | | 0.0020 | | | 13.411 | 1.16 |
| 1202056487 | Perchlorate-101 | 101 > 85 | 3.17 | 43.182 | 43.182 | bb | | | 0.0051 | | | 30.625 | |
| 1202056487 | Perchlorate-O(18) | 107 > 89 | 3.20 | 10504.167 | 10504.167 | bb | | | 0.5048 | 100.96 | 0.96 | 5070.6... | |

6624
20.0500
107
3/16/10

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: 258892

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 08-MAR-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 1202056488

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 100

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|-----|----|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .5 | 2 | 2.19 | ug/kg | | 1 | 16-MAR-10 05:33 | per0315083a |
| | Perchlorate Isotope Ratio | | | 2.97 | | | 1 | 16-MAR-10 05:33 | per0315083a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 2.21 | ug/kg | | 1 | 16-MAR-10 05:33 | per0315083a |
| | Perchlorate-O(18) | | | 5.27 | ug/kg | | 1 | 16-MAR-10 05:33 | per0315083a |

[^] 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

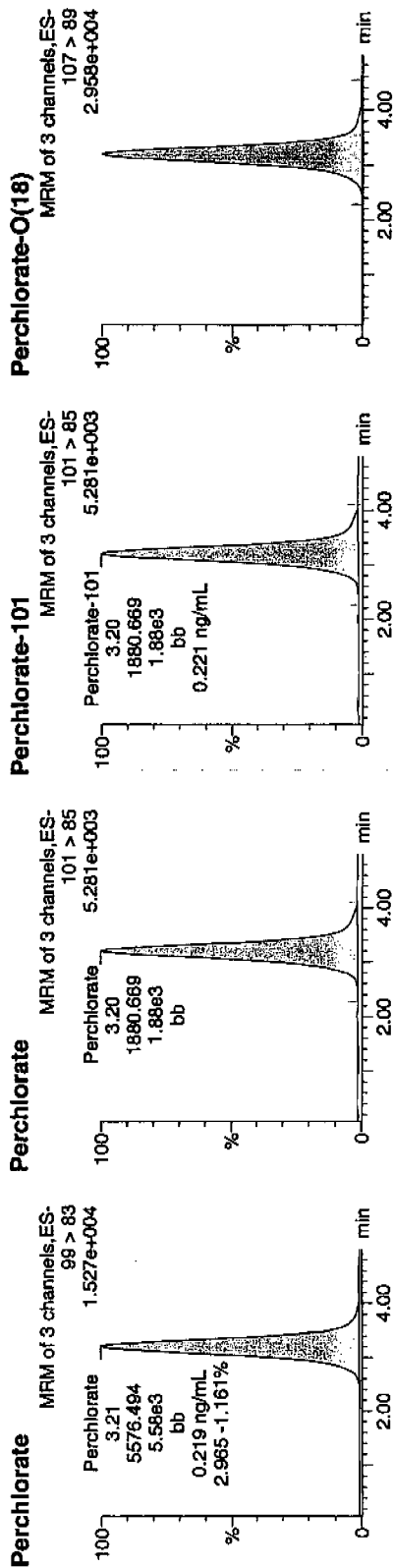
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315083a
Date: 16-Mar-2010
Time: 05:33:50
ID: 1202056488
Vial: 2:5,A

03-16-10

1202056488 | 50700 | LLS | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | pg/mL | %Rec | %Dev | S/N | Ion Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 1202056488 | Perchlorate | 99 > 83 | 3.21 | 5576.494 | 5576.494 | bb | | | 0.2188 | 109.40 | 9.40 | 1165.3... | 2.97 |
| 1202056488 | Perchlorate-101 | 101 > 85 | 3.20 | 1880.669 | 1880.669 | bb | | | 0.2207 | 110.35 | 10.35 | 406.478 | |
| 1202056488 | Perchlorate-O(18) | 107 > 89 | 3.18 | 10973.412 | 10973.412 | bb | | | 0.5273 | 105.47 | 5.47 | 577.339 | |

$$\frac{5576.494}{25487.2} = 0.2188$$

4077
3/16/10

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: 958899

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7896MS

Date Received: 24-FEB-10

GEL Job No (SDG): 10-2010

GEL Sample ID: 1202056489

Date Filtered: 08-MAR-10

Injection Volume (uL): 20

%Solids: 94.1

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .532 | 2.13 | 2.66 | ug/kg | | 1 | 16-MAR-10 05:58 | per0315086a |
| | Perchlorate Isotope Ratio | | | 3 | | | 1 | 16-MAR-10 05:58 | per0315086a |
| 14797-73-0 | Perchlorate-101 | .532 | 2.13 | 2.66 | ug/kg | | 1 | 16-MAR-10 05:58 | per0315086a |
| | Perchlorate-O(18) | | | 5.65 | ug/kg | | 1 | 16-MAR-10 05:58 | per0315086a |

[^] 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

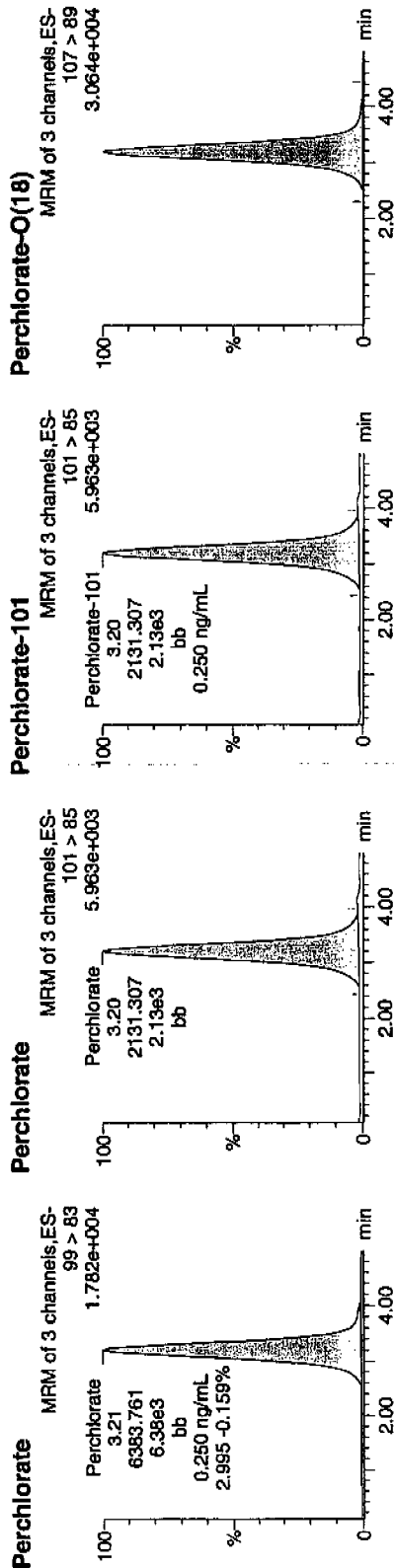
Dataset: C:\MassLynx\Perchlorate.PRO\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315086a
Date: 16-Mar-2010
Time: 05:58:00
ID: 1202056489
Vial: 2:5,D

03-16-10

LANC | 958906 | SOLID MS | 11



| ID | Name | Trace | RT | Area | Response | Flags | Mod Date | Mod Time | ng/mL | %Rec | %Dev | SN | Ion Ratio |
|------------|-------------------|----------|------|-----------|-----------|-------|----------|----------|--------|--------|-------|-----------|-----------|
| 1202056489 | Perchlorate | 99 > 83 | 3.21 | 6383.761 | 6383.761 | bb | | | 0.2505 | 125.23 | 25.23 | 344.367 | 3.00 |
| 1202056489 | Perchlorate-101 | 101 > 85 | 3.20 | 2131.307 | 2131.307 | bb | | | 0.2501 | 125.06 | 25.06 | 141.382 | |
| 1202056489 | Perchlorate-Q(18) | 107 > 89 | 3.18 | 11056.488 | 11056.488 | bb | | | 0.5313 | 106.27 | 6.27 | 3846.5... | |

$$\frac{6383.761}{25487.2} \times 100 = 2.50$$

3/15/10

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: 958899
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7896MSD
 Date Received: 24-FEB-10
 GEL Job No (SDG): 10-2010
 GEL Sample ID: 1202056490
 Date Filtered: 08-MAR-10
 Injection Volume (uL): 20
 %Solids: 94.1

| CAS No. | Analyte [^] | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|------------|---------------------------|------|------|-------|-------|---|-----------------|-----------------|-------------|
| 14797-73-0 | Perchlorate | .532 | 2.13 | 2.50 | ug/kg | | 1 | 16-MAR-10 06:06 | per0315087a |
| | Perchlorate Isotope Ratio | | | 2.93 | | | 1 | 16-MAR-10 06:06 | per0315087a |
| 14797-73-0 | Perchlorate-101 | .532 | 2.13 | 2.55 | ug/kg | | 1 | 16-MAR-10 06:06 | per0315087a |
| | Perchlorate-O(18) | | | 5.63 | ug/kg | | 1 | 16-MAR-10 06:06 | per0315087a |

[^] 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\per031510a.qld

Last Altered: Tuesday, March 16, 2010 1:34:48 PM Eastern Standard Time
Printed: Tuesday, March 16, 2010 2:01:50 PM Eastern Standard Time

Name: per0315087a

Date: 16-Mar-2010

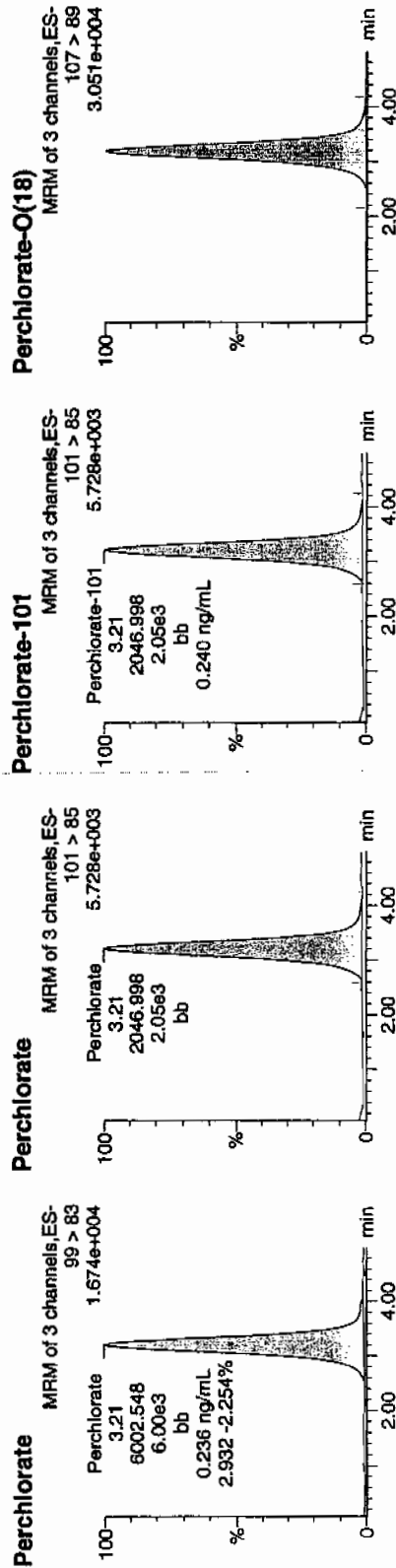
Time: 06:06:03

ID: 1202056490

Vial: 2:5,E

LAN-19525106 | 30070 | MSO | 11

33-16-10



3/16/10

MISCELLANEOUS DATA

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.

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: 958899 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Jareth Shirley Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

| Sample ID | Run Date | Aliquot (g) | Prepped Aliquot (mL) | Prepped Factor (mL/g) |
|----------------------------|----------------------|-------------|----------------------|-----------------------|
| 1202056487 MB | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 1202056488 LCS | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899001 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 1202056489 MS (247899001) | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 1202056490 MSD (247899001) | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899002 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899003 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899004 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899005 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899006 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899007 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899008 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899009 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899010 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899011 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899012 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899013 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899014 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899015 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899016 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899017 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899018 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899019 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 247899020 | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |
| 1202056491 ICS | 08-MAR-2010 14:29:00 | 2 | 20 | 10 |

Comments:

| Type | Sample Id | Description | Serial Number | Spike Amt | Units |
|------|------------|-------------------------------|----------------|-----------|-------|
| ICS | 1202056491 | 10 ug/L ICV/CCV Second Source | UCL100226-01.1 | .4 | mL |
| LCS | 1202056488 | 10 ug/L ICV/CCV Second Source | UCL100226-01.1 | .4 | mL |
| MS | 1202056489 | 10 ug/L ICV/CCV Second Source | UCL100226-01.1 | .4 | mL |
| MSD | 1202056490 | 10 ug/L ICV/CCV Second Source | UCL100226-01.1 | .4 | mL |

Desalting cartridges used: 100217-1-H & 100209-1-Ba

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS#2

Reviewed BY: WWT
Date: 3/18/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100309-06

Method: EPA 6850-Modified
Int. Std.: UCL100210-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#: 1271949

Date: 03/15/10
Extr. Injection Volume: 20uL
Sequence Number: per031510a
Initial Calibration Date: 03/15/10

| DataFile | Sample | Analyst | Injection Date | Batch | SDG | Dilution | Client | Comments | QC_Flag |
|-------------|------------|---------|-----------------|--------|-----------|----------|--------|----------|---------|
| per0315001a | IPB001 | CWW | 3/15/2010 18:33 | | | 1 | | USE | B |
| per0315002a | IPB001 | CWW | 3/15/2010 18:41 | | | 1 | | USE | B |
| per0315003a | WCLICAL-01 | CWW | 3/15/2010 18:49 | | | 1 | | USE | I |
| per0315004a | WCLICAL-02 | CWW | 3/15/2010 18:57 | | | 1 | | USE | I |
| per0315005a | WCLICAL-03 | CWW | 3/15/2010 19:05 | | | 1 | | USE | I |
| per0315006a | WCLICAL-04 | CWW | 3/15/2010 19:13 | | | 1 | | USE | I |
| per0315007a | WCLICAL-05 | CWW | 3/15/2010 19:21 | | | 1 | | USE | I |
| per0315008a | IPB002 | CWW | 3/15/2010 19:29 | | | 1 | | USE | B |
| per0315009a | WCLICV | CWW | 3/15/2010 19:37 | | | 1 | | USE | C |
| per0315010a | IPB003 | CWW | 3/15/2010 19:45 | | | 1 | | USE | B |
| per0315011a | WCLCRI | CWW | 3/15/2010 19:53 | | | 1 | | USE | C |
| per0315012a | 1202063729 | CWW | 3/15/2010 20:01 | 962119 | LPTP10-S1 | 1 | PTQA | USE | S |
| per0315013a | 1202063731 | CWW | 3/15/2010 20:09 | 962119 | LPTP10-S1 | 1 | PTQA | USE | S |
| per0315014a | 248633001 | CWW | 3/15/2010 20:17 | 962119 | LPTP10-S1 | 20 | PTQA | DUSE-DL | S |
| per0315015a | 1202063730 | CWW | 3/15/2010 20:25 | 962119 | LPTP10-S1 | 20 | PTQA | DUSE-DL | S |
| per0315016a | IPB004 | CWW | 3/15/2010 20:33 | | | 1 | | USE | B |
| per0315017a | WCLCCV | CWW | 3/15/2010 20:41 | | | 1 | | USE | C |
| per0315018a | IPB005 | CWW | 3/15/2010 20:49 | | | 1 | | USE | B |
| per0315019a | WCLCRI | CWW | 3/15/2010 20:57 | | | 1 | | USE | C |
| per0315020a | 1202056604 | CWW | 3/15/2010 21:05 | 958968 | VARIOUS | 1 | LANL | USE | S |
| per0315021a | 1202056605 | CWW | 3/15/2010 21:14 | 958968 | VARIOUS | 1 | LANL | USE | S |
| per0315022a | 1202056613 | CWW | 3/15/2010 21:22 | 958968 | VARIOUS | 1 | LANL | USE | S |
| per0315023a | 248058001 | CWW | 3/15/2010 21:30 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315024a | 248058002 | CWW | 3/15/2010 21:38 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315025a | 248058003 | CWW | 3/15/2010 21:46 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315026a | 248058004 | CWW | 3/15/2010 21:54 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315027a | 248058005 | CWW | 3/15/2010 22:02 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315028a | 248058006 | CWW | 3/15/2010 22:10 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315029a | 248058007 | CWW | 3/15/2010 22:18 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315030a | WCLCCV | CWW | 3/15/2010 22:26 | | | 1 | | USE | C |
| per0315031a | IPB006 | CWW | 3/15/2010 22:34 | | | 1 | | USE | B |

[illegible]

| | | | | | | | |
|-------------|------------|-----|----------------|-------|------|------|---|
| per0315071a | WCLCCV | CWW | 3/16/2010 3:56 | 1 | | USE | C |
| per0315072a | IPB010 | CWW | 3/16/2010 4:04 | 1 | | USE | B |
| per0315073a | WCLCRI | CWW | 3/16/2010 4:12 | 1 | | USE | C |
| per0315074a | 247781014 | CWW | 3/16/2010 4:20 | 1 | LANL | DUSE | S |
| per0315075a | 247781015 | CWW | 3/16/2010 4:29 | 1 | LANL | DUSE | S |
| per0315076a | IPB011 | CWW | 3/16/2010 4:37 | 1 | | USE | B |
| per0315077a | 248633001 | CWW | 3/16/2010 4:45 | 10000 | PTQA | DUSE | S |
| per0315078a | 1202063730 | CWW | 3/16/2010 4:53 | 10000 | PTQA | DUSE | S |
| per0315079a | WCLCCV | CWW | 3/16/2010 5:01 | 1 | | USE | C |
| per0315080a | IPB012 | CWW | 3/16/2010 5:09 | 1 | | USE | B |
| per0315081a | WCLCRI | CWW | 3/16/2010 5:17 | 1 | | USE | C |
| per0315082a | 1202056487 | CWW | 3/16/2010 5:25 | 1 | LANL | USE | S |
| per0315083a | 1202056488 | CWW | 3/16/2010 5:33 | 1 | LANL | USE | S |
| per0315084a | 1202056491 | CWW | 3/16/2010 5:41 | 1 | LANL | USE | S |
| per0315085a | 247899001 | CWW | 3/16/2010 5:49 | 1 | LANL | USE | S |
| per0315086a | 1202056489 | CWW | 3/16/2010 5:58 | 1 | LANL | USE | S |
| per0315087a | 1202056490 | CWW | 3/16/2010 6:06 | 1 | LANL | USE | S |
| per0315088a | 247899002 | CWW | 3/16/2010 6:14 | 1 | LANL | USE | S |
| per0315089a | 247899003 | CWW | 3/16/2010 6:22 | 1 | LANL | USE | S |
| per0315090a | 247899004 | CWW | 3/16/2010 6:30 | 1 | LANL | USE | S |
| per0315091a | WCLCCV | CWW | 3/16/2010 6:38 | 1 | | USE | C |
| per0315092a | IPB013 | CWW | 3/16/2010 6:46 | 1 | | USE | B |
| per0315093a | WCLCRI | CWW | 3/16/2010 6:54 | 1 | | USE | C |
| per0315094a | 247899005 | CWW | 3/16/2010 7:02 | 1 | LANL | USE | S |
| per0315095a | 247899006 | CWW | 3/16/2010 7:10 | 1 | LANL | USE | S |
| per0315096a | 247899007 | CWW | 3/16/2010 7:18 | 1 | LANL | USE | S |
| per0315097a | 247899008 | CWW | 3/16/2010 7:26 | 1 | LANL | USE | S |
| per0315098a | 247899009 | CWW | 3/16/2010 7:34 | 1 | LANL | USE | S |
| per0315099a | 247899010 | CWW | 3/16/2010 7:43 | 1 | LANL | USE | S |
| per0315100a | 247899011 | CWW | 3/16/2010 7:51 | 1 | LANL | USE | S |
| per0315101a | 247899012 | CWW | 3/16/2010 7:59 | 1 | LANL | USE | S |
| per0315102a | WCLCCV | CWW | 3/16/2010 8:07 | 1 | | USE | C |
| per0315103a | IPB014 | CWW | 3/16/2010 8:15 | 1 | | USE | B |
| per0315104a | WCLCRI | CWW | 3/16/2010 8:24 | 1 | | USE | C |
| per0315105a | 247899013 | CWW | 3/16/2010 8:32 | 1 | LANL | USE | S |
| per0315106a | 247899014 | CWW | 3/16/2010 8:40 | 1 | LANL | USE | S |
| per0315107a | 247899015 | CWW | 3/16/2010 8:48 | 1 | LANL | USE | S |
| per0315108a | 247899016 | CWW | 3/16/2010 8:56 | 1 | LANL | USE | S |
| per0315109a | 247899017 | CWW | 3/16/2010 9:04 | 1 | LANL | USE | S |

| | | | | | | | | | |
|-------------|------------|-----|-----------------|--------|-----------|---|------|---------|---|
| per0315110a | 247899018 | CWW | 3/16/2010 9:12 | 958906 | 10-2010 | 1 | LANL | USE | S |
| per0315111a | 247899019 | CWW | 3/16/2010 9:20 | 958906 | 10-2010 | 1 | LANL | USE | S |
| per0315112a | 247899020 | CWW | 3/16/2010 9:28 | 958906 | 10-2010 | 1 | LANL | USE | S |
| per0315113a | WCLCCV | CWW | 3/16/2010 9:36 | | | 1 | | USE | C |
| per0315114a | IPB015 | CWW | 3/16/2010 9:45 | | | 1 | | USE | B |
| per0315115a | WCLCRI | CWW | 3/16/2010 9:53 | | | 1 | | USE | C |
| per0315116a | 248058008 | CWW | 3/16/2010 10:01 | 958968 | 10-2083 | 1 | LANL | USE | S |
| per0315117a | 248065001 | CWW | 3/16/2010 10:09 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315118a | 1202056606 | CWW | 3/16/2010 10:17 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315119a | 1202056607 | CWW | 3/16/2010 10:25 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315120a | 248065002 | CWW | 3/16/2010 10:33 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315121a | 248065003 | CWW | 3/16/2010 10:41 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315122a | 248065004 | CWW | 3/16/2010 10:49 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315123a | 248065005 | CWW | 3/16/2010 10:57 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315124a | 248065006 | CWW | 3/16/2010 11:05 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315125a | 248065007 | CWW | 3/16/2010 11:13 | 958968 | 10-2086 | 1 | LANL | USE | S |
| per0315126a | WCLCCV | CWW | 3/16/2010 11:21 | | | 1 | | USE | C |
| per0315127a | IPB016 | CWW | 3/16/2010 11:29 | | | 1 | | USE | B |
| per0315128a | WCLCRI | CWW | 3/16/2010 11:37 | | | 1 | | USE | C |
| per0315129a | 248065008 | CWW | 3/16/2010 11:45 | 958968 | 10-2086 | 1 | LANL | DUSE-RA | S |
| per0315130a | IPB017 | CWW | 3/16/2010 11:53 | | | 1 | | DUSE | B |
| per0315131a | 1202054236 | CWW | 3/16/2010 12:01 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315132a | 1202054237 | CWW | 3/16/2010 12:10 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315133a | 1202054240 | CWW | 3/16/2010 12:18 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315134a | 247781001 | CWW | 3/16/2010 12:26 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315135a | 1202054238 | CWW | 3/16/2010 12:34 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315136a | 1202054239 | CWW | 3/16/2010 12:42 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315137a | 247781002 | CWW | 3/16/2010 12:50 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315138a | 247781003 | CWW | 3/16/2010 12:58 | 957953 | 10-1976-1 | 1 | LANL | DUSE-RA | S |
| per0315139a | WCLCCV | CWW | 3/16/2010 13:06 | | | 1 | | DUSE | C |
| per0315140a | IPB018 | CWW | 3/16/2010 13:14 | | | 1 | | DUSE | B |
| per0315141a | WCLCRI | CWW | 3/16/2010 13:22 | | | 1 | | DUSE | C |

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2010**

Sample Analysis

| Sample ID | Client ID |
|------------------|------------------|
| 247899001 | RE15-10-7896 |
| 247899002 | RE15-10-7894 |
| 247899003 | RE15-10-7900 |
| 247899004 | RE15-10-7898 |
| 247899005 | RE15-10-7897 |
| 247899006 | RE15-10-7895 |
| 247899007 | RE15-10-7899 |
| 247899008 | RE15-10-7893 |
| 247899009 | RE15-10-8011 |
| 247899010 | RE15-10-8004 |
| 247899011 | RE15-10-8009 |
| 247899012 | RE15-10-8003 |
| 247899013 | RE15-10-8007 |
| 247899014 | RE15-10-8002 |
| 247899015 | RE15-10-8010 |
| 247899016 | RE15-10-8006 |
| 247899017 | RE15-10-8001 |
| 247899018 | RE15-10-8012 |
| 247899019 | RE15-10-8008 |
| 247899020 | RE15-10-8005 |

| | |
|------------|--|
| 1202054493 | Method Blank (MB) ICP |
| 1202054498 | Laboratory Control Sample (LCS) |
| 1202054495 | 247899001(RE15-10-7896L) Serial Dilution (SD) |
| 1202054494 | 247899001(RE15-10-7896D) Sample Duplicate (DUP) |
| 1202054496 | 247899001(RE15-10-7896S) Matrix Spike (MS) |
| 1202054497 | 247899001(RE15-10-7896SD) Matrix Spike Duplicate (MSD) |
| 1202054499 | Method Blank (MB) ICP-MS |
| 1202054504 | Laboratory Control Sample (LCS) |
| 1202054501 | 247899001(RE15-10-7896L) Serial Dilution (SD) |
| 1202054500 | 247899001(RE15-10-7896D) Sample Duplicate (DUP) |
| 1202054502 | 247899001(RE15-10-7896S) Matrix Spike (MS) |
| 1202054503 | 247899001(RE15-10-7896SD) Matrix Spike Duplicate (MSD) |
| 1202056115 | Method Blank (MB) CVAA |
| 1202056116 | Laboratory Control Sample (LCS) |
| 1202056119 | 247899001(RE15-10-7896L) Serial Dilution (SD) |
| 1202056117 | 247899001(RE15-10-7896D) Sample Duplicate (DUP) |
| 1202056118 | 247899001(RE15-10-7896S) Matrix Spike (MS) |
| 1202056120 | 247899001(RE15-10-7896SD) Matrix Spike Duplicate (MSD) |

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

Method/Analysis Information

| | |
|---------------------------------------|---|
| Analytical Batch: | 958053, 958055 and 958725 |
| Prep Batch : | 958052, 958054 and 958722 |
| Standard Operating Procedures: | 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 |
| Analytical Method: | SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A |
| Prep Method : | 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 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 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 method blank analyzed with this SDG did not contain analytes of interest above the CRDL, with the exception of iron. The samples in this SDG contained iron at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.

Laboratory Control Sample (LCS) Recovery

The laboratory control sample (LCS) met the recommended acceptance criteria for percent recovery (%R) for all elements of interest, with the exception of antimony. 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.

Quality Control (QC) Sample Statement

The following sample was selected as the quality control (QC) sample for this SDG: 247899001 (RE15-10-7896).

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 magnesium and potassium, 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 magnesium and potassium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of manganese, as indicated by the "*" qualifier.

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, barium, calcium, chromium, copper, iron, magnesium, manganese, potassium, vanadium, zinc and uranium 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).

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 were diluted the standard 2x for solids on the ICPMS. The samples 247899005 (RE15-10-7897), 247899009 (RE15-10-8011), 247899011 (RE15-10-8009), 247899012 (RE15-10-8003), 247899013 (RE15-10-8007), 247899017 (RE15-10-8001) and 247899020 (RE15-10-8005) required dilutions for uranium in order to bring over range concentrations within the linear calibration range of the instrument.

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 DERs were generated for this SDG: 810095 and 810587. A copy of each DER 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: Kuister-Lauson Date: 3/29/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899001

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7896

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 94.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4140000 | ug/Kg | * | 6920 | 20400 | 20400 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1020 | ug/Kg | U | 336 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.47 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 26600 | ug/Kg | * | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.33 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/24/10 22:46 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 509 | ug/Kg | U | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 963000 | ug/Kg | * | 8150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 10400 | ug/Kg | * | 153 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 768 | ug/Kg | | 153 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5680 | ug/Kg | * | 305 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9460000 | ug/Kg | * | 8150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 5410 | ug/Kg | | 255 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 764000 | ug/Kg | *N | 8660 | 30500 | 30500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 238000 | ug/Kg | * | 204 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 8.49 | ug/kg | J | 3.93 | 11.6 | 11.6 | 1 | AV | JXL1 | 03/15/10 09:04 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.13 | mg/kg | | 0.105 | 0.419 | 0.419 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 519000 | ug/Kg | *N | 6520 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.524 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 212 | ug/Kg | J | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 122000 | ug/Kg | | 7130 | 25500 | 25500 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.210 | mg/kg | U | 0.0629 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 13:52 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 0.813 | mg/kg | * | 0.0138 | 0.0419 | 0.0419 | 2 | MS | RMJ | 03/25/10 05:10 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 7430 | ug/Kg | * | 102 | 509 | 509 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 47100 | ug/Kg | * | 336 | 1020 | 1020 | 1 | P | HSC | 03/25/10 21:13 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.522 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.507 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.552 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899002

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7894

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 73

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5250000 | ug/Kg | * | 7860 | 23100 | 23100 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1160 | ug/Kg | U | 381 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.6 | mg/kg | | 0.271 | 1.35 | 1.35 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 75900 | ug/Kg | * | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.674 | mg/kg | | 0.0271 | 0.135 | 0.135 | 2 | MS | RMJ | 03/24/10 22:59 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 148 | ug/Kg | J | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2060000 | ug/Kg | * | 9250 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 22000 | ug/Kg | * | 173 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3450 | ug/Kg | | 173 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 8660 | ug/Kg | * | 347 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9860000 | ug/Kg | * | 9250 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9330 | ug/Kg | | 289 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1020000 | ug/Kg | *N | 9820 | 34700 | 34700 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 330000 | ug/Kg | * | 231 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 5.04 | ug/kg | J | 4.99 | 14.7 | 14.7 | 1 | AV | JXL1 | 03/15/10 09:14 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.85 | mg/kg | | 0.135 | 0.542 | 0.542 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 954000 | ug/Kg | *N | 7400 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.35 | mg/kg | U | 0.677 | 1.35 | 1.35 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 578 | ug/Kg | U | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 87500 | ug/Kg | | 8090 | 28900 | 28900 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0954 | mg/kg | J | 0.0813 | 0.271 | 0.271 | 2 | MS | RMJ | 03/24/10 14:12 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 14.9 | mg/kg | * | 0.0179 | 0.0542 | 0.0542 | 2 | MS | RMJ | 03/25/10 05:31 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 16000 | ug/Kg | * | 116 | 578 | 578 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 36200 | ug/Kg | * | 381 | 1160 | 1160 | 1 | P | HSC | 03/25/10 21:48 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.592 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.505 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.559 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899003

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7900

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 91.8

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6150000 | ug/Kg | * | 7110 | 20900 | 20900 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1050 | ug/Kg | U | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2 | mg/kg | | 0.2 | 0.999 | 0.999 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 44300 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.06 | mg/kg | | 0.02 | 0.0999 | 0.0999 | 2 | MS | RMJ | 03/24/10 23:06 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 110 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1040000 | ug/Kg | * | 8360 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 17800 | ug/Kg | * | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3470 | ug/Kg | | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 6270 | ug/Kg | * | 314 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 15300000 | ug/Kg | * | 8360 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 7690 | ug/Kg | | 261 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1120000 | ug/Kg | *N | 8880 | 31400 | 31400 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 280000 | ug/Kg | * | 209 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 8.15 | ug/kg | J | 4.05 | 11.9 | 11.9 | 1 | AV | JXL1 | 03/15/10 09:16 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 7.1 | mg/kg | | 0.0999 | 0.4 | 0.4 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 983000 | ug/Kg | *N | 6690 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 0.999 | mg/kg | U | 0.5 | 0.999 | 0.999 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 189 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 120000 | ug/Kg | | 7320 | 26100 | 26100 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.160 | mg/kg | J | 0.0599 | 0.2 | 0.2 | 2 | MS | RMJ | 03/24/10 14:16 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.53 | mg/kg | * | 0.0132 | 0.04 | 0.04 | 2 | MS | RMJ | 03/25/10 05:35 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 23800 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 49200 | ug/Kg | * | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 21:55 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.521 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.545 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.548 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899004

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7898

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 85

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 12400000 | ug/Kg | * | 6800 | 20000 | 20000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1000 | ug/Kg | U | 330 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 4.96 | mg/kg | | 0.222 | 1.11 | 1.11 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 65900 | ug/Kg | * | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.91 | mg/kg | | 0.0222 | 0.111 | 0.111 | 2 | MS | RMJ | 03/24/10 23:09 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 500 | ug/Kg | U | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2900000 | ug/Kg | * | 8000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 23300 | ug/Kg | * | 150 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 4580 | ug/Kg | | 150 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 18100 | ug/Kg | * | 300 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 15600000 | ug/Kg | * | 8000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 14000 | ug/Kg | | 250 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 2310000 | ug/Kg | *N | 8500 | 30000 | 30000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 263000 | ug/Kg | * | 200 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15 | ug/kg | | 4.09 | 12 | 12 | 1 | AV | JXL1 | 03/15/10 09:18 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 16.9 | mg/kg | | 0.111 | 0.444 | 0.444 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 1800000 | ug/Kg | *N | 6400 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.11 | mg/kg | U | 0.555 | 1.11 | 1.11 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 152 | ug/Kg | J | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 106000 | ug/Kg | | 7000 | 25000 | 25000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.330 | mg/kg | | 0.0666 | 0.222 | 0.222 | 2 | MS | RMJ | 03/24/10 14:20 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 15.5 | mg/kg | * | 0.0147 | 0.0444 | 0.0444 | 2 | MS | RMJ | 03/25/10 05:38 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 23100 | ug/Kg | * | 100 | 500 | 500 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 38800 | ug/Kg | * | 330 | 1000 | 1000 | 1 | P | HSC | 03/25/10 22:16 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.591 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.532 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.59 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899005

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7897

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 84

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 10700000 | ug/Kg | * | 7400 | 21800 | 21800 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1090 | ug/Kg | U | 359 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 3.09 | mg/kg | | 0.214 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 66300 | ug/Kg | * | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.65 | mg/kg | | 0.0214 | 0.107 | 0.107 | 2 | MS | RMJ | 03/24/10 23:12 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 544 | ug/Kg | U | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2790000 | ug/Kg | * | 8710 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 14500 | ug/Kg | * | 163 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3130 | ug/Kg | | 163 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 33300 | ug/Kg | * | 327 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 14300000 | ug/Kg | * | 8710 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 32500 | ug/Kg | | 272 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 2130000 | ug/Kg | *N | 9250 | 32700 | 32700 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 205000 | ug/Kg | * | 218 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 12.3 | ug/kg | U | 4.18 | 12.3 | 12.3 | 1 | AV | JXL1 | 03/15/10 09:24 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 11.9 | mg/kg | | 0.107 | 0.428 | 0.428 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 1630000 | ug/Kg | *N | 6970 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.07 | mg/kg | U | 0.536 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 188 | ug/Kg | J | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 95200 | ug/Kg | | 7620 | 27200 | 27200 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.208 | mg/kg | J | 0.0643 | 0.214 | 0.214 | 2 | MS | RMJ | 03/24/10 14:24 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 36.5 | mg/kg | * | 0.0707 | 0.214 | 0.214 | 10 | MS | RMJ | 03/26/10 02:03 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 20800 | ug/Kg | * | 109 | 544 | 544 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 33900 | ug/Kg | * | 359 | 1090 | 1090 | 1 | P | HSC | 03/25/10 22:23 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.548 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.583 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899006

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7895

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 90.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4510000 | ug/Kg | * | 7120 | 20900 | 20900 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1050 | ug/Kg | U | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.74 | mg/kg | | 0.205 | 1.03 | 1.03 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 30600 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.32 | mg/kg | | 0.0205 | 0.103 | 0.103 | 2 | MS | RMJ | 03/24/10 23:14 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 523 | ug/Kg | U | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1270000 | ug/Kg | * | 8370 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 4990 | ug/Kg | * | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 950 | ug/Kg | | 157 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 7130 | ug/Kg | * | 314 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9170000 | ug/Kg | * | 8370 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 6940 | ug/Kg | | 262 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 874000 | ug/Kg | *N | 8900 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 237000 | ug/Kg | * | 209 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 6.21 | ug/kg | J | 4.12 | 12.1 | 12.1 | 1 | AV | JXL1 | 03/15/10 09:26 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 5.44 | mg/kg | | 0.103 | 0.41 | 0.41 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 675000 | ug/Kg | *N | 6700 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.03 | mg/kg | U | 0.513 | 1.03 | 1.03 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 142 | ug/Kg | J | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 75700 | ug/Kg | | 7330 | 26200 | 26200 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0673 | mg/kg | J | 0.0615 | 0.205 | 0.205 | 2 | MS | RMJ | 03/24/10 14:36 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 2.38 | mg/kg | * | 0.0135 | 0.041 | 0.041 | 2 | MS | RMJ | 03/25/10 05:44 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8280 | ug/Kg | * | 105 | 523 | 523 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 43700 | ug/Kg | * | 345 | 1050 | 1050 | 1 | P | HSC | 03/25/10 22:30 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.53 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.541 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.549 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899007

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7899

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 82

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6510000 | ug/Kg | * | 8300 | 24400 | 24400 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1220 | ug/Kg | U | 403 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.41 | mg/kg | | 0.207 | 1.04 | 1.04 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 54600 | ug/Kg | * | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.620 | mg/kg | | 0.0207 | 0.104 | 0.104 | 2 | MS | RMJ | 03/24/10 23:17 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 611 | ug/Kg | U | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2180000 | ug/Kg | * | 9770 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 15600 | ug/Kg | * | 183 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 3640 | ug/Kg | | 183 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5320 | ug/Kg | * | 366 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 22300000 | ug/Kg | * | 9770 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9460 | ug/Kg | | 305 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 2870000 | ug/Kg | *N | 10400 | 36600 | 36600 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 280000 | ug/Kg | * | 244 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 4.89 | ug/kg | J | 4.38 | 12.9 | 12.9 | 1 | AV | JXLI | 03/15/10 09:28 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.78 | mg/kg | | 0.104 | 0.414 | 0.414 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 1780000 | ug/Kg | *N | 7820 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.04 | mg/kg | U | 0.518 | 1.04 | 1.04 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 269 | ug/Kg | J | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 253000 | ug/Kg | | 8550 | 30500 | 30500 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.105 | mg/kg | J | 0.0621 | 0.207 | 0.207 | 2 | MS | RMJ | 03/24/10 14:40 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 4.21 | mg/kg | * | 0.0137 | 0.0414 | 0.0414 | 2 | MS | RMJ | 03/25/10 05:47 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 34800 | ug/Kg | * | 122 | 611 | 611 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 90000 | ug/Kg | * | 403 | 1220 | 1220 | 1 | P | HSC | 03/25/10 22:37 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.502 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.592 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.571 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899008

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-7893

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 72

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3750000 | ug/Kg | * | 8550 | 25200 | 25200 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1260 | ug/Kg | U | 415 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.14 | mg/kg | | 0.274 | 1.37 | 1.37 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 53900 | ug/Kg | * | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.918 | mg/kg | | 0.0274 | 0.137 | 0.137 | 2 | MS | RMJ | 03/24/10 23:19 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 629 | ug/Kg | U | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1480000 | ug/Kg | * | 10100 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 34200 | ug/Kg | * | 189 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2650 | ug/Kg | | 189 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5730 | ug/Kg | * | 377 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 8060000 | ug/Kg | * | 10100 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 31300 | ug/Kg | | 314 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 712000 | ug/Kg | *N | 10700 | 37700 | 37700 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 268000 | ug/Kg | * | 252 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15.7 | ug/kg | U | 5.35 | 15.7 | 15.7 | 1 | AV | JXL1 | 03/15/10 09:30 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.17 | mg/kg | | 0.137 | 0.548 | 0.548 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 724000 | ug/Kg | *N | 8050 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.37 | mg/kg | U | 0.685 | 1.37 | 1.37 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 629 | ug/Kg | U | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 116000 | ug/Kg | | 8800 | 31400 | 31400 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0876 | mg/kg | J | 0.0822 | 0.274 | 0.274 | 2 | MS | RMJ | 03/24/10 14:44 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 16.2 | mg/kg | * | 0.0181 | 0.0548 | 0.0548 | 2 | MS | RMJ | 03/25/10 05:50 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 11400 | ug/Kg | * | 126 | 629 | 629 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 31800 | ug/Kg | * | 415 | 1260 | 1260 | 1 | P | HSC | 03/25/10 22:44 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.552 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.507 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.529 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899009

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8011

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 85

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3720000 | ug/Kg | * | 6950 | 20400 | 20400 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1020 | ug/Kg | U | 337 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.32 | mg/kg | | 0.211 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 51400 | ug/Kg | * | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.7 | mg/kg | | 0.0211 | 0.105 | 0.105 | 2 | MS | RMJ | 03/24/10 23:22 | 100324-3 | 958055 |
| 7440-43-9 | Cadmium | 511 | ug/Kg | U | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1330000 | ug/Kg | * | 8170 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 6830 | ug/Kg | * | 153 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2360 | ug/Kg | | 153 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 20100 | ug/Kg | * | 306 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10500000 | ug/Kg | * | 8170 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 16700 | ug/Kg | | 255 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 694000 | ug/Kg | *N | 8680 | 30600 | 30600 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 338000 | ug/Kg | * | 204 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 13 | ug/kg | U | 4.43 | 13 | 13 | 1 | AV | JXL1 | 03/15/10 09:32 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.33 | mg/kg | | 0.105 | 0.422 | 0.422 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 695000 | ug/Kg | *N | 6540 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.527 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 3270 | ug/Kg | | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 95400 | ug/Kg | | 7150 | 25500 | 25500 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0713 | mg/kg | J | 0.0633 | 0.211 | 0.211 | 2 | MS | RMJ | 03/24/10 14:49 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 39.3 | mg/kg | * | 0.0696 | 0.211 | 0.211 | 10 | MS | RMJ | 03/26/10 02:06 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 11700 | ug/Kg | * | 102 | 511 | 511 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 42000 | ug/Kg | * | 337 | 1020 | 1020 | 1 | P | HSC | 03/25/10 22:51 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.574 | g | 50 | ml. | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.556 | g | 50 | ml. | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.54 | g | 30 | ml. | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899010

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8004

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 88

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5810000 | ug/Kg | * | 7650 | 22500 | 22500 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1120 | ug/Kg | U | 371 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.56 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 46500 | ug/Kg | * | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.861 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/25/10 01:47 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 562 | ug/Kg | U | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1650000 | ug/Kg | * | 9000 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 11500 | ug/Kg | * | 169 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2640 | ug/Kg | | 169 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 8780 | ug/Kg | * | 337 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 13000000 | ug/Kg | * | 9000 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 8670 | ug/Kg | | 281 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1060000 | ug/Kg | *N | 9560 | 33700 | 33700 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 287000 | ug/Kg | * | 225 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 11.6 | ug/kg | U | 3.95 | 11.6 | 11.6 | 1 | AV | JXL1 | 03/15/10 09:34 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.86 | mg/kg | | 0.105 | 0.421 | 0.421 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 895000 | ug/Kg | *N | 7200 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.526 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 185 | ug/Kg | J | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 122000 | ug/Kg | | 7870 | 28100 | 28100 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0757 | mg/kg | J | 0.0631 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 14:53 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 4.82 | mg/kg | * | 0.0139 | 0.0421 | 0.0421 | 2 | MS | RMJ | 03/25/10 06:03 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 14100 | ug/Kg | * | 112 | 562 | 562 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 48100 | ug/Kg | * | 371 | 1120 | 1120 | 1 | P | HSC | 03/25/10 22:58 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.504 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.539 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.586 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899011

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8009

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 76

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3860000 | ug/Kg | * | 8750 | 25700 | 25700 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 3450 | ug/Kg | | 425 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.5 | mg/kg | | 0.251 | 1.26 | 1.26 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 86200 | ug/Kg | * | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 7.37 | mg/kg | | 0.0251 | 0.126 | 0.126 | 2 | MS | RMJ | 03/25/10 01:50 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 422 | ug/Kg | J | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2310000 | ug/Kg | * | 10300 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 7290 | ug/Kg | * | 193 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1690 | ug/Kg | | 193 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 175000 | ug/Kg | * | 386 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 5330000 | ug/Kg | * | 10300 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 97700 | ug/Kg | | 322 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 867000 | ug/Kg | *N | 10900 | 38600 | 38600 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 240000 | ug/Kg | * | 257 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 7.56 | ug/kg | J | 5.11 | 15 | 15 | 1 | AV | JXL1 | 03/15/10 09:36 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.05 | mg/kg | | 0.126 | 0.502 | 0.502 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 849000 | ug/Kg | *N | 8240 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.26 | mg/kg | U | 0.628 | 1.26 | 1.26 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 183 | ug/Kg | J | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 153000 | ug/Kg | | 9010 | 32200 | 32200 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.251 | mg/kg | U | 0.0753 | 0.251 | 0.251 | 2 | MS | RMJ | 03/24/10 14:57 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 348 | mg/kg | * | 0.331 | 1 | 1 | 40 | MS | RMJ | 03/26/10 02:10 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 7230 | ug/Kg | * | 129 | 644 | 644 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 51300 | ug/Kg | * | 425 | 1290 | 1290 | 1 | P | HSC | 03/25/10 23:05 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.508 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.521 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.522 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899012

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8003

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 75

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 4500000 | ug/Kg | * | 8430 | 24800 | 24800 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1240 | ug/Kg | U | 409 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.95 | mg/kg | | 0.248 | 1.24 | 1.24 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 52900 | ug/Kg | * | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 7.96 | mg/kg | | 0.0248 | 0.124 | 0.124 | 2 | MS | RMJ | 03/25/10 01:52 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 620 | ug/Kg | U | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1620000 | ug/Kg | * | 9920 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 10600 | ug/Kg | * | 186 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2610 | ug/Kg | | 186 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 20900 | ug/Kg | * | 372 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 12100000 | ug/Kg | * | 9920 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 17600 | ug/Kg | | 310 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 896000 | ug/Kg | *N | 10500 | 37200 | 37200 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 329000 | ug/Kg | * | 248 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 15.7 | ug/kg | U | 5.33 | 15.7 | 15.7 | 1 | AV | JXL1 | 03/15/10 09:38 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 9.93 | mg/kg | | 0.124 | 0.497 | 0.497 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 852000 | ug/Kg | *N | 7930 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.24 | mg/kg | U | 0.621 | 1.24 | 1.24 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 170 | ug/Kg | J | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 116000 | ug/Kg | | 8680 | 31000 | 31000 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.127 | mg/kg | J | 0.0745 | 0.248 | 0.248 | 2 | MS | RMJ | 03/24/10 15:01 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 103 | mg/kg | * | 0.164 | 0.497 | 0.497 | 20 | MS | RMJ | 03/26/10 02:13 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 12800 | ug/Kg | * | 124 | 620 | 620 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 50900 | ug/Kg | * | 409 | 1240 | 1240 | 1 | P | HSC | 03/25/10 23:13 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.536 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.535 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.509 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899013

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8007

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 75

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 8970000 | ug/Kg | * | 8680 | 25500 | 25500 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1280 | ug/Kg | U | 421 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.91 | mg/kg | | 0.229 | 1.14 | 1.14 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 113000 | ug/Kg | * | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.24 | mg/kg | | 0.0229 | 0.114 | 0.114 | 2 | MS | RMJ | 03/25/10 01:55 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 278 | ug/Kg | J | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 3360000 | ug/Kg | * | 10200 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 17600 | ug/Kg | * | 192 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 9340 | ug/Kg | | 192 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 47300 | ug/Kg | * | 383 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 20300000 | ug/Kg | * | 10200 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 48400 | ug/Kg | | 319 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1550000 | ug/Kg | *N | 10900 | 38300 | 38300 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 765000 | ug/Kg | * | 255 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 7.37 | ug/kg | J | 5.23 | 15.4 | 15.4 | 1 | AV | JXL1 | 03/15/10 09:40 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 7.19 | mg/kg | | 0.114 | 0.457 | 0.457 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 1360000 | ug/Kg | *N | 8170 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.14 | mg/kg | U | 0.571 | 1.14 | 1.14 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 519 | ug/Kg | J | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 131000 | ug/Kg | | 8940 | 31900 | 31900 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.104 | mg/kg | J | 0.0686 | 0.229 | 0.229 | 2 | MS | RMJ | 03/24/10 15:05 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 28.4 | mg/kg | * | 0.0754 | 0.229 | 0.229 | 10 | MS | RMJ | 03/26/10 02:16 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 27600 | ug/Kg | * | 128 | 638 | 638 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 83900 | ug/Kg | * | 421 | 1280 | 1280 | 1 | P | HSC | 03/25/10 23:34 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.519 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.58 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.517 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899014

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8002

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 92

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3390000 | ug/Kg | * | 6960 | 20500 | 20500 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1020 | ug/Kg | U | 338 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.812 | mg/kg | J | 0.212 | 1.06 | 1.06 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 30100 | ug/Kg | * | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.693 | mg/kg | | 0.0212 | 0.106 | 0.106 | 2 | MS | RMJ | 03/25/10 01:58 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 512 | ug/Kg | U | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1180000 | ug/Kg | * | 8190 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 11800 | ug/Kg | * | 154 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1390 | ug/Kg | | 154 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 5270 | ug/Kg | * | 307 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10800000 | ug/Kg | * | 8190 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 9510 | ug/Kg | | 256 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 589000 | ug/Kg | *N | 8700 | 30700 | 30700 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 266000 | ug/Kg | * | 205 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 12.8 | ug/kg | U | 4.34 | 12.8 | 12.8 | 1 | AV | JXL1 | 03/15/10 09:42 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 2.29 | mg/kg | | 0.106 | 0.425 | 0.425 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 510000 | ug/Kg | *N | 6550 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.06 | mg/kg | U | 0.531 | 1.06 | 1.06 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 228 | ug/Kg | J | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 187000 | ug/Kg | | 7170 | 25600 | 25600 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.212 | mg/kg | U | 0.0637 | 0.212 | 0.212 | 2 | MS | RMJ | 03/24/10 15:17 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 2.35 | mg/kg | * | 0.014 | 0.0425 | 0.0425 | 2 | MS | RMJ | 03/25/10 06:15 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8480 | ug/Kg | * | 102 | 512 | 512 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 50300 | ug/Kg | * | 338 | 1020 | 1020 | 1 | P | HSC | 03/25/10 23:41 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.531 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.512 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.511 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899015

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8010

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5170000 | ug/Kg | * | 6830 | 20100 | 20100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1000 | ug/Kg | U | 331 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.83 | mg/kg | | 0.218 | 1.09 | 1.09 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 82000 | ug/Kg | * | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.21 | mg/kg | | 0.0218 | 0.109 | 0.109 | 2 | MS | RMJ | 03/25/10 02:00 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 502 | ug/Kg | U | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1550000 | ug/Kg | * | 8030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 7400 | ug/Kg | * | 151 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2090 | ug/Kg | | 151 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 17200 | ug/Kg | * | 301 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9740000 | ug/Kg | * | 8030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 12400 | ug/Kg | | 251 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1090000 | ug/Kg | *N | 8530 | 30100 | 30100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 180000 | ug/Kg | * | 201 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 21.3 | ug/kg | | 4.56 | 13.4 | 13.4 | 1 | AV | JXL1 | 03/15/10 09:48 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.76 | mg/kg | | 0.109 | 0.436 | 0.436 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 766000 | ug/Kg | *N | 6420 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.09 | mg/kg | U | 0.545 | 1.09 | 1.09 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 203 | ug/Kg | J | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 147000 | ug/Kg | | 7030 | 25100 | 25100 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0826 | mg/kg | J | 0.0654 | 0.218 | 0.218 | 2 | MS | RMJ | 03/24/10 15:21 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 13.7 | mg/kg | * | 0.0144 | 0.0436 | 0.0436 | 2 | MS | RMJ | 03/25/10 06:18 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 11300 | ug/Kg | * | 100 | 502 | 502 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 32100 | ug/Kg | * | 331 | 1000 | 1000 | 1 | P | HSC | 03/25/10 23:48 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.513 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.5 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899016

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8006

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 92.9

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|----------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 6750000 | ug/Kg | * | 6580 | 19400 | 19400 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 968 | ug/Kg | U | 319 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 2.01 | mg/kg | | 0.21 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 28300 | ug/Kg | * | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 1.78 | mg/kg | | 0.021 | 0.105 | 0.105 | 2 | MS | RMJ | 03/25/10 02:03 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 484 | ug/Kg | U | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 1480000 | ug/Kg | * | 7740 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 12200 | ug/Kg | * | 145 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 947 | ug/Kg | | 145 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 7550 | ug/Kg | * | 290 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 10700000 | ug/Kg | * | 7740 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 7410 | ug/Kg | | 242 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1180000 | ug/Kg | *N | 8230 | 29000 | 29000 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 145000 | ug/Kg | * | 194 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 24.4 | ug/kg | | 3.66 | 10.8 | 10.8 | 1 | AV | JXL1 | 03/15/10 09:50 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.6 | mg/kg | | 0.105 | 0.42 | 0.42 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 679000 | ug/Kg | *N | 6190 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.05 | mg/kg | U | 0.526 | 1.05 | 1.05 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 484 | ug/Kg | U | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 111000 | ug/Kg | | 6780 | 24200 | 24200 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0801 | mg/kg | J | 0.0631 | 0.21 | 0.21 | 2 | MS | RMJ | 03/24/10 15:25 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 0.985 | mg/kg | * | 0.0139 | 0.042 | 0.042 | 2 | MS | RMJ | 03/25/10 06:27 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 9730 | ug/Kg | * | 96.8 | 484 | 484 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 43500 | ug/Kg | * | 319 | 968 | 968 | 1 | P | HSC | 03/25/10 23:56 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.556 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.512 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.6 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899017

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8001

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 71

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5450000 | ug/Kg | * | 9340 | 27500 | 27500 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 789 | ug/Kg | J | 453 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.96 | mg/kg | | 0.262 | 1.31 | 1.31 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 79600 | ug/Kg | * | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 2.2 | mg/kg | | 0.0262 | 0.131 | 0.131 | 2 | MS | RMJ | 03/25/10 02:10 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 359 | ug/Kg | J | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2110000 | ug/Kg | * | 11000 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 31600 | ug/Kg | * | 206 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2380 | ug/Kg | | 206 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 43800 | ug/Kg | * | 412 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9580000 | ug/Kg | * | 11000 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 27100 | ug/Kg | | 343 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1030000 | ug/Kg | *N | 11700 | 41200 | 41200 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 266000 | ug/Kg | * | 275 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 14.7 | ug/kg | U | 5.01 | 14.7 | 14.7 | 1 | AV | JXL1 | 03/15/10 09:52 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 6.03 | mg/kg | | 0.131 | 0.525 | 0.525 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 884000 | ug/Kg | *N | 8790 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.31 | mg/kg | U | 0.656 | 1.31 | 1.31 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 257 | ug/Kg | J | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 105000 | ug/Kg | | 9610 | 34300 | 34300 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0887 | mg/kg | J | 0.0787 | 0.262 | 0.262 | 2 | MS | RMJ | 03/24/10 15:29 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 47.9 | mg/kg | * | 0.0866 | 0.262 | 0.262 | 10 | MS | RMJ | 03/26/10 02:19 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 11700 | ug/Kg | * | 137 | 686 | 686 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 42500 | ug/Kg | * | 453 | 1370 | 1370 | 1 | P | HSC | 03/26/10 00:03 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.516 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.54 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.577 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899018

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8012

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 94.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Rnn | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 2970000 | ug/Kg | * | 6080 | 17900 | 17900 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 894 | ug/Kg | U | 295 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.979 | mg/kg | | 0.183 | 0.913 | 0.913 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 36400 | ug/Kg | * | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.489 | mg/kg | | 0.0183 | 0.0913 | 0.0913 | 2 | MS | RMJ | 03/25/10 02:12 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 447 | ug/Kg | U | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 825000 | ug/Kg | * | 7150 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 4870 | ug/Kg | * | 134 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1910 | ug/Kg | | 134 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 3260 | ug/Kg | * | 268 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 8430000 | ug/Kg | * | 7150 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 6010 | ug/Kg | | 224 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 623000 | ug/Kg | *N | 7600 | 26800 | 26800 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 272000 | ug/Kg | * | 179 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 11.3 | ug/kg | U | 3.83 | 11.3 | 11.3 | 1 | AV | JXL1 | 03/15/10 09:54 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.73 | mg/kg | | 0.0913 | 0.365 | 0.365 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 589000 | ug/Kg | *N | 5720 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 0.913 | mg/kg | U | 0.456 | 0.913 | 0.913 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 130 | ug/Kg | J | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 94400 | ug/Kg | | 6260 | 22400 | 22400 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.183 | mg/kg | U | 0.0548 | 0.183 | 0.183 | 2 | MS | RMJ | 03/24/10 15:33 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.03 | mg/kg | * | 0.012 | 0.0365 | 0.0365 | 2 | MS | RMJ | 03/25/10 06:33 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8810 | ug/Kg | * | 89.4 | 447 | 447 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 35400 | ug/Kg | * | 295 | 894 | 894 | 1 | P | HSC | 03/26/10 00:10 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt/vol. | Units | Final wt/vol. | Units | Date | Analyst |
|------------------|------------|------------------|-----------------|-------|---------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.593 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.581 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.565 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899019

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8008

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|--------|--------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 3090000 | ug/Kg | * | 6970 | 20500 | 20500 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1030 | ug/Kg | U | 338 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 0.877 | mg/kg | J | 0.214 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 36100 | ug/Kg | * | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 0.470 | mg/kg | | 0.0214 | 0.107 | 0.107 | 2 | MS | RMJ | 03/25/10 02:15 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 513 | ug/Kg | U | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 939000 | ug/Kg | * | 8200 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 5360 | ug/Kg | * | 154 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 1900 | ug/Kg | | 154 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 4000 | ug/Kg | * | 308 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 7770000 | ug/Kg | * | 8200 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 5770 | ug/Kg | | 256 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 584000 | ug/Kg | *N | 8720 | 30800 | 30800 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 236000 | ug/Kg | * | 205 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 33.3 | ug/kg | | 4.11 | 12.1 | 12.1 | 1 | AV | JXL1 | 03/15/10 09:56 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 3.31 | mg/kg | | 0.107 | 0.428 | 0.428 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 602000 | ug/Kg | *N | 6560 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.07 | mg/kg | U | 0.535 | 1.07 | 1.07 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 513 | ug/Kg | U | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 104000 | ug/Kg | | 7180 | 25600 | 25600 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.214 | mg/kg | U | 0.0642 | 0.214 | 0.214 | 2 | MS | RMJ | 03/24/10 15:37 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 1.03 | mg/kg | * | 0.0141 | 0.0428 | 0.0428 | 2 | MS | RMJ | 03/25/10 06:36 | 100324-6 | 958055 |
| 7440-62-2 | Vanadium | 8330 | ug/Kg | * | 103 | 513 | 513 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 34000 | ug/Kg | * | 338 | 1030 | 1030 | 1 | P | HSC | 03/26/10 00:17 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.547 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.524 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.557 | g | 30 | mL | 03/12/10 | TXB3 |

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2010

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247899020

BASIS: Dry Weight

DATE COLLECTED 18-FEB-10

CLIENT ID: RE15-10-8005

LEVEL: Low

DATE RECEIVED 24-FEB-10

MATRIX: SOIL

%SOLIDS: 82

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|-----------|-----------|---------|-------|------|--------|-------|-------|----|----|---------|----------------|----------------|------------------|
| 7429-90-5 | Aluminum | 5840000 | ug/Kg | * | 7430 | 21900 | 21900 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-36-0 | Antimony | 1020 | ug/Kg | J | 361 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-38-2 | Arsenic | 1.79 | mg/kg | | 0.243 | 1.22 | 1.22 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-39-3 | Barium | 74300 | ug/Kg | * | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-41-7 | Beryllium | 3.81 | mg/kg | | 0.0243 | 0.122 | 0.122 | 2 | MS | RMJ | 03/25/10 02:17 | 100324-5 | 958055 |
| 7440-43-9 | Cadmium | 824 | ug/Kg | | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-70-2 | Calcium | 2300000 | ug/Kg | * | 8750 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-47-3 | Chromium | 12000 | ug/Kg | * | 164 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-48-4 | Cobalt | 2100 | ug/Kg | | 164 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-50-8 | Copper | 88900 | ug/Kg | * | 328 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-89-6 | Iron | 9270000 | ug/Kg | * | 8750 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-92-1 | Lead | 57300 | ug/Kg | | 273 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-95-4 | Magnesium | 1030000 | ug/Kg | *N | 9290 | 32800 | 32800 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-96-5 | Manganese | 265000 | ug/Kg | * | 219 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7439-97-6 | Mercury | 4.94 | ug/kg | J | 4.92 | 14.5 | 14.5 | 1 | AV | JXL1 | 03/15/10 09:58 | 031510S1-8 | 958725 |
| 7440-02-0 | Nickel | 4.81 | mg/kg | | 0.122 | 0.486 | 0.486 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-09-7 | Potassium | 937000 | ug/Kg | *N | 7000 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7782-49-2 | Selenium | 1.22 | mg/kg | U | 0.608 | 1.22 | 1.22 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-22-4 | Silver | 168 | ug/Kg | J | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-23-5 | Sodium | 85500 | ug/Kg | | 7650 | 27300 | 27300 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-28-0 | Thallium | 0.0756 | mg/kg | J | 0.0729 | 0.243 | 0.243 | 2 | MS | RMJ | 03/24/10 15:41 | 100323-2 | 958055 |
| 7440-61-1 | Uranium | 59 | mg/kg | * | 0.0802 | 0.243 | 0.243 | 10 | MS | RMJ | 03/26/10 02:22 | 100325-7 | 958055 |
| 7440-62-2 | Vanadium | 10800 | ug/Kg | * | 109 | 547 | 547 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |
| 7440-66-6 | Zinc | 54800 | ug/Kg | * | 361 | 1090 | 1090 | 1 | P | HSC | 03/26/10 00:24 | 032510A-1 | 958053 |

Prep Information:

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|------------------|------------|------------------|------------------|-------|----------------|-------|----------|---------|
| 958053 | 958052 | SW846 3050B | 0.557 | g | 50 | mL | 03/02/10 | FGA |
| 958055 | 958054 | SW846 3050B | 0.501 | g | 50 | mL | 03/02/10 | FGA |
| 958725 | 958722 | SW846 7471A Prep | 0.505 | g | 30 | mL | 03/12/10 | TXB3 |

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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 | 5.4 | ug/L | 5 | ug/L | 108 | 90.0 – 110.0 | AV | 15-MAR-10 08:50 | 031510S1-8 |
| | Arsenic | 51.6 | ug/L | 50 | ug/L | 103.3 | 90.0 – 110.0 | MS | 24-MAR-10 13:07 | 100323-2 |
| | Nickel | 52.6 | ug/L | 50 | ug/L | 105.3 | 90.0 – 110.0 | MS | 24-MAR-10 13:07 | 100323-2 |
| | Selenium | 51 | ug/L | 50 | ug/L | 101.9 | 90.0 – 110.0 | MS | 24-MAR-10 13:07 | 100323-2 |
| | Thallium | 50.7 | ug/L | 50 | ug/L | 101.5 | 90.0 – 110.0 | MS | 24-MAR-10 13:07 | 100323-2 |
| | Beryllium | 50.3 | ug/L | 50 | ug/L | 100.6 | 90.0 – 110.0 | MS | 24-MAR-10 22:05 | 100324-3 |
| | Beryllium | 50.3 | ug/L | 50 | ug/L | 100.7 | 90.0 – 110.0 | MS | 25-MAR-10 01:31 | 100324-5 |
| | Uranium | 53.5 | ug/L | 50 | ug/L | 106.9 | 90.0 – 110.0 | MS | 25-MAR-10 02:44 | 100324-6 |
| | Aluminum | 5000 | ug/L | 5000 | ug/L | 100 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Antimony | 517 | ug/L | 500 | ug/L | 103.4 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Barium | 500 | ug/L | 500 | ug/L | 100.1 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Cadmium | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Calcium | 5010 | ug/L | 5000 | ug/L | 100.2 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Chromium | 480 | ug/L | 500 | ug/L | 96 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Cobalt | 506 | ug/L | 500 | ug/L | 101.3 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Copper | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Iron | 5040 | ug/L | 5000 | ug/L | 100.7 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Lead | 489 | ug/L | 500 | ug/L | 97.7 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Magnesium | 5350 | ug/L | 5000 | ug/L | 107 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Manganese | 505 | ug/L | 500 | ug/L | 101.1 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Potassium | 2410 | ug/L | 2500 | ug/L | 96.4 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Silver | 256 | ug/L | 250 | ug/L | 102.5 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Sodium | 2400 | ug/L | 2500 | ug/L | 95.8 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Vanadium | 505 | ug/L | 500 | ug/L | 101 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Zinc | 498 | ug/L | 500 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 08:09 | 032510A-1 |
| | Uranium | 54.1 | ug/L | 50 | ug/L | 108.2 | 90.0 – 110.0 | MS | 25-MAR-10 23:48 | 100325-7 |
| CCV01 | | | | | | | | | | |
| | Mercury | 5.11 | ug/L | 5 | ug/L | 102.1 | 80.0 – 120.0 | AV | 15-MAR-10 08:56 | 031510S1-8 |
| | Arsenic | 50.7 | ug/L | 50 | ug/L | 101.4 | 90.0 – 110.0 | MS | 24-MAR-10 13:27 | 100323-2 |
| | Nickel | 52.3 | ug/L | 50 | ug/L | 104.6 | 90.0 – 110.0 | MS | 24-MAR-10 13:27 | 100323-2 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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 | 51.1 | ug/L | 50 | ug/L | 102.2 | 90.0 - 110.0 | MS | 24-MAR-10 13:27 | 100323-2 |
| | Thallium | 51 | ug/L | 50 | ug/L | 102 | 90.0 - 110.0 | MS | 24-MAR-10 13:27 | 100323-2 |
| | Beryllium | 50 | ug/L | 50 | ug/L | 100 | 90.0 - 110.0 | MS | 24-MAR-10 22:16 | 100324-3 |
| | Beryllium | 49.2 | ug/L | 50 | ug/L | 98.5 | 90.0 - 110.0 | MS | 25-MAR-10 01:42 | 100324-5 |
| | Uranium | 52.5 | ug/L | 50 | ug/L | 105 | 90.0 - 110.0 | MS | 25-MAR-10 02:59 | 100324-6 |
| | Aluminum | 4940 | ug/L | 5000 | ug/L | 98.9 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Antimony | 527 | ug/L | 500 | ug/L | 105.3 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Barium | 496 | ug/L | 500 | ug/L | 99.3 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Cadmium | 499 | ug/L | 500 | ug/L | 99.8 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Calcium | 5000 | ug/L | 5000 | ug/L | 100 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Chromium | 498 | ug/L | 500 | ug/L | 99.7 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Cobalt | 506 | ug/L | 500 | ug/L | 101.3 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Copper | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Iron | 4960 | ug/L | 5000 | ug/L | 99.2 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Lead | 498 | ug/L | 500 | ug/L | 99.6 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Magnesium | 5180 | ug/L | 5000 | ug/L | 103.6 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Manganese | 489 | ug/L | 500 | ug/L | 97.8 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Potassium | 4910 | ug/L | 5000 | ug/L | 98.2 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Silver | 504 | ug/L | 500 | ug/L | 100.8 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Sodium | 9610 | ug/L | 10000 | ug/L | 96.1 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Vanadium | 501 | ug/L | 500 | ug/L | 100.3 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Zinc | 494 | ug/L | 500 | ug/L | 98.9 | 90.0 - 110.0 | P | 25-MAR-10 08:57 | 032510A-1 |
| | Uranium | 53.8 | ug/L | 50 | ug/L | 107.6 | 90.0 - 110.0 | MS | 26-MAR-10 00:04 | 100325-7 |
| CCV02 | Mercury | 5.05 | ug/L | 5 | ug/L | 101.1 | 80.0 - 120.0 | AV | 15-MAR-10 09:20 | 031510S1-8 |
| | Arsenic | 51.9 | ug/L | 50 | ug/L | 103.8 | 90.0 - 110.0 | MS | 24-MAR-10 13:43 | 100323-2 |
| | Nickel | 52.8 | ug/L | 50 | ug/L | 105.5 | 90.0 - 110.0 | MS | 24-MAR-10 13:43 | 100323-2 |
| | Selenium | 51 | ug/L | 50 | ug/L | 101.9 | 90.0 - 110.0 | MS | 24-MAR-10 13:43 | 100323-2 |
| | Thallium | 50.8 | ug/L | 50 | ug/L | 101.7 | 90.0 - 110.0 | MS | 24-MAR-10 13:43 | 100323-2 |
| | Beryllium | 53.7 | ug/L | 50 | ug/L | 107.4 | 90.0 - 110.0 | MS | 24-MAR-10 22:36 | 100324-3 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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 | 53.3 | ug/L | 50 | ug/L | 106.6 | 90.0 - 110.0 | MS | 25-MAR-10 02:05 | 100324-5 |
| | Uranium | 52.9 | ug/L | 50 | ug/L | 105.8 | 90.0 - 110.0 | MS | 25-MAR-10 03:15 | 100324-6 |
| | Aluminum | 5110 | ug/L | 5000 | ug/L | 102.1 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Antimony | 523 | ug/L | 500 | ug/L | 104.6 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Barium | 499 | ug/L | 500 | ug/L | 99.8 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Cadmium | 500 | ug/L | 500 | ug/L | 100 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Calcium | 5140 | ug/L | 5000 | ug/L | 102.8 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Chromium | 501 | ug/L | 500 | ug/L | 100.2 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Cobalt | 508 | ug/L | 500 | ug/L | 101.6 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Copper | 496 | ug/L | 500 | ug/L | 99.3 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Iron | 5140 | ug/L | 5000 | ug/L | 102.8 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Lead | 494 | ug/L | 500 | ug/L | 98.7 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Magnesium | 5240 | ug/L | 5000 | ug/L | 104.8 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Manganese | 496 | ug/L | 500 | ug/L | 99.1 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Potassium | 4970 | ug/L | 5000 | ug/L | 99.4 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Silver | 509 | ug/L | 500 | ug/L | 101.7 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Sodium | 10200 | ug/L | 10000 | ug/L | 101.8 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Vanadium | 505 | ug/L | 500 | ug/L | 101 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Zinc | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 - 110.0 | P | 25-MAR-10 09:24 | 032510A-1 |
| | Uranium | 54 | ug/L | 50 | ug/L | 108.1 | 90.0 - 110.0 | MS | 26-MAR-10 00:32 | 100325-7 |
| CCV03 | | | | | | | | | | |
| | Mercury | 4.98 | ug/L | 5 | ug/L | 99.6 | 80.0 - 120.0 | AV | 15-MAR-10 09:44 | 031510S1-8 |
| | Arsenic | 52.1 | ug/L | 50 | ug/L | 104.2 | 90.0 - 110.0 | MS | 24-MAR-10 14:28 | 100323-2 |
| | Nickel | 52 | ug/L | 50 | ug/L | 104 | 90.0 - 110.0 | MS | 24-MAR-10 14:28 | 100323-2 |
| | Selenium | 53.4 | ug/L | 50 | ug/L | 106.8 | 90.0 - 110.0 | MS | 24-MAR-10 14:28 | 100323-2 |
| | Thallium | 51.7 | ug/L | 50 | ug/L | 103.3 | 90.0 - 110.0 | MS | 24-MAR-10 14:28 | 100323-2 |
| | Beryllium | 53.9 | ug/L | 50 | ug/L | 107.8 | 90.0 - 110.0 | MS | 24-MAR-10 23:02 | 100324-3 |
| | Beryllium | 52.6 | ug/L | 50 | ug/L | 105.2 | 90.0 - 110.0 | MS | 25-MAR-10 02:20 | 100324-5 |
| | Uranium | 53.2 | ug/L | 50 | ug/L | 106.4 | 90.0 - 110.0 | MS | 25-MAR-10 03:42 | 100324-6 |
| | Aluminum | 4850 | ug/L | 5000 | ug/L | 97.1 | 90.0 - 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Antimony | 514 | ug/L | 500 | ug/L | 102.7 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Barium | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Cadmium | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Calcium | 4890 | ug/L | 5000 | ug/L | 97.8 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Chromium | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Cobalt | 501 | ug/L | 500 | ug/L | 100.1 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Copper | 486 | ug/L | 500 | ug/L | 97.1 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Iron | 4860 | ug/L | 5000 | ug/L | 97.1 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Lead | 494 | ug/L | 500 | ug/L | 98.7 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Magnesium | 5030 | ug/L | 5000 | ug/L | 100.7 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Manganese | 484 | ug/L | 500 | ug/L | 96.7 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Potassium | 4680 | ug/L | 5000 | ug/L | 93.6 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Silver | 499 | ug/L | 500 | ug/L | 99.8 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Sodium | 9520 | ug/L | 10000 | ug/L | 95.2 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Vanadium | 497 | ug/L | 500 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Zinc | 488 | ug/L | 500 | ug/L | 97.7 | 90.0 – 110.0 | P | 25-MAR-10 10:14 | 032510A-1 |
| | Uranium | 53.8 | ug/L | 50 | ug/L | 107.7 | 90.0 – 110.0 | MS | 26-MAR-10 01:02 | 100325-7 |
| CCV04 | Mercury | 4.79 | ug/L | 5 | ug/L | 95.9 | 80.0 – 120.0 | AV | 15-MAR-10 10:08 | 031510S1-8 |
| | Arsenic | 51.2 | ug/L | 50 | ug/L | 102.5 | 90.0 – 110.0 | MS | 24-MAR-10 15:09 | 100323-2 |
| | Nickel | 53 | ug/L | 50 | ug/L | 106 | 90.0 – 110.0 | MS | 24-MAR-10 15:09 | 100323-2 |
| | Selenium | 52.4 | ug/L | 50 | ug/L | 104.8 | 90.0 – 110.0 | MS | 24-MAR-10 15:09 | 100323-2 |
| | Thallium | 52.8 | ug/L | 50 | ug/L | 105.6 | 90.0 – 110.0 | MS | 24-MAR-10 15:09 | 100323-2 |
| | Beryllium | 53.8 | ug/L | 50 | ug/L | 107.5 | 90.0 – 110.0 | MS | 24-MAR-10 23:24 | 100324-3 |
| | Uranium | 54.3 | ug/L | 50 | ug/L | 108.6 | 90.0 – 110.0 | MS | 25-MAR-10 04:13 | 100324-6 |
| | Aluminum | 5020 | ug/L | 5000 | ug/L | 100.4 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Antimony | 516 | ug/L | 500 | ug/L | 103.2 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Barium | 499 | ug/L | 500 | ug/L | 99.8 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Cadmium | 499 | ug/L | 500 | ug/L | 99.9 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Calcium | 5080 | ug/L | 5000 | ug/L | 101.6 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Chromium | 500 | ug/L | 500 | ug/L | 100 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Cobalt | 508 | ug/L | 500 | ug/L | 101.6 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Copper | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Iron | 5090 | ug/L | 5000 | ug/L | 101.8 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Lead | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Magnesium | 5210 | ug/L | 5000 | ug/L | 104.2 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Manganese | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Potassium | 4830 | ug/L | 5000 | ug/L | 96.7 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Silver | 507 | ug/L | 500 | ug/L | 101.4 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Sodium | 9990 | ug/L | 10000 | ug/L | 99.9 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Vanadium | 504 | ug/L | 500 | ug/L | 100.9 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Zinc | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 11:24 | 032510A-1 |
| | Uranium | 53.6 | ug/L | 50 | ug/L | 107.2 | 90.0 – 110.0 | MS | 26-MAR-10 01:36 | 100325-7 |
| CCV05 | Arsenic | 50.6 | ug/L | 50 | ug/L | 101.2 | 90.0 – 110.0 | MS | 24-MAR-10 15:45 | 100323-2 |
| | Nickel | 51.6 | ug/L | 50 | ug/L | 103.2 | 90.0 – 110.0 | MS | 24-MAR-10 15:45 | 100323-2 |
| | Selenium | 52.2 | ug/L | 50 | ug/L | 104.4 | 90.0 – 110.0 | MS | 24-MAR-10 15:45 | 100323-2 |
| | Thallium | 51.7 | ug/L | 50 | ug/L | 103.3 | 90.0 – 110.0 | MS | 24-MAR-10 15:45 | 100323-2 |
| | Uranium | 53.8 | ug/L | 50 | ug/L | 107.5 | 90.0 – 110.0 | MS | 25-MAR-10 04:57 | 100324-6 |
| | Aluminum | 5050 | ug/L | 5000 | ug/L | 100.9 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Antimony | 522 | ug/L | 500 | ug/L | 104.4 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Barium | 497 | ug/L | 500 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Cadmium | 498 | ug/L | 500 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Calcium | 5060 | ug/L | 5000 | ug/L | 101.1 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Chromium | 497 | ug/L | 500 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Cobalt | 508 | ug/L | 500 | ug/L | 101.6 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Copper | 492 | ug/L | 500 | ug/L | 98.4 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Iron | 5030 | ug/L | 5000 | ug/L | 100.6 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Lead | 495 | ug/L | 500 | ug/L | 99 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Magnesium | 5200 | ug/L | 5000 | ug/L | 104.1 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Manganese | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Potassium | 4920 | ug/L | 5000 | ug/L | 98.3 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Silver | 504 | ug/L | 500 | ug/L | 100.9 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Sodium | 10100 | ug/L | 10000 | ug/L | 100.6 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Vanadium | 501 | ug/L | 500 | ug/L | 100.3 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Zinc | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 12:43 | 032510A-1 |
| | Uranium | 53.8 | ug/L | 50 | ug/L | 107.6 | 90.0 – 110.0 | MS | 26-MAR-10 01:54 | 100325-7 |
| CCV06 | Uranium | 54.3 | ug/L | 50 | ug/L | 108.6 | 90.0 – 110.0 | MS | 25-MAR-10 05:22 | 100324-6 |
| | Aluminum | 4990 | ug/L | 5000 | ug/L | 99.8 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Antimony | 523 | ug/L | 500 | ug/L | 104.7 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Barium | 498 | ug/L | 500 | ug/L | 99.6 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Cadmium | 498 | ug/L | 500 | ug/L | 99.6 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Calcium | 5080 | ug/L | 5000 | ug/L | 101.5 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Chromium | 496 | ug/L | 500 | ug/L | 99.3 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Cobalt | 508 | ug/L | 500 | ug/L | 101.6 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Copper | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Iron | 5140 | ug/L | 5000 | ug/L | 102.7 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Lead | 497 | ug/L | 500 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Magnesium | 5280 | ug/L | 5000 | ug/L | 105.6 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Manganese | 499 | ug/L | 500 | ug/L | 99.8 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Potassium | 4890 | ug/L | 5000 | ug/L | 97.9 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Silver | 506 | ug/L | 500 | ug/L | 101.3 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Sodium | 10100 | ug/L | 10000 | ug/L | 101.1 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Vanadium | 502 | ug/L | 500 | ug/L | 100.5 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Zinc | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 13:50 | 032510A-1 |
| | Uranium | 54.7 | ug/L | 50 | ug/L | 109.4 | 90.0 – 110.0 | MS | 26-MAR-10 02:25 | 100325-7 |
| CCV07 | Uranium | 53.9 | ug/L | 50 | ug/L | 107.8 | 90.0 – 110.0 | MS | 25-MAR-10 05:53 | 100324-6 |
| | Aluminum | 5030 | ug/L | 5000 | ug/L | 100.6 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Antimony | 521 | ug/L | 500 | ug/L | 104.1 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Barium | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Cadmium | 494 | ug/L | 500 | ug/L | 98.7 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Calcium | 5060 | ug/L | 5000 | ug/L | 101.2 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Chromium | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Cobalt | 503 | ug/L | 500 | ug/L | 100.6 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Copper | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Iron | 5070 | ug/L | 5000 | ug/L | 101.5 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Lead | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Magnesium | 5150 | ug/L | 5000 | ug/L | 103.1 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Manganese | 486 | ug/L | 500 | ug/L | 97.2 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Potassium | 4910 | ug/L | 5000 | ug/L | 98.3 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Silver | 503 | ug/L | 500 | ug/L | 100.5 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Sodium | 9660 | ug/L | 10000 | ug/L | 96.6 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Vanadium | 498 | ug/L | 500 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| | Zinc | 489 | ug/L | 500 | ug/L | 97.9 | 90.0 – 110.0 | P | 25-MAR-10 15:00 | 032510A-1 |
| CCV08 | Uranium | 54.3 | ug/L | 50 | ug/L | 108.5 | 90.0 – 110.0 | MS | 25-MAR-10 06:21 | 100324-6 |
| | Aluminum | 4900 | ug/L | 5000 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Antimony | 519 | ug/L | 500 | ug/L | 103.8 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Barium | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Cadmium | 495 | ug/L | 500 | ug/L | 99 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Calcium | 5070 | ug/L | 5000 | ug/L | 101.4 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Chromium | 492 | ug/L | 500 | ug/L | 98.4 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Cobalt | 505 | ug/L | 500 | ug/L | 100.9 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Copper | 491 | ug/L | 500 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Iron | 5160 | ug/L | 5000 | ug/L | 103.2 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Lead | 488 | ug/L | 500 | ug/L | 97.7 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Magnesium | 5190 | ug/L | 5000 | ug/L | 103.9 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Manganese | 487 | ug/L | 500 | ug/L | 97.3 | 90.0 – 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Potassium | 4820 | ug/L | 5000 | ug/L | 96.4 | 90.0 - 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Silver | 503 | ug/L | 500 | ug/L | 100.7 | 90.0 - 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Sodium | 9870 | ug/L | 10000 | ug/L | 98.7 | 90.0 - 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Vanadium | 499 | ug/L | 500 | ug/L | 99.7 | 90.0 - 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| | Zinc | 490 | ug/L | 500 | ug/L | 97.9 | 90.0 - 110.0 | P | 25-MAR-10 16:11 | 032510A-1 |
| CCV09 | Uranium | 53.5 | ug/L | 50 | ug/L | 107.1 | 90.0 - 110.0 | MS | 25-MAR-10 06:42 | 100324-6 |
| | Aluminum | 4960 | ug/L | 5000 | ug/L | 99.3 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Antimony | 519 | ug/L | 500 | ug/L | 103.8 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Barium | 493 | ug/L | 500 | ug/L | 98.7 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Cadmium | 493 | ug/L | 500 | ug/L | 98.7 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Calcium | 5000 | ug/L | 5000 | ug/L | 100 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Chromium | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Cobalt | 504 | ug/L | 500 | ug/L | 100.9 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Copper | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Iron | 5060 | ug/L | 5000 | ug/L | 101.3 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Lead | 491 | ug/L | 500 | ug/L | 98.1 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Magnesium | 5090 | ug/L | 5000 | ug/L | 101.9 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Manganese | 487 | ug/L | 500 | ug/L | 97.3 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Potassium | 4860 | ug/L | 5000 | ug/L | 97.3 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Silver | 505 | ug/L | 500 | ug/L | 100.9 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Sodium | 10000 | ug/L | 10000 | ug/L | 100.1 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Vanadium | 500 | ug/L | 500 | ug/L | 100 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| | Zinc | 490 | ug/L | 500 | ug/L | 97.9 | 90.0 - 110.0 | P | 25-MAR-10 16:32 | 032510A-1 |
| CCV10 | Aluminum | 5040 | ug/L | 5000 | ug/L | 100.9 | 90.0 - 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Antimony | 522 | ug/L | 500 | ug/L | 104.4 | 90.0 - 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Barium | 494 | ug/L | 500 | ug/L | 98.7 | 90.0 - 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Cadmium | 494 | ug/L | 500 | ug/L | 98.9 | 90.0 - 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Calcium | 5080 | ug/L | 5000 | ug/L | 101.6 | 90.0 - 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Chromium | 492 | ug/L | 500 | ug/L | 98.4 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Cobalt | 505 | ug/L | 500 | ug/L | 101 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Copper | 492 | ug/L | 500 | ug/L | 98.3 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Iron | 5140 | ug/L | 5000 | ug/L | 102.9 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Lead | 490 | ug/L | 500 | ug/L | 97.9 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Magnesium | 5130 | ug/L | 5000 | ug/L | 102.6 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Manganese | 487 | ug/L | 500 | ug/L | 97.5 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Potassium | 4970 | ug/L | 5000 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Silver | 504 | ug/L | 500 | ug/L | 100.8 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Sodium | 9850 | ug/L | 10000 | ug/L | 98.5 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Vanadium | 498 | ug/L | 500 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| | Zinc | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 17:36 | 032510A-1 |
| CCV11 | Aluminum | 4880 | ug/L | 5000 | ug/L | 97.6 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Antimony | 524 | ug/L | 500 | ug/L | 104.8 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Barium | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Cadmium | 493 | ug/L | 500 | ug/L | 98.7 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Calcium | 5020 | ug/L | 5000 | ug/L | 100.3 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Chromium | 492 | ug/L | 500 | ug/L | 98.4 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Cobalt | 504 | ug/L | 500 | ug/L | 100.8 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Copper | 492 | ug/L | 500 | ug/L | 98.5 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Iron | 5120 | ug/L | 5000 | ug/L | 102.3 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Lead | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Magnesium | 5120 | ug/L | 5000 | ug/L | 102.3 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Manganese | 486 | ug/L | 500 | ug/L | 97.3 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Potassium | 4810 | ug/L | 5000 | ug/L | 96.1 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Silver | 505 | ug/L | 500 | ug/L | 101 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Sodium | 9920 | ug/L | 10000 | ug/L | 99.2 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Vanadium | 499 | ug/L | 500 | ug/L | 99.9 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |
| | Zinc | 489 | ug/L | 500 | ug/L | 97.9 | 90.0 – 110.0 | P | 25-MAR-10 18:45 | 032510A-1 |

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| CCV12 | | | | | | | | | | |
| | Aluminum | 4910 | ug/L | 5000 | ug/L | 98.2 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Antimony | 512 | ug/L | 500 | ug/L | 102.4 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Barium | 484 | ug/L | 500 | ug/L | 96.8 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Cadmium | 487 | ug/L | 500 | ug/L | 97.3 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Calcium | 5040 | ug/L | 5000 | ug/L | 100.7 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Chromium | 484 | ug/L | 500 | ug/L | 96.7 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Cobalt | 497 | ug/L | 500 | ug/L | 99.3 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Copper | 481 | ug/L | 500 | ug/L | 96.3 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Iron | 5050 | ug/L | 5000 | ug/L | 101 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Lead | 484 | ug/L | 500 | ug/L | 96.8 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Magnesium | 5170 | ug/L | 5000 | ug/L | 103.4 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Manganese | 478 | ug/L | 500 | ug/L | 95.5 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Potassium | 4870 | ug/L | 5000 | ug/L | 97.5 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Silver | 494 | ug/L | 500 | ug/L | 98.9 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Sodium | 9740 | ug/L | 10000 | ug/L | 97.4 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Vanadium | 490 | ug/L | 500 | ug/L | 98.1 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| | Zinc | 481 | ug/L | 500 | ug/L | 96.1 | 90.0 – 110.0 | P | 25-MAR-10 19:49 | 032510A-1 |
| CCV13 | | | | | | | | | | |
| | Aluminum | 4860 | ug/L | 5000 | ug/L | 97.3 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Antimony | 524 | ug/L | 500 | ug/L | 104.9 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Barium | 496 | ug/L | 500 | ug/L | 99.2 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Cadmium | 497 | ug/L | 500 | ug/L | 99.5 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Calcium | 4980 | ug/L | 5000 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Chromium | 496 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Cobalt | 507 | ug/L | 500 | ug/L | 101.4 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Copper | 497 | ug/L | 500 | ug/L | 99.4 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Iron | 5120 | ug/L | 5000 | ug/L | 102.4 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Lead | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Magnesium | 5060 | ug/L | 5000 | ug/L | 101.1 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Manganese | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|----------|---------------------------|-------------------|
| | Potassium | 4820 | ug/L | 5000 | ug/L | 96.5 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Silver | 509 | ug/L | 500 | ug/L | 101.8 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Sodium | 10200 | ug/L | 10000 | ug/L | 102 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Vanadium | 503 | ug/L | 500 | ug/L | 100.7 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| | Zinc | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 20:45 | 032510A-1 |
| CCV14 | Aluminum | 4930 | ug/L | 5000 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Antimony | 522 | ug/L | 500 | ug/L | 104.3 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Barium | 489 | ug/L | 500 | ug/L | 97.7 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Cadmium | 490 | ug/L | 500 | ug/L | 98 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Calcium | 5020 | ug/L | 5000 | ug/L | 100.4 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Chromium | 487 | ug/L | 500 | ug/L | 97.5 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Cobalt | 501 | ug/L | 500 | ug/L | 100.2 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Copper | 489 | ug/L | 500 | ug/L | 97.7 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Iron | 5300 | ug/L | 5000 | ug/L | 106 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Lead | 487 | ug/L | 500 | ug/L | 97.5 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Magnesium | 5200 | ug/L | 5000 | ug/L | 104 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Manganese | 483 | ug/L | 500 | ug/L | 96.6 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Potassium | 4970 | ug/L | 5000 | ug/L | 99.3 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Silver | 502 | ug/L | 500 | ug/L | 100.3 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Sodium | 10700 | ug/L | 10000 | ug/L | 106.9 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Vanadium | 495 | ug/L | 500 | ug/L | 99 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| | Zinc | 484 | ug/L | 500 | ug/L | 96.9 | 90.0 – 110.0 | P | 25-MAR-10 22:02 | 032510A-1 |
| CCV15 | Aluminum | 4860 | ug/L | 5000 | ug/L | 97.2 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Antimony | 527 | ug/L | 500 | ug/L | 105.5 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Barium | 496 | ug/L | 500 | ug/L | 99.3 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Cadmium | 500 | ug/L | 500 | ug/L | 100 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Calcium | 5000 | ug/L | 5000 | ug/L | 100.1 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Chromium | 496 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS6,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 | 510 | ug/L | 500 | ug/L | 102 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Copper | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Iron | 5050 | ug/L | 5000 | ug/L | 100.9 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Lead | 497 | ug/L | 500 | ug/L | 99.5 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Magnesium | 5020 | ug/L | 5000 | ug/L | 100.5 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Manganese | 500 | ug/L | 500 | ug/L | 100.1 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Potassium | 4870 | ug/L | 5000 | ug/L | 97.4 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Silver | 508 | ug/L | 500 | ug/L | 101.7 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Sodium | 9970 | ug/L | 10000 | ug/L | 99.7 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Vanadium | 503 | ug/L | 500 | ug/L | 100.6 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| | Zinc | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 25-MAR-10 23:20 | 032510A-1 |
| CCV16 | | | | | | | | | | |
| | Aluminum | 4810 | ug/L | 5000 | ug/L | 96.2 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Antimony | 526 | ug/L | 500 | ug/L | 105.1 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Barium | 495 | ug/L | 500 | ug/L | 99.1 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Cadmium | 500 | ug/L | 500 | ug/L | 100 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Calcium | 4970 | ug/L | 5000 | ug/L | 99.4 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Chromium | 495 | ug/L | 500 | ug/L | 98.9 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Cobalt | 509 | ug/L | 500 | ug/L | 101.8 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Copper | 494 | ug/L | 500 | ug/L | 98.8 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Iron | 5090 | ug/L | 5000 | ug/L | 101.9 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Lead | 493 | ug/L | 500 | ug/L | 98.6 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Magnesium | 5020 | ug/L | 5000 | ug/L | 100.5 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Manganese | 496 | ug/L | 500 | ug/L | 99.2 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Potassium | 4830 | ug/L | 5000 | ug/L | 96.6 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Silver | 507 | ug/L | 500 | ug/L | 101.5 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Sodium | 10300 | ug/L | 10000 | ug/L | 103.4 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Vanadium | 503 | ug/L | 500 | ug/L | 100.5 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |
| | Zinc | 492 | ug/L | 500 | ug/L | 98.4 | 90.0 – 110.0 | P | 26-MAR-10 00:31 | 032510A-1 |

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS6,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 | .148 | ug/L | .2 | ug/L | 73.9 | 70.0 – 130.0 | AV | 15-MAR-10 08:54 | 031510S1-8 |
| | Nickel | 2.35 | ug/L | 2 | ug/L | 117.5 | 70.0 – 130.0 | MS | 24-MAR-10 13:15 | 100323-2 |
| | Thallium | 1.17 | ug/L | 1 | ug/L | 116.6 | 70.0 – 130.0 | MS | 24-MAR-10 13:15 | 100323-2 |
| | Arsenic | 5.95 | ug/L | 5 | ug/L | 119 | 70.0 – 130.0 | MS | 24-MAR-10 13:15 | 100323-2 |
| | Selenium | 5.53 | ug/L | 5 | ug/L | 110.7 | 70.0 – 130.0 | MS | 24-MAR-10 13:15 | 100323-2 |
| | Beryllium | .538 | ug/L | .5 | ug/L | 107.6 | 70.0 – 130.0 | MS | 24-MAR-10 22:09 | 100324-3 |
| | Beryllium | .577 | ug/L | .5 | ug/L | 115.4 | 70.0 – 130.0 | MS | 25-MAR-10 01:36 | 100324-5 |
| | Uranium | .258 | ug/L | .2 | ug/L | 129 | 70.0 – 130.0 | MS | 25-MAR-10 02:50 | 100324-6 |
| | Uranium | .218 | ug/L | .2 | ug/L | 109 | 70.0 – 130.0 | MS | 25-MAR-10 23:55 | 100325-7 |
| PQL01 | | | | | | | | | | |
| | Aluminum | 223 | ug/L | 200 | ug/L | 111.6 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Iron | 82.5 | ug/L | 100 | ug/L | 82.5 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Lead | 10.6 | ug/L | 10 | ug/L | 106.2 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Magnesium | 357 | ug/L | 300 | ug/L | 118.9 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Manganese | 10.9 | ug/L | 10 | ug/L | 108.6 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Potassium | 147 | ug/L | 150 | ug/L | 98.3 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Silver | 4.86 | ug/L | 5 | ug/L | 97.2 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Sodium | 279 | ug/L | 300 | ug/L | 93.1 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Antimony | 10.4 | ug/L | 10 | ug/L | 104.1 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Barium | 5.26 | ug/L | 5 | ug/L | 105.3 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Cadmium | 5.18 | ug/L | 5 | ug/L | 103.6 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Chromium | 5.32 | ug/L | 5 | ug/L | 106.4 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Cobalt | 5.21 | ug/L | 5 | ug/L | 104.3 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Copper | 10.8 | ug/L | 10 | ug/L | 107.5 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Vanadium | 5.24 | ug/L | 5 | ug/L | 104.9 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Zinc | 11.9 | ug/L | 10 | ug/L | 118.5 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |
| | Calcium | 221 | ug/L | 200 | ug/L | 110.6 | 70.0 – 130.0 | P | 25-MAR-10 08:23 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| ICB01 | | | | | | | | | | |
| | Mercury | -0.116 | +/-2 | J | 0.068 | 0.2 | SOL | AV | 15-MAR-10 08:52 | 031510S1-8 |
| | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 13:11 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 13:11 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 13:11 | 100323-2 |
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 13:11 | 100323-2 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 24-MAR-10 22:07 | 100324-3 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 25-MAR-10 01:33 | 100324-5 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 02:47 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 08:16 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 23:52 | 100325-7 |
| CCB01 | | | | | | | | | | |
| | Mercury | -0.083 | +/-2 | J | 0.068 | 0.2 | SOL | AV | 15-MAR-10 08:58 | 031510S1-8 |
| | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 13:31 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 13:31 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 13:31 | 100323-2 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 13:31 | 100323-2 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 24-MAR-10 22:18 | 100324-3 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 25-MAR-10 01:45 | 100324-5 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 03:02 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Antimony | 3.82 | +/-10 | J | 3.3 | 10.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 09:04 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 00:07 | 100325-7 |
| CCB02 | Mercury | -0.072 | +/-2 | J | 0.068 | 0.2 | SOL | AV | 15-MAR-10 09:22 | 031510S1-8 |
| | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 13:47 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 13:47 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 13:47 | 100323-2 |
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 13:47 | 100323-2 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 24-MAR-10 22:38 | 100324-3 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 25-MAR-10 02:07 | 100324-5 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 03:18 | 100324-6 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Antimony | 4.02 | +/-10 | J | 3.3 | 10.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 09:31 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 00:35 | 100325-7 |
| CCB03 | Mercury | -0.099 | +/-2 | J | 0.068 | 0.2 | SOL | AV | 15-MAR-10 09:46 | 031510S1-8 |
| | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 14:32 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 14:32 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 14:32 | 100323-2 |
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 14:32 | 100323-2 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 24-MAR-10 23:04 | 100324-3 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 25-MAR-10 02:22 | 100324-5 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 03:46 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 10:21 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 01:05 | 100325-7 |
| CCB04 | Mercury | -0.128 | +/-2 | J | 0.068 | 0.2 | SOL | AV | 15-MAR-10 10:10 | 031510S1-8 |
| | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 15:13 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 15:13 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 15:13 | 100323-2 |
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 15:13 | 100323-2 |
| | Beryllium | 0.1 | +/-5 | U | 0.1 | 0.5 | SOL | MS | 24-MAR-10 23:27 | 100324-3 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 04:16 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Magnesium | 95.12 | +/-300 | J | 85.0 | 300 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 11:31 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 01:39 | 100325-7 |
| CCB05 | Arsenic | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | MS | 24-MAR-10 15:49 | 100323-2 |
| | Nickel | 0.5 | +/-2 | U | 0.5 | 2.0 | SOL | MS | 24-MAR-10 15:49 | 100323-2 |
| | Selenium | 2.5 | +/-5 | U | 2.5 | 5.0 | SOL | MS | 24-MAR-10 15:49 | 100323-2 |
| | Thallium | 0.3 | +/-1 | U | 0.3 | 1.0 | SOL | MS | 24-MAR-10 15:49 | 100323-2 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 05:00 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| CCB06 | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 12:50 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 01:58 | 100325-7 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 05:25 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 13:57 | 032510A-1 |
| | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 26-MAR-10 02:28 | 100325-7 |
| CCB07 | Uranium | 0.066 | +/-2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 05:56 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 15:07 | 032510A-1 |
| CCB08 | Uranium | 0.066 | +/-0.2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 06:24 | 100324-6 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Magnesium | 92.31 | +/-300 | J | 85.0 | 300 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 16:18 | 032510A-1 |
| CCB09 | Uranium | 0.066 | +/-0.2 | U | 0.066 | 0.2 | SOL | MS | 25-MAR-10 06:46 | 100324-6 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 16:39 | 032510A-1 |
| CCB10 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ng/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 17:43 | 032510A-1 |
| CCB11 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Magnesium | 99.66 | +/-300 | J | 85.0 | 300 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 18:52 | 032510A-1 |
| CCB12 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 19:56 | 032510A-1 |
| CCB13 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Iron | 92.44 | +/-250 | J | 80.0 | 250 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 20:52 | 032510A-1 |
| CCB14 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Magnesium | 114.29 | +/-300 | J | 85.0 | 300 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 22:09 | 032510A-1 |
| CCB15 | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Potassium | -77.56 | +/-250 | J | 64.0 | 250 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

| <u>Sample ID</u> | <u>Analyte</u> | <u>Result</u> <u>ug/L</u> | <u>Acceptance</u> | <u>Conc</u> <u>Qual</u> | <u>MDL</u> | <u>RDL</u> | <u>Matrix</u> | <u>M</u> | <u>Analysis</u> <u>Date/Time</u> | <u>Run</u> |
|------------------|----------------|------------------------------|-------------------|----------------------------|------------|------------|---------------|----------|-------------------------------------|------------|
| CCB16 | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 25-MAR-10 23:27 | 032510A-1 |
| | Aluminum | 68.0 | +/-200 | U | 68.0 | 200 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Antimony | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Barium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Cadmium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Calcium | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Chromium | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Cobalt | 1.5 | +/-5 | U | 1.5 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Copper | 3.0 | +/-10 | U | 3.0 | 10.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Iron | 80.0 | +/-250 | U | 80.0 | 250 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Lead | 2.5 | +/-10 | U | 2.5 | 10.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Magnesium | 85.0 | +/-300 | U | 85.0 | 300 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Manganese | 2.0 | +/-10 | U | 2.0 | 10.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Potassium | 64.0 | +/-250 | U | 64.0 | 250 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Silver | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Sodium | 70.0 | +/-250 | U | 70.0 | 250 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Vanadium | 1.0 | +/-5 | U | 1.0 | 5.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |
| | Zinc | 3.3 | +/-10 | U | 3.3 | 10.0 | SOL | P | 26-MAR-10 00:38 | 032510A-1 |

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-2010
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> |
|------------------|----------------|---------------|--------------|--------------------------|------------------|----------|------------|------------|
| 1202054493 | Aluminum | 6070 | ug/Kg | +/-17900 | U | P | 6070 | 17900 |
| | Antimony | 295 | ug/Kg | +/-893 | U | P | 295 | 893 |
| | Barium | 134 | ug/Kg | +/-446 | J | P | 89.3 | 446 |
| | Cadmium | 89.3 | ug/Kg | +/-446 | U | P | 89.3 | 446 |
| | Calcium | 7140 | ug/Kg | +/-22300 | U | P | 7140 | 22300 |
| | Chromium | 150 | ug/Kg | +/-446 | J | P | 134 | 446 |
| | Cobalt | 134 | ug/Kg | +/-446 | U | P | 134 | 446 |
| | Copper | 268 | ug/Kg | +/-893 | U | P | 268 | 893 |
| | Iron | 56500 | ug/Kg | +/-22300 | | P | 7140 | 22300 |
| | Lead | 223 | ug/Kg | +/-893 | U | P | 223 | 893 |
| | Magnesium | 7590 | ug/Kg | +/-26800 | U | P | 7590 | 26800 |
| | Manganese | 231 | ug/Kg | +/-893 | J | P | 179 | 893 |
| | Potassium | 5710 | ug/Kg | +/-22300 | U | P | 5710 | 22300 |
| | Silver | 89.3 | ug/Kg | +/-446 | U | P | 89.3 | 446 |
| | Sodium | 6270 | ug/Kg | +/-22300 | J | P | 6250 | 22300 |
| | Vanadium | 95.8 | ug/Kg | +/-446 | J | P | 89.3 | 446 |
| | Zinc | 295 | ug/Kg | +/-893 | U | P | 295 | 893 |
| 1202054499 | Arsenic | 0.198 | mg/kg | +/-0.992 | U | MS | 0.198 | 0.992 |
| | Beryllium | 0.0198 | mg/kg | +/-0.0992 | U | MS | 0.0198 | 0.0992 |
| | Nickel | 0.0992 | mg/kg | +/-0.397 | U | MS | 0.0992 | 0.397 |
| | Selenium | 0.496 | mg/kg | +/-0.992 | U | MS | 0.496 | 0.992 |
| | Thallium | 0.0595 | mg/kg | +/-0.198 | U | MS | 0.0595 | 0.198 |
| | Uranium | 0.0131 | mg/kg | +/-0.0397 | U | MS | 0.0131 | 0.0397 |
| 1202056115 | Mercury | -6.85 | ug/kg | +/-11.1 | J | AV | 3.78 | 11.1 |

METALS
-4-
Interference Check Sample

SDG No: 10-2010

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> |
|------------------|----------------|---------------|--------------|-------------------|--------------|-------------------|-------------------------------|---------------------------|-------------------|
| ICSA01 | | | | | | | | | |
| | Aluminum | 518000 | ug/L | 500000 | ug/L | 104 | 80.0 – 120.0 | 25-MAR-10 08:30 | 032510A-1 |
| | Antimony | -5.95 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Barium | -0.354 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Cadmium | 0.784 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Calcium | 478000 | ug/L | 500000 | ug/L | 95.6 | 80.0 – 120.0 | 25-MAR-10 08:30 | 032510A-1 |
| | Chromium | -1.32 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Cobalt | -1.2 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Copper | 2.29 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Iron | 184000 | ug/L | 200000 | ug/L | 92.1 | 80.0 – 120.0 | 25-MAR-10 08:30 | 032510A-1 |
| | Lead | -14.9 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Magnesium | 485000 | ug/L | 500000 | ug/L | 97 | 80.0 – 120.0 | 25-MAR-10 08:30 | 032510A-1 |
| | Manganese | -3.62 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Potassium | -202.0 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Silver | -3.38 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Sodium | 143 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Vanadium | -3.86 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| | Zinc | 2.16 | ug/L | | | | | 25-MAR-10 08:30 | 032510A-1 |
| ICSAB01 | | | | | | | | | |
| | Aluminum | 525000 | ug/L | 500000 | ug/L | 105 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Antimony | 575 | ug/L | 500 | ug/L | 115 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Barium | 498 | ug/L | 500 | ug/L | 99.6 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Cadmium | 475 | ug/L | 500 | ug/L | 95 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Calcium | 480000 | ug/L | 500000 | ug/L | 96.1 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Chromium | 487 | ug/L | 500 | ug/L | 97.5 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Cobalt | 463 | ug/L | 500 | ug/L | 92.6 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Copper | 558 | ug/L | 500 | ug/L | 112 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Iron | 183000 | ug/L | 200000 | ug/L | 91.6 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Lead | 460 | ug/L | 500 | ug/L | 92.1 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Magnesium | 487000 | ug/L | 500000 | ug/L | 97.4 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |

METALS
-4-
Interference Check Sample

SDG No: 10-2010

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 | 484 | ug/L | 500 | ug/L | 96.8 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Potassium | 5110 | ug/L | 5000 | ug/L | 102 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Silver | 274 | ug/L | 250 | ug/L | 109 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Sodium | 5260 | ug/L | 5000 | ug/L | 105 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Vanadium | 510 | ug/L | 500 | ug/L | 102 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |
| | Zinc | 502 | ug/L | 500 | ug/L | 100 | 80.0 – 120.0 | 25-MAR-10 08:36 | 032510A-1 |

METALS
-4-
Interference Check Sample

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

| <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 | 0.308 | ug/L | | | | | 24-MAR-10 13:19 | 100323-2 |
| | Nickel | 2.5 | ug/L | | | | | 24-MAR-10 13:19 | 100323-2 |
| | Selenium | -1.43 | ug/L | | | | | 24-MAR-10 13:19 | 100323-2 |
| | Thallium | 0.027 | ug/L | | | | | 24-MAR-10 13:19 | 100323-2 |
| ICSAB01 | | | | | | | | | |
| | Arsenic | 21.8 | ug/L | 20 | ug/L | 109 | 80.0 - 120.0 | 24-MAR-10 13:23 | 100323-2 |
| | Nickel | 22.6 | ug/L | 23.31 | ug/L | 96.8 | 80.0 - 120.0 | 24-MAR-10 13:23 | 100323-2 |
| | Selenium | 21.2 | ug/L | 20 | ug/L | 106 | 80.0 - 120.0 | 24-MAR-10 13:23 | 100323-2 |
| | Thallium | 19.7 | ug/L | 20 | ug/L | 98.7 | 80.0 - 120.0 | 24-MAR-10 13:23 | 100323-2 |

METALS
-4-
Interference Check Sample

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

| <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 | 0.077 | ug/L | | | | | 24-MAR-10 22:12 | 100324-3 |
| ICSAB01 | Beryllium | 20.4 | ug/L | 20 | ug/L | 102 | 80.0 - 120.0 | 24-MAR-10 22:14 | 100324-3 |

METALS
-4-
Interference Check Sample

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

| <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 | 0.102 | ug/L | | | | | 25-MAR-10 01:38 | 100324-5 |
| ICSAB01 | Beryllium | 20.3 | ug/L | 20 | ug/L | 101 | 80.0 - 120.0 | 25-MAR-10 01:40 | 100324-5 |

METALS

-4-

Interference Check Sample

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

| <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 | Uranium | 0.002 | ug/L | | | | | 25-MAR-10 02:53 | 100324-6 |
| ICSAB01 | Uranium | 21.6 | ug/L | 20 | ug/L | 108 | 80.0 - 120.0 | 25-MAR-10 02:56 | 100324-6 |

METALS

-4-

Interference Check Sample

SDG No: 10-2010

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

| <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 | Uranium | 0.005 | ug/L | | | | | 25-MAR-10 23:58 | 100325-7 |
| ICSAB01 | Uranium | 21.8 | ug/L | 20 | ug/L | 109 | 80.0 - 120.0 | 26-MAR-10 00:01 | 100325-7 |

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2010 Client ID RE15-10-7896S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202054496

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|------------------|---------------|---|---------------|---|-------------|------------|------|---|
| Manganese | ug/Kg | | 308000 | | 238000 | | 48100 | 145 | N/A | P |
| Potassium | ug/Kg | 75-125 | 1220000 | | 519000 | | 481000 | 145 | N | P |
| Silver | ug/Kg | 75-125 | 46200 | | 212 | J | 48100 | 95.7 | | P |
| Sodium | ug/Kg | 75-125 | 571000 | | 122000 | | 481000 | 93.3 | | P |
| Vanadium | ug/Kg | 75-125 | 54300 | | 7430 | | 48100 | 97.5 | | P |
| Zinc | ug/Kg | 75-125 | 93400 | | 47100 | | 48100 | 96.4 | | P |
| Aluminum | ug/Kg | | 8340000 | | 4140000 | | 481000 | 875 | N/A | P |
| Antimony | ug/Kg | 75-125 | 40200 | | 336 | U | 48100 | 83.6 | | P |
| Barium | ug/Kg | 75-125 | 74400 | | 26600 | | 48100 | 99.4 | | P |
| Cadmium | ug/Kg | 75-125 | 43800 | | 102 | U | 48100 | 91.1 | | P |
| Calcium | ug/Kg | 75-125 | 1380000 | | 963000 | | 481000 | 86.3 | | P |
| Chromium | ug/Kg | 75-125 | 57100 | | 10400 | | 48100 | 97.3 | | P |
| Cobalt | ug/Kg | 75-125 | 45500 | | 768 | | 48100 | 93.1 | | P |
| Copper | ug/Kg | 75-125 | 55300 | | 5680 | | 48100 | 103 | | P |
| Iron | ug/Kg | | 10300000 | | 9460000 | | 481000 | 181 | N/A | P |
| Lead | ug/Kg | 75-125 | 49900 | | 5410 | | 48100 | 92.5 | | P |
| Magnesium | ug/Kg | 75-125 | 1530000 | | 764000 | | 481000 | 160 | N | P |

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2010 Client ID RE15-10-7896SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202054497

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|------------------|---------------|---|---------------|---|-------------|------------|------|---|
| Aluminum | ug/Kg | | 7900000 | | 4140000 | | 496000 | 759 | N/A | P |
| Antimony | ug/Kg | 75-125 | 41700 | | 336 | U | 49600 | 84.2 | | P |
| Barium | ug/Kg | 75-125 | 73900 | | 26600 | | 49600 | 95.4 | | P |
| Cadmium | ug/Kg | 75-125 | 44400 | | 102 | U | 49600 | 89.5 | | P |
| Calcium | ug/Kg | 75-125 | 1360000 | | 963000 | | 496000 | 80.4 | | P |
| Chromium | ug/Kg | 75-125 | 57100 | | 10400 | | 49600 | 94.3 | | P |
| Cobalt | ug/Kg | 75-125 | 45900 | | 768 | | 49600 | 91.1 | | P |
| Copper | ug/Kg | 75-125 | 55800 | | 5680 | | 49600 | 101 | | P |
| Iron | ug/Kg | | 9660000 | | 9460000 | | 496000 | 40.4 | N/A | P |
| Lead | ug/Kg | 75-125 | 50000 | | 5410 | | 49600 | 89.9 | | P |
| Magnesium | ug/Kg | 75-125 | 1520000 | | 764000 | | 496000 | 153 | N | P |
| Manganese | ug/Kg | | 232000 | | 238000 | | 49600 | -13.9 | N/A | P |
| Potassium | ug/Kg | 75-125 | 1200000 | | 519000 | | 496000 | 136 | N | P |
| Silver | ug/Kg | 75-125 | 46900 | | 212 | J | 49600 | 94.3 | | P |
| Sodium | ug/Kg | 75-125 | 587000 | | 122000 | | 496000 | 93.9 | | P |
| Vanadium | ug/Kg | 75-125 | 54900 | | 7430 | | 49600 | 95.8 | | P |
| Zinc | ug/Kg | 75-125 | 90900 | | 47100 | | 49600 | 88.3 | | P |

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2010 Client ID: RE15-10-7896S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202054502

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|---------------------|------------------|---|------------------|---|----------------|---------------|------|----|
| Beryllium | mg/kg | 75-125 | 6.52 | | 1.33 | | 5.03 | 103 | | MS |
| Nickel | mg/kg | 75-125 | 9.44 | | 4.13 | | 5.03 | 106 | | MS |
| Selenium | mg/kg | 75-125 | 2.16 | | 0.524 | U | 2.01 | 84.3 | | MS |
| Thallium | mg/kg | 75-125 | 8.39 | | 0.0629 | U | 10.1 | 82.8 | | MS |
| Uranium | mg/kg | 75-125 | 5.72 | | 0.813 | | 5.03 | 97.5 | | MS |
| Arsenic | mg/kg | 75-125 | 8.53 | | 1.47 | | 8.05 | 87.7 | | MS |

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2010 Client ID RE15-10-7896SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202054503

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|-----------|-------|------------------|---------------|---|---------------|---|-------------|------------|------|----|
| Arsenic | mg/kg | 75-125 | 8.46 | | 1.47 | | 7.82 | 89.5 | | MS |
| Beryllium | mg/kg | 75-125 | 6.38 | | 1.33 | | 4.89 | 103 | | MS |
| Nickel | mg/kg | 75-125 | 8.94 | | 4.13 | | 4.89 | 98.4 | | MS |
| Selenium | mg/kg | 75-125 | 2.06 | | 0.524 | U | 1.95 | 81.4 | | MS |
| Thallium | mg/kg | 75-125 | 8.1 | | 0.0629 | U | 9.77 | 82.3 | | MS |
| Uranium | mg/kg | 75-125 | 5.59 | | 0.813 | | 4.89 | 97.7 | | MS |

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2010 Client ID RE15-10-7896S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202056118

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---------|-------|---------------------|------------------|---|------------------|---|----------------|---------------|------|----|
| Mercury | ug/kg | 75-125 | 130 | | 8.49 | J | 118 | 103 | | AV |

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2010 Client ID RE15-10-7896SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.1

Sample ID: 247899001 Spike ID: 1202056120

| <u>Analyte</u> | <u>Units</u> | <u>Acceptance Limit</u> | <u>Spiked Result</u> | <u>C</u> | <u>Sample Result</u> | <u>C</u> | <u>Spike Added</u> | <u>% Recovery</u> | <u>Qual</u> | <u>M</u> |
|----------------|--------------|-----------------------------|--------------------------|----------|--------------------------|----------|------------------------|-----------------------|-------------|----------|
| Mercury | ug/kg | 75-125 | 123 | | 8.49 | J | 109 | 105 | | AV |

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896D

Sample ID: 247899001

Duplicate ID: 1202054494

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|---|
| Aluminum | ug/Kg | +/-20% | 4140000 | | 5710000 | | 32 | * | P |
| Antimony | ug/Kg | | 336 U | | 329 U | | | | P |
| Barium | ug/Kg | +/-20% | 26600 | | 40200 | | 40.6 | * | P |
| Cadmium | ug/Kg | | 102 U | | 99.7 U | | | | P |
| Calcium | ug/Kg | +/-20% | 963000 | | 1370000 | | 35.1 | * | P |
| Chromium | ug/Kg | +/-20% | 10400 | | 13800 | | 28.6 | * | P |
| Cobalt | ug/Kg | +/-499 | 768 | | 996 | | 25.8 | | P |
| Copper | ug/Kg | +/-20% | 5680 | | 7570 | | 28.5 | * | P |
| Iron | ug/Kg | +/-20% | 9460000 | | 11900000 | | 22.7 | * | P |
| Lead | ug/Kg | +/-20% | 5410 | | 6580 | | 19.4 | | P |
| Magnesium | ug/Kg | +/-20% | 764000 | | 1080000 | | 33.9 | * | P |
| Manganese | ug/Kg | +/-20% | 238000 | | 328000 | | 31.7 | * | P |
| Potassium | ug/Kg | +/-20% | 519000 | | 712000 | | 31.3 | * | P |
| Silver | ug/Kg | +/-499 | 212 J | | 290 J | | 31 | | P |
| Sodium | ug/Kg | +/-24900 | 122000 | | 130000 | | 6.67 | | P |
| Vanadium | ug/Kg | +/-20% | 7430 | | 9330 | | 22.7 | * | P |
| Zinc | ug/Kg | +/-20% | 47100 | | 58800 | | 22.2 | * | P |

Metals
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Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896SD

Sample ID: 1202054496

Duplicate ID: 1202054497

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|---|
| Aluminum | ug/Kg | +/-20 | 8340000 | | 7900000 | | 5.45 | | P |
| Antimony | ug/Kg | +/-20 | 40200 | | 41700 | | 3.76 | | P |
| Barium | ug/Kg | +/-20 | 74400 | | 73900 | | .627 | | P |
| Cadmium | ug/Kg | +/-20 | 43800 | | 44400 | | 1.31 | | P |
| Calcium | ug/Kg | +/-20 | 1380000 | | 1360000 | | 1.2 | | P |
| Chromium | ug/Kg | +/-20 | 57100 | | 57100 | | .022 | | P |
| Cobalt | ug/Kg | +/-20 | 45500 | | 45900 | | .893 | | P |
| Copper | ug/Kg | +/-20 | 55300 | | 55800 | | .968 | | P |
| Iron | ug/Kg | +/-20 | 10300000 | | 9660000 | | 6.7 | | P |
| Lead | ug/Kg | +/-20 | 49900 | | 50000 | | .315 | | P |
| Magnesium | ug/Kg | +/-20 | 1530000 | | 1520000 | | .847 | | P |
| Manganese | ug/Kg | +/-20 | 308000 | | 232000 | | 28.4 | * | P |
| Potassium | ug/Kg | +/-20 | 1220000 | | 1200000 | | 1.77 | | P |
| Silver | ug/Kg | +/-20 | 46200 | | 46900 | | 1.61 | | P |
| Sodium | ug/Kg | +/-20 | 571000 | | 587000 | | 2.9 | | P |
| Vanadium | ug/Kg | +/-20 | 54300 | | 54900 | | 1.2 | | P |
| Zinc | ug/Kg | +/-20 | 93400 | | 90900 | | 2.74 | | P |

Metals
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Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896D

Sample ID: 247899001

Duplicate ID: 1202054500

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|----|
| Arsenic | mg/kg | +/-1.04 | 1.47 | | 1.16 | | 23.2 | | MS |
| Beryllium | mg/kg | +/-20% | 1.33 | | 1.17 | | 13.2 | | MS |
| Nickel | mg/kg | +/-20% | 4.13 | | 4.32 | | 4.34 | | MS |
| Selenium | mg/kg | | 0.524 U | | 0.52 U | | | | MS |
| Thallium | mg/kg | | 0.0629 U | | 0.0624 U | | | | MS |
| Uranium | mg/kg | +/-20% | 0.813 | | 1.05 | | 25.3 | * | MS |

Metals
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Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896SD

Sample ID: 1202054502

Duplicate ID: 1202054503

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|-----------|-------|------------------|---------------|---|------------------|---|------|------|----|
| Arsenic | mg/kg | +/-20 | 8.53 | | 8.46 | | .761 | | MS |
| Beryllium | mg/kg | +/-20 | 6.52 | | 6.38 | | 2.17 | | MS |
| Nickel | mg/kg | +/-20 | 9.44 | | 8.94 | | 5.48 | | MS |
| Selenium | mg/kg | +/-20 | 2.16 | | 2.06 | | 5.05 | | MS |
| Thallium | mg/kg | +/-20 | 8.39 | | 8.1 | | 3.5 | | MS |
| Uranium | mg/kg | +/-20 | 5.72 | | 5.59 | | 2.33 | | MS |

Metals

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Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896D

Sample ID: 247899001

Duplicate ID: 1202056117

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---------|-------|---------------------|------------------|---|---------------------|---|------|------|----|
| Mercury | ug/kg | +/-12.1 | 8.49 J | | 8.56 J | | .785 | | AV |

Metals

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Duplicate Sample Summary

SDG No.: 10-2010

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7896SD

Sample ID: 1202056118

Duplicate ID: 1202056120

Percent Solids for Dup: 94.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---------|-------|---------------------|------------------|---|---------------------|---|------|------|----|
| Mercury | ug/kg | +/-20 | 130 | | 123 | | 5.48 | | AV |

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2010

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> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202054498 | | | | | | | | |
| | Aluminum | ug/Kg | 10500000 | 8590000 | | 81.8 | 56-144 | P |
| | Antimony | ug/Kg | 173000 | 116000 | | 67.1 | 71-130 | P |
| | Barium | ug/Kg | 198000 | 202000 | | 102 | 80-120 | P |
| | Cadmium | ug/Kg | 60700 | 56400 | | 92.9 | 81-120 | P |
| | Calcium | ug/Kg | 9870000 | 9010000 | | 91.3 | 83-117 | P |
| | Chromium | ug/Kg | 236000 | 232000 | | 98.2 | 80-120 | P |
| | Cobalt | ug/Kg | 91200 | 89300 | | 98 | 81-120 | P |
| | Copper | ug/Kg | 174000 | 182000 | | 104 | 81-118 | P |
| | Iron | ug/Kg | 18000000 | 16800000 | | 93.4 | 51-149 | P |
| | Lead | ug/Kg | 86000 | 77600 | | 90.2 | 79-121 | P |
| | Magnesium | ug/Kg | 4000000 | 3510000 | | 87.7 | 79-122 | P |
| | Manganese | ug/Kg | 558000 | 524000 | | 93.9 | 81-119 | P |
| | Potassium | ug/Kg | 4300000 | 3760000 | | 87.5 | 74-127 | P |
| | Silver | ug/Kg | 30100 | 31200 | | 104 | 66-134 | P |
| | Sodium | ug/Kg | 1020000 | 1000000 | | 98 | 74-127 | P |
| | Vanadium | ug/Kg | 115000 | 119000 | | 104 | 79-121 | P |
| | Zinc | ug/Kg | 594000 | 559000 | | 94.2 | 80-121 | P |

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2010

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> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202054504 | | | | | | | | |
| | Arsenic | mg/kg | 104 | 105 | | 101 | 78-123 | MS |
| | Beryllium | mg/kg | 77.6 | 83.6 | | 108 | 84-116 | MS |
| | Nickel | mg/kg | 134 | 142 | | 106 | 78-123 | MS |
| | Selenium | mg/kg | 286 | 292 | | 102 | 77-123 | MS |
| | Thallium | mg/kg | 121 | 124 | | 103 | 78-122 | MS |
| | Uranium | mg/kg | 2.13 | 2.01 | | 94.4 | 73-127 | MS |

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2010

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> |
|------------------|----------------|--------------|-------------------|---------------|----------|-------------------|-------------------------|----------|
| 1202056116 | Mercury | ug/kg | 5150 | 4740 | | 91.9 | 71.6-128.3 | AV |

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2010 Client ID RE15-10-7896L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247899001 Serial Dilution ID: 1202054495

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M |
|-----------|--------------------------|---|-------------------------|---|-----------------|------|---------------------|---|
| Aluminum | 40600 | | 39200 | | 3.45 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 261 | | 273 | | 4.6 | | 10 | P |
| Cadmium | 1 | U | 5 | U | | | | P |
| Calcium | 9460 | | 9400 | | .634 | | 10 | P |
| Chromium | 102 | | 105 | | 2.94 | | 10 | P |
| Cobalt | 7.55 | | 7.5 | U | 100 | | | P |
| Copper | 55.8 | | 59 | | 5.73 | | | P |
| Iron | 92900 | | 92000 | | .969 | | 10 | P |
| Lead | 53.2 | | 55 | | 3.38 | | | P |
| Magnesium | 7500 | | 7650 | | 2 | | 10 | P |
| Manganese | 2340 | | 2490 | | 6.2 | | 10 | P |
| Potassium | 5100 | | 4770 | | 6.47 | | 10 | P |
| Silver | 2.08 | J | 5 | U | 100 | | | P |
| Sodium | 1200 | | 1290 | | 7.5 | | | P |
| Vanadium | 73 | | 79 | | 8.22 | | 10 | P |
| Zinc | 462 | | 485 | | 4.87 | | 10 | P |

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2010

Client ID: RE15-10-7896L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 247899001

Serial Dilution ID: 1202054501

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M |
|----------------|-----------------------------------|----------|----------------------------------|----------|-------------------------|-------------|-----------------------------|----------|
| Arsenic | 7.01 | | 5 | U | 100 | | | MS |
| Beryllium | 6.36 | | 6.4 | | .629 | | | MS |
| Nickel | 19.7 | | 20.5 | | 4.06 | | | MS |
| Selenium | 2.5 | U | 12.5 | U | | | | MS |
| Thallium | .3 | U | 1.5 | U | | | | MS |
| Uranium | 3.88 | | 4.14 | | 6.7 | | | MS |

METALS

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Serial Dilution Sample Summary

SDG NO. 10-2010 Client ID RE15-10-7896L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247899001 Serial Dilution ID: 1202056119

| <u>Analyte</u> | <u>Initial Value ug/L</u> | <u>C</u> | <u>Serial Value ug/L</u> | <u>C</u> | <u>% Difference</u> | <u>Qual</u> | <u>Acceptance Limit</u> | <u>M</u> |
|----------------|-----------------------------------|----------|----------------------------------|----------|-------------------------|-------------|-----------------------------|----------|
| Mercury | .147 | J | .34 | U | 100 | | | AV |

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2010

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 | 958052 | | | | | | |
| 1202054493 | MB for batch 958052 | MB | S | 02-MAR-10 | .56g | 50mL | |
| 1202054498 | LCS for batch 958052 | LCS | S | 02-MAR-10 | .512g | 50mL | |
| 1202054496 | RE15-10-7896S | MS | S | 02-MAR-10 | .553g | 50mL | |
| 1202054497 | RE15-10-7896SD | MSD | S | 02-MAR-10 | .536g | 50mL | |
| 1202054494 | RE15-10-7896D | DUP | S | 02-MAR-10 | .533g | 50mL | |
| 247899001 | RE15-10-7896 | SAMPLE | S | 02-MAR-10 | .522g | 50mL | |
| 247899002 | RE15-10-7894 | SAMPLE | S | 02-MAR-10 | .592g | 50mL | |
| 247899003 | RE15-10-7900 | SAMPLE | S | 02-MAR-10 | .521g | 50mL | |
| 247899004 | RE15-10-7898 | SAMPLE | S | 02-MAR-10 | .591g | 50mL | |
| 247899005 | RE15-10-7897 | SAMPLE | S | 02-MAR-10 | .548g | 50mL | |
| 247899006 | RE15-10-7895 | SAMPLE | S | 02-MAR-10 | .53g | 50mL | |
| 247899007 | RE15-10-7899 | SAMPLE | S | 02-MAR-10 | .502g | 50mL | |
| 247899008 | RE15-10-7893 | SAMPLE | S | 02-MAR-10 | .552g | 50mL | |
| 247899009 | RE15-10-8011 | SAMPLE | S | 02-MAR-10 | .574g | 50mL | |
| 247899010 | RE15-10-8004 | SAMPLE | S | 02-MAR-10 | .504g | 50mL | |
| 247899011 | RE15-10-8009 | SAMPLE | S | 02-MAR-10 | .508g | 50mL | |
| 247899012 | RE15-10-8003 | SAMPLE | S | 02-MAR-10 | .536g | 50mL | |
| 247899013 | RE15-10-8007 | SAMPLE | S | 02-MAR-10 | .519g | 50mL | |
| 247899014 | RE15-10-8002 | SAMPLE | S | 02-MAR-10 | .531g | 50mL | |

SW846

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2010**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> |
|------------------|------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| 247899015 | RE15-10-8010 | SAMPLE | S | 02-MAR-10 | .557g | 50mL | |
| 247899016 | RE15-10-8006 | SAMPLE | S | 02-MAR-10 | .556g | 50mL | |
| 247899017 | RE15-10-8001 | SAMPLE | S | 02-MAR-10 | .516g | 50mL | |
| 247899018 | RE15-10-8012 | SAMPLE | S | 02-MAR-10 | .593g | 50mL | |
| 247899019 | RE15-10-8008 | SAMPLE | S | 02-MAR-10 | .547g | 50mL | |
| 247899020 | RE15-10-8005 | SAMPLE | S | 02-MAR-10 | .557g | 50mL | |

SW846

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-2010

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 958054 | | | | | | | |
| 1202054499 | MB for batch 958054 | MB | S | 02-MAR-10 | .504g | 50mL | |
| 1202054504 | LCS for batch 958054 | LCS | S | 02-MAR-10 | .552g | 50mL | |
| 1202054502 | RE15-10-7896S | MS | S | 02-MAR-10 | .528g | 50mL | |
| 1202054503 | RE15-10-7896SD | MSD | S | 02-MAR-10 | .544g | 50mL | |
| 1202054500 | RE15-10-7896D | DUP | S | 02-MAR-10 | .511g | 50mL | |
| 247899001 | RE15-10-7896 | SAMPLE | S | 02-MAR-10 | .507g | 50mL | |
| 247899002 | RE15-10-7894 | SAMPLE | S | 02-MAR-10 | .505g | 50mL | |
| 247899003 | RE15-10-7900 | SAMPLE | S | 02-MAR-10 | .545g | 50mL | |
| 247899004 | RE15-10-7898 | SAMPLE | S | 02-MAR-10 | .532g | 50mL | |
| 247899005 | RE15-10-7897 | SAMPLE | S | 02-MAR-10 | .557g | 50mL | |
| 247899006 | RE15-10-7895 | SAMPLE | S | 02-MAR-10 | .541g | 50mL | |
| 247899007 | RE15-10-7899 | SAMPLE | S | 02-MAR-10 | .592g | 50mL | |
| 247899008 | RE15-10-7893 | SAMPLE | S | 02-MAR-10 | .507g | 50mL | |
| 247899009 | RE15-10-8011 | SAMPLE | S | 02-MAR-10 | .556g | 50mL | |
| 247899010 | RE15-10-8004 | SAMPLE | S | 02-MAR-10 | .539g | 50mL | |
| 247899011 | RE15-10-8009 | SAMPLE | S | 02-MAR-10 | .521g | 50mL | |
| 247899012 | RE15-10-8003 | SAMPLE | S | 02-MAR-10 | .535g | 50mL | |
| 247899013 | RE15-10-8007 | SAMPLE | S | 02-MAR-10 | .58g | 50mL | |
| 247899014 | RE15-10-8002 | SAMPLE | S | 02-MAR-10 | .512g | 50mL | |

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2010

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> |
|------------------|------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| 247899015 | RE15-10-8010 | SAMPLE | S | 02-MAR-10 | .513g | 50mL | |
| 247899016 | RE15-10-8006 | SAMPLE | S | 02-MAR-10 | .512g | 50mL | |
| 247899017 | RE15-10-8001 | SAMPLE | S | 02-MAR-10 | .54g | 50mL | |
| 247899018 | RE15-10-8012 | SAMPLE | S | 02-MAR-10 | .581g | 50mL | |
| 247899019 | RE15-10-8008 | SAMPLE | S | 02-MAR-10 | .524g | 50mL | |
| 247899020 | RE15-10-8005 | SAMPLE | S | 02-MAR-10 | .501g | 50mL | |

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2010

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 958722 | | | | | | | |
| 1202056115 | MB for batch 958722 | MB | S | 12-MAR-10 | .54g | 30mL | |
| 1202056116 | LCS for batch 958722 | LCS | S | 12-MAR-10 | .209g | 30mL | |
| 1202056118 | RE15-10-7896S | MS | S | 12-MAR-10 | .541g | 30mL | |
| 1202056120 | RE15-10-7896SD | MSD | S | 12-MAR-10 | .583g | 30mL | |
| 1202056117 | RE15-10-7896D | DUP | S | 12-MAR-10 | .526g | 30mL | |
| 247899001 | RE15-10-7896 | SAMPLE | S | 12-MAR-10 | .552g | 30mL | |
| 247899002 | RE15-10-7894 | SAMPLE | S | 12-MAR-10 | .559g | 30mL | |
| 247899003 | RE15-10-7900 | SAMPLE | S | 12-MAR-10 | .548g | 30mL | |
| 247899004 | RE15-10-7898 | SAMPLE | S | 12-MAR-10 | .59g | 30mL | |
| 247899005 | RE15-10-7897 | SAMPLE | S | 12-MAR-10 | .583g | 30mL | |
| 247899006 | RE15-10-7895 | SAMPLE | S | 12-MAR-10 | .549g | 30mL | |
| 247899007 | RE15-10-7899 | SAMPLE | S | 12-MAR-10 | .571g | 30mL | |
| 247899008 | RE15-10-7893 | SAMPLE | S | 12-MAR-10 | .529g | 30mL | |
| 247899009 | RE15-10-8011 | SAMPLE | S | 12-MAR-10 | .54g | 30mL | |
| 247899010 | RE15-10-8004 | SAMPLE | S | 12-MAR-10 | .586g | 30mL | |
| 247899011 | RE15-10-8009 | SAMPLE | S | 12-MAR-10 | .522g | 30mL | |
| 247899012 | RE15-10-8003 | SAMPLE | S | 12-MAR-10 | .509g | 30mL | |
| 247899013 | RE15-10-8007 | SAMPLE | S | 12-MAR-10 | .517g | 30mL | |
| 247899014 | RE15-10-8002 | SAMPLE | S | 12-MAR-10 | .511g | 30mL | |

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2010

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> |
|------------------|------------------|--------------------|---------------|------------------|----------------------------|----------------------------|-----------------------|
| 247899015 | RE15-10-8010 | SAMPLE | S | 12-MAR-10 | .5g | 30mL | |
| 247899016 | RE15-10-8006 | SAMPLE | S | 12-MAR-10 | .6g | 30mL | |
| 247899017 | RE15-10-8001 | SAMPLE | S | 12-MAR-10 | .577g | 30mL | |
| 247899018 | RE15-10-8012 | SAMPLE | S | 12-MAR-10 | .565g | 30mL | |
| 247899019 | RE15-10-8008 | SAMPLE | S | 12-MAR-10 | .557g | 30mL | |
| 247899020 | RE15-10-8005 | SAMPLE | S | 12-MAR-10 | .505g | 30mL | |

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 24-MAR-10

Client Sdg: 10-2010

Method MS

Data File: 100323-2

End Date: 24-MAR-10

| 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 | U | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 12:55 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| S10 | 1 | 12:59 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| S100 | 1 | 13:03 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| ICV01 | 1 | 13:07 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| ICB01 | 1 | 13:11 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CRDL01 | 1 | 13:15 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| ICSA01 | 1 | 13:19 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| ICSAB01 | 1 | 13:23 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCV01 | 1 | 13:27 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCB01 | 1 | 13:31 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054499 | 2 | 13:35 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054504 | 40 | 13:39 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCV02 | 1 | 13:43 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCB02 | 1 | 13:47 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899001 | 2 | 13:52 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054500 | 2 | 13:56 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054502 | 2 | 14:00 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054503 | 19 | 14:04 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 1202054501 | 210 | 14:08 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899002 | 2 | 14:12 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899003 | 2 | 14:16 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899004 | 2 | 14:20 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899005 | 2 | 14:24 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCV03 | 1 | 14:28 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCB03 | 1 | 14:32 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899006 | 2 | 14:36 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899007 | 2 | 14:40 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899008 | 2 | 14:44 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899009 | 2 | 14:49 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899010 | 2 | 14:53 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899011 | 2 | 14:57 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899012 | 2 | 15:01 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899013 | 2 | 15:05 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCV04 | 1 | 15:09 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| CCB04 | 1 | 15:13 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899014 | 2 | 15:17 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899015 | 2 | 15:21 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899016 | 2 | 15:25 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899017 | 2 | 15:29 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |
| 247899018 | 2 | 15:33 | | | X | | | | | | | | | | | | | X | X | | | X | | | | |

Metals
-14-
Analysis Run Log

| Samp No. | D/F | Run Time | | | | | | | | | | | | | | | | | | |
|-----------|-----|----------|--|---|--|--|--|--|--|--|--|--|--|--|---|---|--|---|--|--|
| 247899019 | 2 | 15:37 | | X | | | | | | | | | | | X | X | | X | | |
| 247899020 | 2 | 15:41 | | X | | | | | | | | | | | X | X | | X | | |
| CCV05 | 1 | 15:45 | | X | | | | | | | | | | | X | X | | X | | |
| CCB05 | 1 | 15:49 | | X | | | | | | | | | | | X | X | | X | | |

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 24-MAR-10

End Date: 25-MAR-10

Client Sdg: 10-2010

Method MS

Data File: 100324-3

| 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 | Ti | U | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 21:58 | | | | | X | | | | | | | | | | | | | | | | | | | |
| S10 | 1 | 22:00 | | | | | X | | | | | | | | | | | | | | | | | | | |
| S100 | 1 | 22:03 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICV01 | 1 | 22:05 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICB01 | 1 | 22:07 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CRDL01 | 1 | 22:09 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICSA01 | 1 | 22:12 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICSAB01 | 1 | 22:14 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV01 | 1 | 22:16 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB01 | 1 | 22:18 | | | | | X | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:21 | | | | | | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:24 | | | | | | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:26 | | | | | | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:29 | | | | | | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:31 | | | | | | | | | | | | | | | | | | | | | | | | |
| TTTTT | 2 | 22:34 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV02 | 1 | 22:36 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB02 | 1 | 22:38 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054499 | 2 | 22:41 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054504 | 40 | 22:44 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899001 | 2 | 22:46 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054500 | 2 | 22:49 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054502 | 2 | 22:51 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054503 | 102 | 22:54 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 1202054501 | 210 | 22:57 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899002 | 2 | 22:59 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV03 | 1 | 23:02 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB03 | 1 | 23:04 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899003 | 2 | 23:06 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899004 | 2 | 23:09 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899005 | 2 | 23:12 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899006 | 2 | 23:14 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899007 | 2 | 23:17 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899008 | 2 | 23:19 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899009 | 2 | 23:22 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV04 | 1 | 23:24 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB04 | 1 | 23:27 | | | | | X | | | | | | | | | | | | | | | | | | | |

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 24-MAR-10

Client Sdg: 10-2010

Method MS

Data File: 100324-5

End Date: 25-MAR-10

| 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 | U | V | Zn |
|-----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 01:24 | | | | | X | | | | | | | | | | | | | | | | | | | |
| S10 | 1 | 01:27 | | | | | X | | | | | | | | | | | | | | | | | | | |
| S100 | 1 | 01:29 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICV01 | 1 | 01:31 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICB01 | 1 | 01:33 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CRDL01 | 1 | 01:36 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICSA01 | 1 | 01:38 | | | | | X | | | | | | | | | | | | | | | | | | | |
| ICSAB01 | 1 | 01:40 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV01 | 1 | 01:42 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB01 | 1 | 01:45 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899010 | 2 | 01:47 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899011 | 2 | 01:50 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899012 | 2 | 01:52 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899013 | 2 | 01:55 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899014 | 2 | 01:58 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899015 | 2 | 02:00 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899016 | 2 | 02:03 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV02 | 1 | 02:05 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB02 | 1 | 02:07 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899017 | 2 | 02:10 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899018 | 2 | 02:12 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899019 | 2 | 02:15 | | | | | X | | | | | | | | | | | | | | | | | | | |
| 247899020 | 2 | 02:17 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCV03 | 1 | 02:20 | | | | | X | | | | | | | | | | | | | | | | | | | |
| CCB03 | 1 | 02:22 | | | | | X | | | | | | | | | | | | | | | | | | | |

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 24-MAR-10

Client Sdg: 10-2010

Method MS

Data File: 100324-6

End Date: 25-MAR-10

| 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 | U | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 02:35 | | | | | | | | | | | | | | | | | | | | | | X | | |
| S10 | 1 | 02:38 | | | | | | | | | | | | | | | | | | | | | | X | | |
| S100 | 1 | 02:41 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICV01 | 1 | 02:44 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICB01 | 1 | 02:47 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRDL01 | 1 | 02:50 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICSA01 | 1 | 02:53 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICSAB01 | 1 | 02:56 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV01 | 1 | 02:59 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB01 | 1 | 03:02 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 03:06 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 40 | 03:09 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:12 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV02 | 1 | 03:15 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB02 | 1 | 03:18 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 03:21 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:24 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:27 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10 | 03:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:33 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:36 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:39 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV03 | 1 | 03:42 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB03 | 1 | 03:46 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 03:49 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:52 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:55 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 03:58 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:01 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:04 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:07 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:10 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV04 | 1 | 04:13 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB04 | 1 | 04:16 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 04:20 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:23 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:26 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:29 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:32 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 04:42 | | | | | | | | | | | | | | | | | | | | | | | | |

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 25-MAR-10

End Date: 26-MAR-10

Client Sdg: 10-2010

Method MS

Data File: 100325-7

| 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 | U | V | Zn |
|----------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 23:39 | | | | | | | | | | | | | | | | | | | | | | X | | |
| S10 | 1 | 23:42 | | | | | | | | | | | | | | | | | | | | | | X | | |
| S100 | 1 | 23:45 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICV01 | 1 | 23:48 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICB01 | 1 | 23:52 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CRDL01 | 1 | 23:55 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICSA01 | 1 | 23:58 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ICSAB01 | 1 | 00:01 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCV01 | 1 | 00:04 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB01 | 1 | 00:07 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 00:10 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:13 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:16 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:19 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:22 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:25 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:28 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV02 | 1 | 00:32 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB02 | 1 | 00:35 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 00:38 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 40 | 00:41 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:44 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:47 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:50 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:53 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10 | 00:56 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 00:59 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV03 | 1 | 01:02 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB03 | 1 | 01:05 | | | | | | | | | | | | | | | | | | | | | | X | | |
| ZZZZZZ | 2 | 01:08 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:11 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:18 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:21 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:24 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:27 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 2 | 01:33 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV04 | 1 | 01:36 | | | | | | | | | | | | | | | | | | | | | | X | | |
| CCB04 | 1 | 01:39 | | | | | | | | | | | | | | | | | | | | | | X | | |

| Samp No. | D/F | Run Time |
|-----------|-----|----------|
| ZZZZZZ | 2 | 01:42 |
| ZZZZZZ | 2 | 01:45 |
| ZZZZZZ | 2 | 01:48 |
| ZZZZZZ | 2 | 01:51 |
| CCV05 | 1 | 01:54 |
| CCB05 | 1 | 01:58 |
| 247899005 | 10 | 02:03 |
| 247899009 | 10 | 02:06 |
| 247899011 | 40 | 02:10 |
| 247899012 | 20 | 02:13 |
| 247899013 | 10 | 02:16 |
| 247899017 | 10 | 02:19 |
| 247899020 | 10 | 02:22 |
| CCV06 | 1 | 02:25 |
| CCB06 | 1 | 02:28 |

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 25-MAR-10

End Date: 26-MAR-10

Client Sdg: 10-2010

Method P

Data File: 032510A-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 | U | V | Zn |
|----------|------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 07:36 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| S0.1 | 1 | 07:43 | | X | | X | | X | | X | X | X | | X | | X | | | X | | X | | | | X | X |
| S0.5 | 1 | 07:50 | X | X | | X | | X | X | X | X | X | | X | X | X | | | X | | X | | | | X | X |
| SCAL | 1 | 07:57 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| S10 | 1 | 08:04 | X | | | | | X | | | | | X | | X | | | | | | | X | | | | |
| ICV01 | 1 | 08:09 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ICB01 | 1 | 08:16 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| PQL01 | 1 | 08:23 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ICSA01 | 1 | 08:30 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ICSAB01 | 1 | 08:36 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| LR01 | 1 | 08:43 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| LR02 | 1 | 08:50 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCV01 | 1 | 08:57 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB01 | 1 | 09:04 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| LR03 | 1 | 09:10 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| LR04 | 1 | 09:17 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCV02 | 1 | 09:24 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB02 | 1 | 09:31 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 5 | 09:54 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 10:01 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 10:07 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV03 | 1 | 10:14 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB03 | 1 | 10:21 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 1 | 10:28 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 10:35 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 10:42 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 10:49 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 10:56 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 20 | 11:03 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 50 | 11:10 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 100 | 11:17 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV04 | 1 | 11:24 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB04 | 1 | 11:31 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 1 | 11:40 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 11:46 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 200 | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 200 | 12:01 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 200 | 12:08 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 200 | 12:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1000 | 12:22 | | | | | | | | | | | | | | | | | | | | | | | | |

| Samp No. | D/F | Run Time | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|-----|----------|---|---|--|---|--|---|---|---|---|---|---|---|---|---|---|--|---|--|---|---|--|---|---|--|
| ZZZZZZ | 200 | 12:29 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 200 | 12:36 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV05 | 1 | 12:43 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCB05 | 1 | 12:50 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| ZZZZZZ | 1 | 12:56 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:03 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:09 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:16 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:23 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:30 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 13:36 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 13:43 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV06 | 1 | 13:50 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCB06 | 1 | 13:57 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| ZZZZZZ | 1 | 14:04 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:11 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:18 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:26 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:32 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:39 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:46 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 14:53 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV07 | 1 | 15:00 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCB07 | 1 | 15:07 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| ZZZZZZ | 1 | 15:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:22 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:29 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:35 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:43 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:50 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 15:57 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 16:04 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV08 | 1 | 16:11 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCB08 | 1 | 16:18 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCV09 | 1 | 16:32 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| CCB09 | 1 | 16:39 | X | X | | X | | X | X | X | X | X | X | X | X | X | X | | X | | X | X | | X | X | |
| ZZZZZZ | 1 | 16:47 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 16:54 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 17:01 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 17:08 | | | | | | | | | | | | | | | | | | | | | | | | |

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 | U | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| ZZZZZZ | 1 | 17:15 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 17:22 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 17:29 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV10 | 1 | 17:36 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB10 | 1 | 17:43 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 1 | 17:49 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 17:56 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:04 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:10 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:17 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:24 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:31 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 18:38 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV11 | 1 | 18:45 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB11 | 1 | 18:52 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 1 | 19:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 19:07 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 19:14 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 19:21 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 19:28 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 19:35 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5 | 19:42 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV12 | 1 | 19:49 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB12 | 1 | 19:56 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| ZZZZZZ | 1 | 20:03 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 20:10 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 20:17 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 20:24 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 20:31 | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1 | 20:38 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV13 | 1 | 20:45 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| CCB13 | 1 | 20:52 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054493 | 1 | 20:59 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054498 | 1 | 21:06 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 247899001 | 1 | 21:13 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054494 | 1 | 21:20 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054496 | 1 | 21:27 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054497 | 1 | 21:34 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 1202054495 | 5 | 21:41 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |
| 247899002 | 1 | 21:48 | X | X | | X | | X | X | X | X | X | X | X | X | X | | | X | | X | X | | | X | X |

Metals
-14-
Analysis Run Log

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** MER536**Start Date:** 15-MAR-10**End Date:** 15-MAR-10**Client Sdg:** 10-2010**Method:** AV**Data File:** 031510S1-8

| 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 | U | V | Zn |
|------------|-----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|---|----|
| S0.0 | 1 | 08:38 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S0.2 | 1 | 08:40 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S0.5 | 1 | 08:42 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S2.0 | 1 | 08:44 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S5.0 | 1 | 08:46 | | | | | | | | | | | | | | | X | | | | | | | | | |
| S10 | 1 | 08:48 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICV01 | 1 | 08:50 | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICB01 | 1 | 08:52 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CRDL01 | 1 | 08:54 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV01 | 1 | 08:56 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB01 | 1 | 08:58 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056115 | 1 | 09:00 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056116 | 10 | 09:02 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899001 | 1 | 09:04 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056117 | 1 | 09:06 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056118 | 1 | 09:08 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056120 | 1 | 09:10 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1202056119 | 5 | 09:12 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899002 | 1 | 09:14 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899003 | 1 | 09:16 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899004 | 1 | 09:18 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV02 | 1 | 09:20 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB02 | 1 | 09:22 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899005 | 1 | 09:24 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899006 | 1 | 09:26 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899007 | 1 | 09:28 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899008 | 1 | 09:30 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899009 | 1 | 09:32 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899010 | 1 | 09:34 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899011 | 1 | 09:36 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899012 | 1 | 09:38 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899013 | 1 | 09:40 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899014 | 1 | 09:42 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV03 | 1 | 09:44 | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB03 | 1 | 09:46 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899015 | 1 | 09:48 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899016 | 1 | 09:50 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899017 | 1 | 09:52 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899018 | 1 | 09:54 | | | | | | | | | | | | | | | X | | | | | | | | | |
| 247899019 | 1 | 09:56 | | | | | | | | | | | | | | | X | | | | | | | | | |

Metals
-14-
Analysis Run Log

[illegible]

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2010

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

| ICP/MS | <u>Analyte</u> | <u>Wavelength (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 |
| | Uranium | | 0.066 | .2 |
| | Vanadium | | 2.0 | 10 |
| | Zinc | | 2.0 | 10 |

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2010

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

| | <u>Analyte</u> | <u>Wavelength</u> <u>(nm)</u> | <u>MDL</u> <u>ug/L</u> | <u>RDL</u> <u>ug/L</u> |
|---------|----------------|----------------------------------|---------------------------|---------------------------|
| MERCURY | | | | |
| SOLID | Mercury | | 0.068 | .2 |

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2010

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

| ICP | <u>Analyte</u> | <u>Wavelength</u> <u>(nm)</u> | <u>MDL</u> | <u>RDL</u> |
|-------|----------------|----------------------------------|-------------|-------------|
| | | | <u>ug/L</u> | <u>ug/L</u> |
| SOLID | 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 |
| | Uranium | 409.014 | 10.0 | 50 |
| | Vanadium | 292.402 | 1.0 | 5 |
| | Zinc | 213.857 | 3.3 | 10 |

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2010**

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: **10-2010**

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: **10-2010**

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: GELGEL Job No: **10-2010**

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-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-2010**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement 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: **10-2010**

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. 10-2010

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS6

| <u>Analyte</u> | <u>Integration Time (msec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective 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 |
| Uranium | 1000 | 5000 | 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. 10-2010

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

| <u>Analyte</u> | <u>Integration Time (sec)</u> | <u>LDR</u> | <u>Units</u> | <u>Effective 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 |
| Uranium | 20 | 15000 | ug/L | 01-FEB-10 |
| Vanadium | 20 | 10000 | ug/L | 01-FEB-10 |
| Zinc | 20 | 15000 | ug/L | 01-FEB-10 |

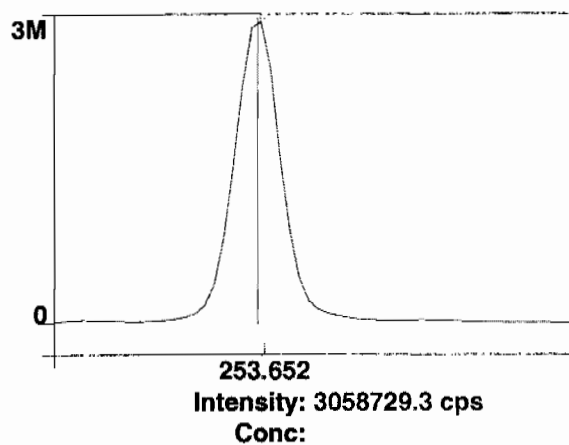
Raw Data

Method: Hg_ReAlign
Result: 032610

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

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Reprocessing Begun

Logged In Analyst: Optima3

Technique: ICP Continuous

Results Data Set (original): 032510

Results Library (original): C:\pe\Optima3\Results\Results.mdb

Results Data Set (reprocessed): 032510A

Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/25/2010 09:39:44

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: 8

Sample ID: S0

Date Collected: 3/25/2010 07:36:22

Analyst:

Data Type: Reprocessed on 3/25/2010 09:41:34

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|-------------|---------------|---------------------|--------------------|---------------|
| 1 | Sc 361.383 | 836103.0 | 836103.0 | 99.553 % | 07:39:31 |
| 1 | Sc Radial | 4000.8 | 4000.8 | 99.2 % | 07:38:35 |
| 1 | Y 371.029 | 713700.0 | 713700.0 | 99.668 % | 07:39:31 |
| 1 | Y RADIAL | 4493.5 | 4493.5 | 99.46 % | 07:38:15 |
| 1 | Ag 328.068† | 255.1 | 256.3 | [0.00] ug/L | 07:39:36 |

| | | | | | | |
|---|--------------------|----------|----------|--------|------|----------|
| 1 | Al 396.153Radial† | -80.2 | -80.9 | [0.00] | ug/L | 07:38:35 |
| 1 | As 188.979† | -19.7 | -19.8 | [0.00] | ug/L | 07:39:57 |
| 1 | B 249.677† | -248.0 | -249.2 | [0.00] | ug/L | 07:39:57 |
| 1 | Ba 233.527† | 17.8 | 17.8 | [0.00] | ug/L | 07:39:57 |
| 1 | Be 313.107† | -4288.8 | -4308.1 | [0.00] | ug/L | 07:39:36 |
| 1 | Ca 317.933Radial† | 14.9 | 15.0 | [0.00] | ug/L | 07:38:35 |
| 1 | Cd 226.502† | -166.3 | -167.0 | [0.00] | ug/L | 07:39:57 |
| 1 | Co 228.616† | -40.9 | -41.1 | [0.00] | ug/L | 07:39:57 |
| 1 | Cr 267.716† | 104.4 | 104.8 | [0.00] | ug/L | 07:39:57 |
| 1 | Cu 324.752† | 6285.6 | 6313.8 | [0.00] | ug/L | 07:39:36 |
| 1 | Fe 238.204 Radial† | 7.9 | 8.0 | [0.00] | ug/L | 07:38:35 |
| 1 | K 766.490 Radial† | 2888.6 | 2912.5 | [0.00] | ug/L | 07:38:15 |
| 1 | Mg 279.077 IEC† | 0.6 | 0.6 | [0.00] | ug/L | 07:38:35 |
| 1 | Mn 257.610† | 458.2 | 460.3 | [0.00] | ug/L | 07:39:57 |
| 1 | Mo 202.031† | 9.0 | 9.0 | [0.00] | ug/L | 07:39:57 |
| 1 | Na 589.592 Radial† | -423.8 | -427.3 | [0.00] | ug/L | 07:38:15 |
| 1 | Ni 231.604† | 96.1 | 96.5 | [0.00] | ug/L | 07:39:57 |
| 1 | P 214.914† | 174.1 | 174.9 | [0.00] | ug/L | 07:39:57 |
| 1 | Pb 220.353† | -63.2 | -63.4 | [0.00] | ug/L | 07:39:57 |
| 1 | S 181.975 Axial† | 26.6 | 26.8 | [0.00] | ug/L | 07:39:57 |
| 1 | Sb 206.836† | 33.5 | 33.7 | [0.00] | ug/L | 07:39:57 |
| 1 | Se 196.026† | -17.3 | -17.4 | [0.00] | ug/L | 07:39:57 |
| 1 | Si 251.611† | 537.0 | 539.4 | [0.00] | ug/L | 07:39:57 |
| 1 | Sn 189.927† | 0.1 | 0.1 | [0.00] | ug/L | 07:39:57 |
| 1 | Sr 421.552† | 56.6 | 57.1 | [0.00] | ug/L | 07:38:15 |
| 1 | Ti 334.940† | -1119.0 | -1124.1 | [0.00] | ug/L | 07:39:36 |
| 1 | Tl 190.801† | -24.9 | -25.0 | [0.00] | ug/L | 07:39:57 |
| 1 | U 409.014† | -1979.2 | -1988.1 | [0.00] | ug/L | 07:39:31 |
| 1 | V 292.402† | -1383.4 | -1389.6 | [0.00] | ug/L | 07:39:36 |
| 1 | Zn 213.857† | 608.4 | 611.1 | [0.00] | ug/L | 07:39:57 |
| 1 | SiO2† | 551.8 | 554.3 | [0.00] | ug/L | 07:41:02 |
| 2 | Sc 361.383 | 844946.8 | 844946.8 | 100.61 | % | 07:40:02 |
| 2 | Sc Radial | 4057.7 | 4057.7 | 101 | % | 07:39:00 |
| 2 | Y 371.029 | 720116.7 | 720116.7 | 100.56 | % | 07:40:02 |
| 2 | Y RADIAL | 4532.7 | 4532.7 | 100.3 | % | 07:38:40 |
| 2 | Ag 328.068† | 237.1 | 235.7 | [0.00] | ug/L | 07:40:07 |
| 2 | Al 396.153Radial† | -79.4 | -78.9 | [0.00] | ug/L | 07:39:00 |
| 2 | As 188.979† | -19.9 | -19.8 | [0.00] | ug/L | 07:40:27 |
| 2 | B 249.677† | -256.7 | -255.1 | [0.00] | ug/L | 07:40:27 |
| 2 | Ba 233.527† | 19.4 | 19.3 | [0.00] | ug/L | 07:40:27 |
| 2 | Be 313.107† | -4273.8 | -4248.0 | [0.00] | ug/L | 07:40:07 |
| 2 | Ca 317.933Radial† | 17.6 | 17.5 | [0.00] | ug/L | 07:39:00 |
| 2 | Cd 226.502† | -163.4 | -162.5 | [0.00] | ug/L | 07:40:27 |
| 2 | Co 228.616† | -35.9 | -35.6 | [0.00] | ug/L | 07:40:27 |
| 2 | Cr 267.716† | 87.7 | 87.2 | [0.00] | ug/L | 07:40:27 |
| 2 | Cu 324.752† | 6383.0 | 6344.5 | [0.00] | ug/L | 07:40:07 |
| 2 | Fe 238.204 Radial† | 8.6 | 8.5 | [0.00] | ug/L | 07:39:00 |
| 2 | K 766.490 Radial† | 2817.5 | 2800.9 | [0.00] | ug/L | 07:38:40 |
| 2 | Mg 279.077 IEC† | 2.0 | 2.0 | [0.00] | ug/L | 07:39:00 |
| 2 | Mn 257.610† | 445.5 | 442.8 | [0.00] | ug/L | 07:40:27 |
| 2 | Mo 202.031† | 16.5 | 16.4 | [0.00] | ug/L | 07:40:27 |
| 2 | Na 589.592 Radial† | -464.4 | -461.7 | [0.00] | ug/L | 07:38:40 |
| 2 | Ni 231.604† | 105.3 | 104.7 | [0.00] | ug/L | 07:40:27 |
| 2 | P 214.914† | 160.8 | 159.8 | [0.00] | ug/L | 07:40:27 |
| 2 | Pb 220.353† | -53.7 | -53.3 | [0.00] | ug/L | 07:40:27 |
| 2 | S 181.975 Axial† | 23.5 | 23.3 | [0.00] | ug/L | 07:40:27 |
| 2 | Sb 206.836† | 19.9 | 19.8 | [0.00] | ug/L | 07:40:27 |
| 2 | Se 196.026† | -18.3 | -18.2 | [0.00] | ug/L | 07:40:27 |
| 2 | Si 251.611† | 521.7 | 518.5 | [0.00] | ug/L | 07:40:27 |
| 2 | Sn 189.927† | 12.3 | 12.2 | [0.00] | ug/L | 07:40:27 |
| 2 | Sr 421.552† | 80.9 | 80.5 | [0.00] | ug/L | 07:38:40 |
| 2 | Ti 334.940† | -1077.7 | -1071.2 | [0.00] | ug/L | 07:40:07 |
| 2 | Tl 190.801† | -25.6 | -25.4 | [0.00] | ug/L | 07:40:27 |
| 2 | U 409.014† | -1994.9 | -1982.8 | [0.00] | ug/L | 07:40:02 |
| 2 | V 292.402† | -1444.8 | -1436.1 | [0.00] | ug/L | 07:40:07 |
| 2 | Zn 213.857† | 604.8 | 601.1 | [0.00] | ug/L | 07:40:27 |
| 2 | SiO2† | 559.1 | 555.7 | [0.00] | ug/L | 07:41:08 |
| 3 | Sc 361.383 | 838516.4 | 838516.4 | 99.841 | % | 07:40:32 |
| 3 | Sc Radial | 4043.0 | 4043.0 | 100 | % | 07:39:25 |
| 3 | Y 371.029 | 714407.8 | 714407.8 | 99.767 | % | 07:40:32 |
| 3 | Y RADIAL | 4527.9 | 4527.9 | 100.2 | % | 07:39:05 |

| | | | | | | |
|---|--------------------|---------|---------|--------|------|----------|
| 3 | Ag 328.068† | 267.8 | 268.2 | [0.00] | ug/L | 07:40:37 |
| 3 | Al 396.153Radial† | -79.3 | -79.1 | [0.00] | ug/L | 07:39:25 |
| 3 | As 188.979† | -22.9 | -22.9 | [0.00] | ug/L | 07:40:57 |
| 3 | B 249.677† | -245.8 | -246.2 | [0.00] | ug/L | 07:40:57 |
| 3 | Ba 233.527† | 18.4 | 18.4 | [0.00] | ug/L | 07:40:57 |
| 3 | Be 313.107† | -4225.3 | -4232.0 | [0.00] | ug/L | 07:40:37 |
| 3 | Ca 317.933Radial† | 19.1 | 19.0 | [0.00] | ug/L | 07:39:25 |
| 3 | Cd 226.502† | -169.4 | -169.7 | [0.00] | ug/L | 07:40:57 |
| 3 | Co 228.616† | -39.9 | -40.0 | [0.00] | ug/L | 07:40:57 |
| 3 | Cr 267.716† | 92.7 | 92.9 | [0.00] | ug/L | 07:40:57 |
| 3 | Cu 324.752† | 6389.7 | 6399.9 | [0.00] | ug/L | 07:40:37 |
| 3 | Fe 238.204 Radial† | 10.5 | 10.4 | [0.00] | ug/L | 07:39:25 |
| 3 | K 766.490 Radial† | 2702.5 | 2696.4 | [0.00] | ug/L | 07:39:05 |
| 3 | Mg 279.077 IEC† | -0.4 | -0.4 | [0.00] | ug/L | 07:39:25 |
| 3 | Mn 257.610† | 453.4 | 454.2 | [0.00] | ug/L | 07:40:57 |
| 3 | Mo 202.031† | 17.1 | 17.2 | [0.00] | ug/L | 07:40:57 |
| 3 | Na 589.592 Radial† | -494.7 | -493.6 | [0.00] | ug/L | 07:39:05 |
| 3 | Ni 231.604† | 79.5 | 79.6 | [0.00] | ug/L | 07:40:57 |
| 3 | P 214.914† | 169.7 | 169.9 | [0.00] | ug/L | 07:40:57 |
| 3 | Pb 220.353† | -59.6 | -59.7 | [0.00] | ug/L | 07:40:57 |
| 3 | S 181.975 Axial† | 23.0 | 23.1 | [0.00] | ug/L | 07:40:57 |
| 3 | Sb 206.836† | 26.4 | 26.4 | [0.00] | ug/L | 07:40:57 |
| 3 | Se 196.026† | -15.2 | -15.3 | [0.00] | ug/L | 07:40:57 |
| 3 | Si 251.611† | 517.6 | 518.4 | [0.00] | ug/L | 07:40:57 |
| 3 | Sn 189.927† | -3.1 | -3.1 | [0.00] | ug/L | 07:40:57 |
| 3 | Sr 421.552† | 72.7 | 72.6 | [0.00] | ug/L | 07:39:05 |
| 3 | Ti 334.940† | -1053.0 | -1054.7 | [0.00] | ug/L | 07:40:37 |
| 3 | Tl 190.801† | -24.7 | -24.7 | [0.00] | ug/L | 07:40:57 |
| 3 | U 409.014† | -2131.2 | -2134.6 | [0.00] | ug/L | 07:40:32 |
| 3 | V 292.402† | -1454.6 | -1456.9 | [0.00] | ug/L | 07:40:37 |
| 3 | Zn 213.857† | 606.1 | 607.1 | [0.00] | ug/L | 07:40:57 |
| 3 | SiO2† | 549.2 | 550.1 | [0.00] | ug/L | 07:41:13 |

Mean Data: S0

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Calib Conc. Units |
|--------------------|-----------------------------|----------|---------|----------------------|
| Sc 361.383 | 839855.4 | 4571.41 | 0.54% | 100.00 % |
| Sc Radial | 4033.8 | 29.56 | 0.73% | 100 % |
| Y 371.029 | 716074.8 | 3518.18 | 0.49% | 100.00 % |
| Y RADIAL | 4518.0 | 21.39 | 0.47% | 100.0 % |
| Ag 328.068† | 253.4 | 16.46 | 6.49% | [0.00] ug/L |
| Al 396.153Radial† | -79.6 | 1.10 | 1.38% | [0.00] ug/L |
| As 188.979† | -20.8 | 1.81 | 8.68% | [0.00] ug/L |
| B 249.677† | -250.2 | 4.55 | 1.82% | [0.00] ug/L |
| Ba 233.527† | 18.5 | 0.73 | 3.95% | [0.00] ug/L |
| Be 313.107† | -4262.7 | 40.09 | 0.94% | [0.00] ug/L |
| Ca 317.933Radial† | 17.2 | 2.01 | 11.71% | [0.00] ug/L |
| Cd 226.502† | -166.4 | 3.67 | 2.20% | [0.00] ug/L |
| Co 228.616† | -38.9 | 2.88 | 7.41% | [0.00] ug/L |
| Cr 267.716† | 95.0 | 9.01 | 9.49% | [0.00] ug/L |
| Cu 324.752† | 6352.8 | 43.63 | 0.69% | [0.00] ug/L |
| Fe 238.204 Radial† | 9.0 | 1.27 | 14.16% | [0.00] ug/L |
| K 766.490 Radial† | 2803.2 | 108.10 | 3.86% | [0.00] ug/L |
| Mg 279.077 IEC† | 0.7 | 1.18 | 167.64% | [0.00] ug/L |
| Mn 257.610† | 452.4 | 8.84 | 1.95% | [0.00] ug/L |
| Mo 202.031† | 14.2 | 4.48 | 31.55% | [0.00] ug/L |
| Na 589.592 Radial† | -460.9 | 33.14 | 7.19% | [0.00] ug/L |
| Ni 231.604† | 93.6 | 12.79 | 13.67% | [0.00] ug/L |
| P 214.914† | 168.2 | 7.67 | 4.56% | [0.00] ug/L |
| Pb 220.353† | -58.8 | 5.11 | 8.68% | [0.00] ug/L |
| S 181.975 Axial† | 24.4 | 2.06 | 8.46% | [0.00] ug/L |
| Sb 206.836† | 26.6 | 6.94 | 26.07% | [0.00] ug/L |
| Se 196.026† | -16.9 | 1.52 | 8.98% | [0.00] ug/L |
| Si 251.611† | 525.5 | 12.10 | 2.30% | [0.00] ug/L |
| Sn 189.927† | 3.1 | 8.09 | 262.02% | [0.00] ug/L |
| Sr 421.552† | 70.0 | 11.90 | 16.99% | [0.00] ug/L |
| Ti 334.940† | -1083.3 | 36.23 | 3.34% | [0.00] ug/L |
| Tl 190.801† | -25.1 | 0.36 | 1.43% | [0.00] ug/L |
| U 409.014† | -2035.2 | 86.16 | 4.23% | [0.00] ug/L |
| V 292.402† | -1427.5 | 34.43 | 2.41% | [0.00] ug/L |

| | | | | |
|-------------|-------|------|-------|-------------|
| Zn 213.857† | 606.4 | 5.02 | 0.83% | [0.00] ug/L |
| SiO2† | 553.4 | 2.90 | 0.52% | [0.00] ug/L |

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/25/2010 07:43:23
 Data Type: Reprocessed on 3/25/2010 09:41:36
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|-------------------|------------------|------------------------|-----------------------|------------------|
| 1 | Sc 361.383 | 821023.4 | 821023.4 | 97.758 % | 07:46:32 |
| 1 | Sc Radial | 4127.0 | 4127.0 | 102 % | 07:45:35 |
| 1 | Y 371.029 | 698941.8 | 698941.8 | 97.607 % | 07:46:32 |
| 1 | Y RADIAL | 4473.9 | 4473.9 | 99.02 % | 07:45:35 |
| 1 | Ag 328.068† | 19878.5 | 20081.1 | [100] ug/L | 07:46:32 |
| 1 | As 188.979† | 160.7 | 185.2 | [100] ug/L | 07:46:52 |
| 1 | B 249.677† | 3185.5 | 3508.7 | [100] ug/L | 07:46:32 |
| 1 | Ba 233.527† | 10757.3 | 10985.5 | [100] ug/L | 07:46:32 |
| 1 | Be 313.107† | 240605.7 | 250387.2 | [100] ug/L | 07:46:32 |
| 1 | Cd 226.502† | 6844.8 | 7168.2 | [100] ug/L | 07:46:52 |
| 1 | Co 228.616† | 3880.7 | 4008.7 | [100] ug/L | 07:46:52 |
| 1 | Cr 267.716† | 7787.1 | 7870.8 | [100] ug/L | 07:46:32 |
| 1 | Cu 324.752† | 36784.8 | 31275.8 | [100] ug/L | 07:46:32 |
| 1 | K 766.490 Radial† | 7777.2 | 4798.4 | [1000] ug/L | 07:45:15 |
| 1 | Mn 257.610† | 77724.0 | 79054.4 | [100] ug/L | 07:46:32 |
| 1 | Mo 202.031† | 1161.8 | 1174.2 | [100] ug/L | 07:46:52 |
| 1 | Ni 231.604† | 3327.8 | 3310.5 | [100] ug/L | 07:46:52 |
| 1 | P 214.914† | 873.8 | 725.6 | [500] ug/L | 07:46:52 |
| 1 | Pb 220.353† | 616.2 | 689.1 | [100] ug/L | 07:46:52 |
| 1 | S 181.975 Axial† | 139.9 | 118.8 | [200] ug/L | 07:46:52 |
| 1 | Sb 206.836† | 258.3 | 237.6 | [100] ug/L | 07:46:52 |
| 1 | Se 196.026† | 101.3 | 120.6 | [100] ug/L | 07:46:52 |
| 1 | Si 251.611† | 13686.8 | 13475.3 | [500] ug/L | 07:46:32 |
| 1 | Sn 189.927† | 439.4 | 446.4 | [100] ug/L | 07:46:52 |
| 1 | Sr 421.552† | 12051.5 | 11709.4 | [100] ug/L | 07:45:35 |
| 1 | Ti 334.940† | 56390.3 | 58767.1 | [100] ug/L | 07:46:32 |
| 1 | Tl 190.801† | 240.2 | 270.7 | [100] ug/L | 07:46:52 |
| 1 | U 409.014† | 1416.4 | 3484.0 | [100] ug/L | 07:46:32 |
| 1 | V 292.402† | 11376.3 | 13064.8 | [100] ug/L | 07:46:32 |
| 1 | Zn 213.857† | 9118.3 | 8721.1 | [100] ug/L | 07:46:32 |
| 1 | SiO2† | 13925.9 | 13692.0 | [1069.5] ug/L | 07:47:49 |
| 2 | Sc 361.383 | 833646.3 | 833646.3 | 99.261 % | 07:46:58 |
| 2 | Sc Radial | 4215.1 | 4215.1 | 104 % | 07:46:00 |
| 2 | Y 371.029 | 709448.6 | 709448.6 | 99.075 % | 07:46:58 |
| 2 | Y RADIAL | 4571.2 | 4571.2 | 101.2 % | 07:46:00 |
| 2 | Ag 328.068† | 20388.2 | 20286.6 | [100] ug/L | 07:46:58 |
| 2 | As 188.979† | 167.6 | 189.7 | [100] ug/L | 07:47:18 |
| 2 | B 249.677† | 3281.4 | 3556.0 | [100] ug/L | 07:46:58 |
| 2 | Ba 233.527† | 10965.8 | 11029.0 | [100] ug/L | 07:46:58 |
| 2 | Be 313.107† | 244618.3 | 250703.0 | [100] ug/L | 07:46:58 |
| 2 | Cd 226.502† | 6846.9 | 7064.3 | [100] ug/L | 07:47:18 |
| 2 | Co 228.616† | 3867.5 | 3935.2 | [100] ug/L | 07:47:18 |
| 2 | Cr 267.716† | 7970.7 | 7935.1 | [100] ug/L | 07:46:58 |
| 2 | Cu 324.752† | 37206.7 | 31131.1 | [100] ug/L | 07:46:58 |
| 2 | K 766.490 Radial† | 7791.7 | 4653.3 | [1000] ug/L | 07:45:40 |
| 2 | Mn 257.610† | 79103.0 | 79239.7 | [100] ug/L | 07:46:58 |
| 2 | Mo 202.031† | 1167.4 | 1161.9 | [100] ug/L | 07:47:18 |
| 2 | Ni 231.604† | 3349.3 | 3280.7 | [100] ug/L | 07:47:18 |
| 2 | P 214.914† | 865.2 | 703.5 | [500] ug/L | 07:47:18 |
| 2 | Pb 220.353† | 606.9 | 670.3 | [100] ug/L | 07:47:18 |
| 2 | S 181.975 Axial† | 137.1 | 113.8 | [200] ug/L | 07:47:18 |
| 2 | Sb 206.836† | 264.7 | 240.1 | [100] ug/L | 07:47:18 |
| 2 | Se 196.026† | 104.6 | 122.3 | [100] ug/L | 07:47:18 |
| 2 | Si 251.611† | 13985.8 | 13564.6 | [500] ug/L | 07:46:58 |
| 2 | Sn 189.927† | 449.7 | 449.9 | [100] ug/L | 07:47:18 |
| 2 | Sr 421.552† | 12194.4 | 11599.9 | [100] ug/L | 07:46:00 |
| 2 | Ti 334.940† | 57297.6 | 58807.7 | [100] ug/L | 07:46:58 |
| 2 | Tl 190.801† | 231.4 | 258.2 | [100] ug/L | 07:47:18 |

| | | | | | | |
|---|-------------------|----------|----------|----------|------|----------|
| 2 | U 409.014† | 1429.1 | 3474.9 | [100] | ug/L | 07:46:58 |
| 2 | V 292.402† | 11662.7 | 13177.1 | [100] | ug/L | 07:46:58 |
| 2 | Zn 213.857† | 9192.0 | 8654.1 | [100] | ug/L | 07:46:58 |
| 2 | SiO2† | 13855.3 | 13405.1 | [1069.5] | ug/L | 07:47:54 |
| 3 | Sc 361.383 | 828606.5 | 828606.5 | 98.661 | % | 07:47:23 |
| 3 | Sc Radial | 4193.1 | 4193.1 | 104 | % | 07:46:25 |
| 3 | Y 371.029 | 705706.8 | 705706.8 | 98.552 | % | 07:47:23 |
| 3 | Y RADIAL | 4561.8 | 4561.8 | 101.0 | % | 07:46:25 |
| 3 | Ag 328.068† | 20096.1 | 20115.5 | [100] | ug/L | 07:47:23 |
| 3 | As 188.979† | 158.7 | 181.6 | [100] | ug/L | 07:47:43 |
| 3 | B 249.677† | 3312.5 | 3607.7 | [100] | ug/L | 07:47:23 |
| 3 | Ba 233.527† | 10875.7 | 11004.9 | [100] | ug/L | 07:47:23 |
| 3 | Be 313.107† | 242954.3 | 250515.2 | [100] | ug/L | 07:47:23 |
| 3 | Cd 226.502† | 6797.6 | 7056.3 | [100] | ug/L | 07:47:43 |
| 3 | Co 228.616† | 3855.2 | 3946.4 | [100] | ug/L | 07:47:43 |
| 3 | Cr 267.716† | 7892.1 | 7904.3 | [100] | ug/L | 07:47:23 |
| 3 | Cu 324.752† | 37148.2 | 31299.7 | [100] | ug/L | 07:47:23 |
| 3 | K 766.490 Radial† | 7733.6 | 4636.6 | [1000] | ug/L | 07:46:05 |
| 3 | Mn 257.610† | 78392.6 | 79004.4 | [100] | ug/L | 07:47:23 |
| 3 | Mo 202.031† | 1169.1 | 1170.7 | [100] | ug/L | 07:47:43 |
| 3 | Ni 231.604† | 3335.3 | 3287.0 | [100] | ug/L | 07:47:43 |
| 3 | P 214.914† | 868.7 | 712.3 | [500] | ug/L | 07:47:43 |
| 3 | Pb 220.353† | 611.1 | 678.2 | [100] | ug/L | 07:47:43 |
| 3 | S 181.975 Axial† | 137.4 | 114.8 | [200] | ug/L | 07:47:43 |
| 3 | Sb 206.836† | 250.1 | 226.8 | [100] | ug/L | 07:47:43 |
| 3 | Se 196.026† | 109.9 | 128.3 | [100] | ug/L | 07:47:43 |
| 3 | Si 251.611† | 13803.7 | 13465.7 | [500] | ug/L | 07:47:23 |
| 3 | Sn 189.927† | 455.0 | 458.1 | [100] | ug/L | 07:47:43 |
| 3 | Sr 421.552† | 12158.3 | 11626.4 | [100] | ug/L | 07:46:25 |
| 3 | Ti 334.940† | 56923.7 | 58779.8 | [100] | ug/L | 07:47:23 |
| 3 | Tl 190.801† | 234.4 | 262.7 | [100] | ug/L | 07:47:43 |
| 3 | U 409.014† | 1552.5 | 3608.7 | [100] | ug/L | 07:47:23 |
| 3 | V 292.402† | 11612.6 | 13197.8 | [100] | ug/L | 07:47:23 |
| 3 | Zn 213.857† | 9123.1 | 8640.5 | [100] | ug/L | 07:47:23 |
| 3 | SiO2† | 13861.8 | 13496.6 | [1069.5] | ug/L | 07:47:59 |

Mean Data: S0.1

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|-------------------|--------------------------|----------|-------|----------|-------------|
| Sc 361.383 | 827758.8 | 6354.01 | 0.77% | 98.560 | % |
| Sc Radial | 4178.4 | 45.87 | 1.10% | 104 | % |
| Y 371.029 | 704699.1 | 5325.39 | 0.76% | 98.411 | % |
| Y RADIAL | 4535.6 | 53.66 | 1.18% | 100.4 | % |
| Ag 328.068† | 20161.1 | 110.08 | 0.55% | [100] | ug/L |
| As 188.979† | 185.5 | 4.04 | 2.18% | [100] | ug/L |
| B 249.677† | 3557.4 | 49.51 | 1.39% | [100] | ug/L |
| Ba 233.527† | 11006.5 | 21.74 | 0.20% | [100] | ug/L |
| Be 313.107† | 250535.1 | 158.83 | 0.06% | [100] | ug/L |
| Cd 226.502† | 7096.3 | 62.42 | 0.88% | [100] | ug/L |
| Co 228.616† | 3963.5 | 39.55 | 1.00% | [100] | ug/L |
| Cr 267.716† | 7903.4 | 32.18 | 0.41% | [100] | ug/L |
| Cu 324.752† | 31235.5 | 91.26 | 0.29% | [100] | ug/L |
| K 766.490 Radial† | 4696.1 | 88.99 | 1.90% | [1000] | ug/L |
| Mn 257.610† | 79099.5 | 124.00 | 0.16% | [100] | ug/L |
| Mo 202.031† | 1169.0 | 6.33 | 0.54% | [100] | ug/L |
| Ni 231.604† | 3292.7 | 15.73 | 0.48% | [100] | ug/L |
| P 214.914† | 713.8 | 11.16 | 1.56% | [500] | ug/L |
| Pb 220.353† | 679.2 | 9.46 | 1.39% | [100] | ug/L |
| S 181.975 Axial† | 115.8 | 2.62 | 2.26% | [200] | ug/L |
| Sb 206.836† | 234.8 | 7.04 | 3.00% | [100] | ug/L |
| Se 196.026† | 123.8 | 4.06 | 3.28% | [100] | ug/L |
| Si 251.611† | 13501.8 | 54.53 | 0.40% | [500] | ug/L |
| Sn 189.927† | 451.5 | 5.99 | 1.33% | [100] | ug/L |
| Sr 421.552† | 11645.2 | 57.14 | 0.49% | [100] | ug/L |
| Ti 334.940† | 58784.9 | 20.77 | 0.04% | [100] | ug/L |
| Tl 190.801† | 263.9 | 6.35 | 2.41% | [100] | ug/L |
| U 409.014† | 3522.6 | 74.79 | 2.12% | [100] | ug/L |
| V 292.402† | 13146.5 | 71.54 | 0.54% | [100] | ug/L |
| Zn 213.857† | 8671.9 | 43.13 | 0.50% | [100] | ug/L |
| SiO2† | 13531.2 | 146.55 | 1.08% | [1069.5] | ug/L |

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/25/2010 07:50:09
 Data Type: Reprocessed on 3/25/2010 09:41:41
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|-------------------|------------------|------------------------|-----------------------|------------------|
| 1 | Sc 361.383 | 841974.3 | 841974.3 | 100.25 % | 07:53:19 |
| 1 | Sc Radial | 4011.4 | 4011.4 | 99.4 % | 07:52:22 |
| 1 | Y 371.029 | 709346.7 | 709346.7 | 99.060 % | 07:53:19 |
| 1 | Y RADIAL | 4397.0 | 4397.0 | 97.32 % | 07:52:01 |
| 1 | Ag 328.068† | 99753.1 | 99248.7 | [500] ug/L | 07:53:24 |
| 1 | Al 396.153Radial† | 4657.2 | 4762.9 | [5000] ug/L | 07:52:01 |
| 1 | As 188.979† | 906.2 | 924.8 | [500] ug/L | 07:53:44 |
| 1 | B 249.677† | 17632.0 | 17837.8 | [500] ug/L | 07:53:24 |
| 1 | Ba 233.527† | 53079.4 | 52927.4 | [500] ug/L | 07:53:24 |
| 1 | Be 313.107† | 1232123.8 | 1233285.8 | [500] ug/L | 07:53:19 |
| 1 | Ca 317.933Radial† | 2536.9 | 2533.9 | [5000] ug/L | 07:52:22 |
| 1 | Cd 226.502† | 35169.9 | 35247.8 | [500] ug/L | 07:53:24 |
| 1 | Co 228.616† | 19413.5 | 19403.5 | [500] ug/L | 07:53:24 |
| 1 | Cr 267.716† | 38241.2 | 38050.0 | [500] ug/L | 07:53:24 |
| 1 | Cu 324.752† | 157681.8 | 150932.2 | [500] ug/L | 07:53:24 |
| 1 | K 766.490 Radial† | 27275.5 | 24624.7 | [5000] ug/L | 07:52:01 |
| 1 | Mg 279.077 IEC† | 121.8 | 121.8 | [5000] ug/L | 07:52:22 |
| 1 | Mn 257.610† | 373488.5 | 372096.1 | [500] ug/L | 07:53:24 |
| 1 | Mo 202.031† | 5711.5 | 5682.9 | [500] ug/L | 07:53:44 |
| 1 | Ni 231.604† | 16266.4 | 16131.9 | [500] ug/L | 07:53:24 |
| 1 | P 214.914† | 3611.5 | 3434.2 | [2500] ug/L | 07:53:44 |
| 1 | Pb 220.353† | 3231.1 | 3281.8 | [500] ug/L | 07:53:44 |
| 1 | S 181.975 Axial† | 604.7 | 578.8 | [1000] ug/L | 07:53:44 |
| 1 | Sb 206.836† | 1191.8 | 1162.1 | [500] ug/L | 07:53:44 |
| 1 | Se 196.026† | 609.3 | 624.7 | [500] ug/L | 07:53:44 |
| 1 | Si 251.611† | 67271.8 | 66577.1 | [2500] ug/L | 07:53:24 |
| 1 | Sn 189.927† | 2251.0 | 2242.2 | [500] ug/L | 07:53:44 |
| 1 | Sr 421.552† | 56646.1 | 56892.7 | [500] ug/L | 07:52:01 |
| 1 | Ti 334.940† | 284907.4 | 285273.7 | [500] ug/L | 07:53:24 |
| 1 | Tl 190.801† | 1245.3 | 1267.2 | [500] ug/L | 07:53:44 |
| 1 | U 409.014† | 15111.9 | 17109.0 | [500] ug/L | 07:53:24 |
| 1 | V 292.402† | 62766.6 | 64036.2 | [500] ug/L | 07:53:24 |
| 1 | Zn 213.857† | 42526.1 | 41812.6 | [500] ug/L | 07:53:24 |
| 1 | SiO2† | 67019.3 | 66297.3 | [5347.5] ug/L | 07:54:51 |
| 2 | Sc 361.383 | 846719.0 | 846719.0 | 100.82 % | 07:53:49 |
| 2 | Sc Radial | 3978.2 | 3978.2 | 98.6 % | 07:52:47 |
| 2 | Y 371.029 | 713643.5 | 713643.5 | 99.660 % | 07:53:49 |
| 2 | Y RADIAL | 4546.4 | 4546.4 | 100.6 % | 07:52:27 |
| 2 | Ag 328.068† | 99872.8 | 98809.9 | [500] ug/L | 07:53:55 |
| 2 | Al 396.153Radial† | 4808.0 | 4954.9 | [5000] ug/L | 07:52:27 |
| 2 | As 188.979† | 911.1 | 924.5 | [500] ug/L | 07:54:15 |
| 2 | B 249.677† | 17631.3 | 17738.5 | [500] ug/L | 07:53:55 |
| 2 | Ba 233.527† | 53130.5 | 52681.3 | [500] ug/L | 07:53:55 |
| 2 | Be 313.107† | 1239244.9 | 1233462.1 | [500] ug/L | 07:53:49 |
| 2 | Ca 317.933Radial† | 2531.7 | 2550.0 | [5000] ug/L | 07:52:47 |
| 2 | Cd 226.502† | 35234.8 | 35115.6 | [500] ug/L | 07:53:55 |
| 2 | Co 228.616† | 19493.5 | 19374.4 | [500] ug/L | 07:53:55 |
| 2 | Cr 267.716† | 38351.3 | 37945.4 | [500] ug/L | 07:53:55 |
| 2 | Cu 324.752† | 157772.5 | 150140.8 | [500] ug/L | 07:53:55 |
| 2 | K 766.490 Radial† | 27961.8 | 25549.9 | [5000] ug/L | 07:52:27 |
| 2 | Mg 279.077 IEC† | 119.2 | 120.2 | [5000] ug/L | 07:52:47 |
| 2 | Mn 257.610† | 374023.1 | 370538.8 | [500] ug/L | 07:53:55 |
| 2 | Mo 202.031† | 5721.5 | 5660.9 | [500] ug/L | 07:54:15 |
| 2 | Ni 231.604† | 16358.6 | 16132.4 | [500] ug/L | 07:53:55 |
| 2 | P 214.914† | 3606.1 | 3408.7 | [2500] ug/L | 07:54:15 |
| 2 | Pb 220.353† | 3227.3 | 3260.0 | [500] ug/L | 07:54:15 |
| 2 | S 181.975 Axial† | 589.5 | 560.4 | [1000] ug/L | 07:54:15 |
| 2 | Sb 206.836† | 1197.0 | 1160.6 | [500] ug/L | 07:54:15 |

| | | | | | | |
|---|-------------------|-----------|-----------|----------|------|----------|
| 2 | Se 196.026† | 611.3 | 623.3 | [500] | ug/L | 07:54:15 |
| 2 | Si 251.611† | 67305.9 | 66234.9 | [2500] | ug/L | 07:53:55 |
| 2 | Sn 189.927† | 2268.2 | 2246.7 | [500] | ug/L | 07:54:15 |
| 2 | Sr 421.552† | 58458.6 | 59206.8 | [500] | ug/L | 07:52:27 |
| 2 | Ti 334.940† | 285442.2 | 284211.7 | [500] | ug/L | 07:53:55 |
| 2 | Tl 190.801† | 1248.6 | 1263.5 | [500] | ug/L | 07:54:15 |
| 2 | U 409.014† | 15058.7 | 16971.8 | [500] | ug/L | 07:53:55 |
| 2 | V 292.402† | 62929.8 | 63847.2 | [500] | ug/L | 07:53:55 |
| 2 | Zn 213.857† | 42713.5 | 41760.9 | [500] | ug/L | 07:53:55 |
| 2 | SiO2† | 66614.6 | 65521.3 | [5347.5] | ug/L | 07:54:56 |
| 3 | Sc 361.383 | 830346.7 | 830346.7 | 98.868 | % | 07:54:20 |
| 3 | Sc Radial | 4008.7 | 4008.7 | 99.4 | % | 07:53:12 |
| 3 | Y 371.029 | 700001.2 | 700001.2 | 97.755 | % | 07:54:20 |
| 3 | Y RADIAL | 4446.3 | 4446.3 | 98.41 | % | 07:52:52 |
| 3 | Ag 328.068† | 100388.7 | 101284.9 | [500] | ug/L | 07:54:25 |
| 3 | Al 396.153Radial† | 4724.6 | 4833.9 | [5000] | ug/L | 07:52:52 |
| 3 | As 188.979† | 897.7 | 928.8 | [500] | ug/L | 07:54:45 |
| 3 | B 249.677† | 17814.4 | 18268.5 | [500] | ug/L | 07:54:25 |
| 3 | Ba 233.527† | 53124.2 | 53714.0 | [500] | ug/L | 07:54:25 |
| 3 | Be 313.107† | 1217307.0 | 1235509.6 | [500] | ug/L | 07:54:20 |
| 3 | Ca 317.933Radial† | 2533.4 | 2532.1 | [5000] | ug/L | 07:53:12 |
| 3 | Cd 226.502† | 35214.6 | 35784.2 | [500] | ug/L | 07:54:25 |
| 3 | Co 228.616† | 19467.0 | 19728.9 | [500] | ug/L | 07:54:25 |
| 3 | Cr 267.716† | 38440.6 | 38785.8 | [500] | ug/L | 07:54:25 |
| 3 | Cu 324.752† | 159005.1 | 154473.2 | [500] | ug/L | 07:54:25 |
| 3 | K 766.490 Radial† | 27457.7 | 24826.7 | [5000] | ug/L | 07:52:52 |
| 3 | Mg 279.077 IEC† | 119.3 | 119.4 | [5000] | ug/L | 07:53:12 |
| 3 | Mn 257.610† | 374717.1 | 378555.7 | [500] | ug/L | 07:54:25 |
| 3 | Mo 202.031† | 5739.1 | 5790.7 | [500] | ug/L | 07:54:45 |
| 3 | Ni 231.604† | 16327.5 | 16420.9 | [500] | ug/L | 07:54:25 |
| 3 | P 214.914† | 3606.4 | 3479.5 | [2500] | ug/L | 07:54:45 |
| 3 | Pb 220.353† | 3223.1 | 3318.8 | [500] | ug/L | 07:54:45 |
| 3 | S 181.975 Axial† | 597.5 | 580.0 | [1000] | ug/L | 07:54:45 |
| 3 | Sb 206.836† | 1202.1 | 1189.2 | [500] | ug/L | 07:54:45 |
| 3 | Se 196.026† | 603.7 | 627.5 | [500] | ug/L | 07:54:45 |
| 3 | Si 251.611† | 67670.2 | 67919.6 | [2500] | ug/L | 07:54:25 |
| 3 | Sn 189.927† | 2265.1 | 2288.0 | [500] | ug/L | 07:54:45 |
| 3 | Sr 421.552† | 57171.8 | 57460.4 | [500] | ug/L | 07:52:52 |
| 3 | Ti 334.940† | 286774.2 | 291141.6 | [500] | ug/L | 07:54:25 |
| 3 | Tl 190.801† | 1251.4 | 1290.8 | [500] | ug/L | 07:54:45 |
| 3 | U 409.014† | 15285.7 | 17495.9 | [500] | ug/L | 07:54:25 |
| 3 | V 292.402† | 63332.3 | 65485.1 | [500] | ug/L | 07:54:25 |
| 3 | Zn 213.857† | 42602.5 | 42483.9 | [500] | ug/L | 07:54:25 |
| 3 | SiO2† | 67335.3 | 67553.0 | [5347.5] | ug/L | 07:55:01 |

Mean Data: S0.5

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|-------------------|--------------------------|----------|-------|--------|-------------|
| Sc 361.383 | 839680.0 | 8423.83 | 1.00% | 99.979 | % |
| Sc Radial | 3999.4 | 18.47 | 0.46% | 99.1 | % |
| Y 371.029 | 707663.8 | 6975.11 | 0.99% | 98.825 | % |
| Y RADIAL | 4463.2 | 76.14 | 1.71% | 98.79 | % |
| Ag 328.068† | 99781.2 | 1320.62 | 1.32% | [500] | ug/L |
| Al 396.153Radial† | 4850.6 | 97.12 | 2.00% | [5000] | ug/L |
| As 188.979† | 926.0 | 2.43 | 0.26% | [500] | ug/L |
| B 249.677† | 17948.3 | 281.73 | 1.57% | [500] | ug/L |
| Ba 233.527† | 53107.6 | 539.46 | 1.02% | [500] | ug/L |
| Be 313.107† | 1234085.9 | 1236.18 | 0.10% | [500] | ug/L |
| Ca 317.933Radial† | 2538.7 | 9.87 | 0.39% | [5000] | ug/L |
| Cd 226.502† | 35382.6 | 354.09 | 1.00% | [500] | ug/L |
| Co 228.616† | 19502.3 | 196.78 | 1.01% | [500] | ug/L |
| Cr 267.716† | 38260.4 | 458.03 | 1.20% | [500] | ug/L |
| Cu 324.752† | 151848.7 | 2307.01 | 1.52% | [500] | ug/L |
| K 766.490 Radial† | 25000.4 | 486.47 | 1.95% | [5000] | ug/L |
| Mg 279.077 IEC† | 120.4 | 1.22 | 1.01% | [5000] | ug/L |
| Mn 257.610† | 373730.2 | 4250.94 | 1.14% | [500] | ug/L |
| Mo 202.031† | 5711.5 | 69.44 | 1.22% | [500] | ug/L |
| Ni 231.604† | 16228.4 | 166.71 | 1.03% | [500] | ug/L |
| P 214.914† | 3440.8 | 35.84 | 1.04% | [2500] | ug/L |
| Pb 220.353† | 3286.9 | 29.77 | 0.91% | [500] | ug/L |

| | | | | | |
|------------------|----------|---------|-------|----------|------|
| S 181.975 Axial† | 573.1 | 11.00 | 1.92% | [1000] | ug/L |
| Sb 206.836† | 1170.7 | 16.08 | 1.37% | [500] | ug/L |
| Se 196.026† | 625.2 | 2.13 | 0.34% | [500] | ug/L |
| Si 251.611† | 66910.5 | 890.51 | 1.33% | [2500] | ug/L |
| Sn 189.927† | 2259.0 | 25.23 | 1.12% | [500] | ug/L |
| Sr 421.552† | 57853.3 | 1206.07 | 2.08% | [500] | ug/L |
| Ti 334.940† | 286875.7 | 3732.34 | 1.30% | [500] | ug/L |
| Tl 190.801† | 1273.9 | 14.82 | 1.16% | [500] | ug/L |
| U 409.014† | 17192.2 | 271.83 | 1.58% | [500] | ug/L |
| V 292.402† | 64456.1 | 896.08 | 1.39% | [500] | ug/L |
| Zn 213.857† | 42019.1 | 403.33 | 0.96% | [500] | ug/L |
| SiO2† | 66457.2 | 1025.28 | 1.54% | [5347.5] | ug/L |

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 3/25/2010 07:57:12
 Data Type: Reprocessed on 3/25/2010 09:41:42
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|------------------|
| 1 | Sc 361.383 | 836028.2 | 836028.2 | 99.544 % | 08:00:24 |
| 1 | Sc Radial | 3994.3 | 3994.3 | 99.0 % | 07:59:25 |
| 1 | Y 371.029 | 702397.8 | 702397.8 | 98.090 % | 08:00:24 |
| 1 | Y RADIAL | 4515.2 | 4515.2 | 99.94 % | 07:59:05 |
| 1 | Ag 328.068† | 197469.4 | 198119.9 | [1000] ug/L | 08:00:24 |
| 1 | Al 396.153Radial† | 9697.8 | 9873.3 | [10000] ug/L | 07:59:05 |
| 1 | As 188.979† | 1838.9 | 1868.2 | [1000] ug/L | 08:00:44 |
| 1 | B 249.677† | 36156.4 | 36572.1 | [1000] ug/L | 08:00:24 |
| 1 | Ba 233.527† | 106341.0 | 106809.3 | [1000] ug/L | 08:00:24 |
| 1 | Be 313.107† | 2447465.3 | 2462931.9 | [1000] ug/L | 08:00:24 |
| 1 | Ca 317.933Radial† | 5226.4 | 5260.9 | [10000] ug/L | 07:59:05 |
| 1 | Cd 226.502† | 70535.9 | 71025.2 | [1000] ug/L | 08:00:24 |
| 1 | Co 228.616† | 37910.1 | 38122.6 | [1000] ug/L | 08:00:44 |
| 1 | Cr 267.716† | 76637.1 | 76893.0 | [1000] ug/L | 08:00:24 |
| 1 | Cu 324.752† | 314991.4 | 310080.6 | [1000] ug/L | 08:00:24 |
| 1 | Fe 238.204 Radial† | 829.7 | 828.9 | [10000] ug/L | 07:59:25 |
| 1 | K 766.490 Radial† | 53321.8 | 51046.0 | [10000] ug/L | 07:59:05 |
| 1 | Mg 279.077 IEC† | 240.5 | 242.2 | [10000] ug/L | 07:59:25 |
| 1 | Mn 257.610† | 763213.2 | 766254.6 | [1000] ug/L | 08:00:24 |
| 1 | Mo 202.031† | 11272.6 | 11310.1 | [1000] ug/L | 08:00:44 |
| 1 | Na 589.592 Radial† | 25374.6 | 26086.5 | [10000] ug/L | 07:59:05 |
| 1 | Ni 231.604† | 31742.4 | 31794.1 | [1000] ug/L | 08:00:44 |
| 1 | P 214.914† | 7085.2 | 6949.4 | [5000] ug/L | 08:00:44 |
| 1 | Pb 220.353† | 6541.7 | 6630.4 | [1000] ug/L | 08:00:44 |
| 1 | S 181.975 Axial† | 1148.2 | 1129.1 | [2000] ug/L | 08:00:44 |
| 1 | Sb 206.836† | 2364.0 | 2348.2 | [1000] ug/L | 08:00:44 |
| 1 | Se 196.026† | 1226.1 | 1248.6 | [1000] ug/L | 08:00:44 |
| 1 | Si 251.611† | 134437.9 | 134527.9 | [5000] ug/L | 08:00:24 |
| 1 | Sn 189.927† | 4478.2 | 4495.7 | [1000] ug/L | 08:00:44 |
| 1 | Sr 421.552† | 119226.7 | 120335.9 | [1000] ug/L | 07:59:05 |
| 1 | Ti 334.940† | 579430.6 | 583166.5 | [1000] ug/L | 08:00:24 |
| 1 | Tl 190.801† | 2544.0 | 2580.7 | [1000] ug/L | 08:00:44 |
| 1 | U 409.014† | 31774.2 | 33954.8 | [1000] ug/L | 08:00:24 |
| 1 | V 292.402† | 128014.4 | 130027.9 | [1000] ug/L | 08:00:24 |
| 1 | Zn 213.857† | 84582.3 | 84363.1 | [1000] ug/L | 08:00:24 |
| 1 | SiO2† | 134145.3 | 134206.0 | [10695] ug/L | 08:01:44 |
| 2 | Sc 361.383 | 836081.3 | 836081.3 | 99.551 % | 08:00:52 |
| 2 | Sc Radial | 4034.2 | 4034.2 | 100 % | 07:59:50 |
| 2 | Y 371.029 | 701502.4 | 701502.4 | 97.965 % | 08:00:52 |
| 2 | Y RADIAL | 4436.0 | 4436.0 | 98.18 % | 07:59:30 |
| 2 | Ag 328.068† | 197172.0 | 197808.6 | [1000] ug/L | 08:00:52 |
| 2 | Al 396.153Radial† | 9444.3 | 9523.1 | [10000] ug/L | 07:59:30 |
| 2 | As 188.979† | 1834.8 | 1863.9 | [1000] ug/L | 08:01:12 |
| 2 | B 249.677† | 36051.8 | 36464.7 | [1000] ug/L | 08:00:52 |
| 2 | Ba 233.527† | 106428.6 | 106890.5 | [1000] ug/L | 08:00:52 |
| 2 | Be 313.107† | 2443182.4 | 2458473.5 | [1000] ug/L | 08:00:52 |
| 2 | Ca 317.933Radial† | 5131.6 | 5113.9 | [10000] ug/L | 07:59:30 |
| 2 | Cd 226.502† | 70504.1 | 70988.8 | [1000] ug/L | 08:00:52 |
| 2 | Co 228.616† | 38159.4 | 38370.5 | [1000] ug/L | 08:01:12 |
| 2 | Cr 267.716† | 76709.6 | 76960.9 | [1000] ug/L | 08:00:52 |
| 2 | Cu 324.752† | 313793.7 | 308857.4 | [1000] ug/L | 08:00:52 |
| 2 | Fe 238.204 Radial† | 828.9 | 819.8 | [10000] ug/L | 07:59:50 |
| 2 | K 766.490 Radial† | 52330.3 | 49522.1 | [10000] ug/L | 07:59:30 |
| 2 | Mg 279.077 IEC† | 243.7 | 243.0 | [10000] ug/L | 07:59:50 |
| 2 | Mn 257.610† | 763197.2 | 766189.8 | [1000] ug/L | 08:00:52 |
| 2 | Mo 202.031† | 11357.3 | 11394.4 | [1000] ug/L | 08:01:12 |
| 2 | Na 589.592 Radial† | 24781.1 | 25239.7 | [10000] ug/L | 07:59:30 |
| 2 | Ni 231.604† | 31956.8 | 32007.4 | [1000] ug/L | 08:01:12 |

| | | | | | | |
|---|--------------------|-----------|-----------|---------|------|----------|
| 2 | P 214.914† | 7127.7 | 6991.6 | [5000] | ug/L | 08:01:12 |
| 2 | Pb 220.353† | 6577.0 | 6665.5 | [1000] | ug/L | 08:01:12 |
| 2 | S 181.975 Axial† | 1167.6 | 1148.5 | [2000] | ug/L | 08:01:12 |
| 2 | Sb 206.836† | 2383.9 | 2368.0 | [1000] | ug/L | 08:01:12 |
| 2 | Se 196.026† | 1242.5 | 1265.0 | [1000] | ug/L | 08:01:12 |
| 2 | Si 251.611† | 134446.4 | 134527.9 | [5000] | ug/L | 08:00:52 |
| 2 | Sn 189.927† | 4509.1 | 4526.4 | [1000] | ug/L | 08:01:12 |
| 2 | Sr 421.552† | 116230.7 | 116149.7 | [1000] | ug/L | 07:59:30 |
| 2 | Ti 334.940† | 579678.4 | 583378.4 | [1000] | ug/L | 08:00:52 |
| 2 | Tl 190.801† | 2562.3 | 2598.9 | [1000] | ug/L | 08:01:12 |
| 2 | U 409.014† | 31634.3 | 33812.2 | [1000] | ug/L | 08:00:52 |
| 2 | V 292.402† | 127716.9 | 129720.9 | [1000] | ug/L | 08:00:52 |
| 2 | Zn 213.857† | 84422.3 | 84197.0 | [1000] | ug/L | 08:00:52 |
| 2 | SiO2† | 133295.9 | 133344.3 | [10695] | ug/L | 08:01:50 |
| 3 | Sc 361.383 | 833096.1 | 833096.1 | 99.195 | % | 08:01:19 |
| 3 | Sc Radial | 4008.5 | 4008.5 | 99.4 | % | 08:00:15 |
| 3 | Y 371.029 | 700484.3 | 700484.3 | 97.823 | % | 08:01:19 |
| 3 | Y RADIAL | 4465.3 | 4465.3 | 98.83 | % | 07:59:55 |
| 3 | Ag 328.068† | 196785.4 | 198128.7 | [1000] | ug/L | 08:01:19 |
| 3 | Al 396.153Radial† | 9492.4 | 9632.0 | [10000] | ug/L | 07:59:55 |
| 3 | As 188.979† | 1838.4 | 1874.1 | [1000] | ug/L | 08:01:39 |
| 3 | B 249.677† | 35948.9 | 36490.7 | [1000] | ug/L | 08:01:19 |
| 3 | Ba 233.527† | 105720.3 | 106559.5 | [1000] | ug/L | 08:01:19 |
| 3 | Be 313.107† | 2438545.2 | 2462592.9 | [1000] | ug/L | 08:01:19 |
| 3 | Ca 317.933Radial† | 5137.4 | 5152.7 | [10000] | ug/L | 07:59:55 |
| 3 | Cd 226.502† | 70062.2 | 70797.0 | [1000] | ug/L | 08:01:19 |
| 3 | Co 228.616† | 37950.4 | 38297.2 | [1000] | ug/L | 08:01:39 |
| 3 | Cr 267.716† | 76200.3 | 76723.6 | [1000] | ug/L | 08:01:19 |
| 3 | Cu 324.752† | 313478.5 | 309669.1 | [1000] | ug/L | 08:01:19 |
| 3 | Fe 238.204 Radial† | 827.7 | 823.9 | [10000] | ug/L | 08:00:15 |
| 3 | K 766.490 Radial† | 52343.1 | 49870.6 | [10000] | ug/L | 07:59:55 |
| 3 | Mg 279.077 IEC† | 239.0 | 239.8 | [10000] | ug/L | 08:00:15 |
| 3 | Mn 257.610† | 758515.2 | 764216.9 | [1000] | ug/L | 08:01:19 |
| 3 | Mo 202.031† | 11295.5 | 11372.9 | [1000] | ug/L | 08:01:39 |
| 3 | Na 589.592 Radial† | 24817.1 | 25434.8 | [10000] | ug/L | 07:59:55 |
| 3 | Ni 231.604† | 31760.6 | 31924.6 | [1000] | ug/L | 08:01:39 |
| 3 | P 214.914† | 7088.9 | 6978.2 | [5000] | ug/L | 08:01:39 |
| 3 | Pb 220.353† | 6530.7 | 6642.5 | [1000] | ug/L | 08:01:39 |
| 3 | S 181.975 Axial† | 1156.2 | 1141.2 | [2000] | ug/L | 08:01:39 |
| 3 | Sb 206.836† | 2361.3 | 2353.8 | [1000] | ug/L | 08:01:39 |
| 3 | Se 196.026† | 1227.7 | 1254.6 | [1000] | ug/L | 08:01:39 |
| 3 | Si 251.611† | 133582.1 | 134140.4 | [5000] | ug/L | 08:01:19 |
| 3 | Sn 189.927† | 4487.7 | 4521.0 | [1000] | ug/L | 08:01:39 |
| 3 | Sr 421.552† | 116468.3 | 117134.2 | [1000] | ug/L | 07:59:55 |
| 3 | Ti 334.940† | 576770.7 | 582533.7 | [1000] | ug/L | 08:01:19 |
| 3 | Tl 190.801† | 2561.0 | 2606.9 | [1000] | ug/L | 08:01:39 |
| 3 | U 409.014† | 31561.3 | 33852.5 | [1000] | ug/L | 08:01:19 |
| 3 | V 292.402† | 127502.9 | 129965.0 | [1000] | ug/L | 08:01:19 |
| 3 | Zn 213.857† | 83921.6 | 83996.1 | [1000] | ug/L | 08:01:19 |
| 3 | SiO2† | 134171.9 | 134707.1 | [10695] | ug/L | 08:01:55 |

Mean Data: SCAL

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Calib Conc. Units |
|--------------------|-----------------------------|----------|-------|----------------------|
| Sc 361.383 | 835068.6 | 1708.41 | 0.20% | 99.430 % |
| Sc Radial | 4012.3 | 20.22 | 0.50% | 99.5 % |
| Y 371.029 | 701461.5 | 957.39 | 0.14% | 97.959 % |
| Y RADIAL | 4472.2 | 40.09 | 0.90% | 98.98 % |
| Ag 328.068† | 198019.1 | 182.31 | 0.09% | [1000] ug/L |
| Al 396.153Radial† | 9676.1 | 179.24 | 1.85% | [10000] ug/L |
| As 188.979† | 1868.7 | 5.15 | 0.28% | [1000] ug/L |
| B 249.677† | 36509.2 | 56.02 | 0.15% | [1000] ug/L |
| Ba 233.527† | 106753.1 | 172.50 | 0.16% | [1000] ug/L |
| Be 313.107† | 2461332.8 | 2481.99 | 0.10% | [1000] ug/L |
| Ca 317.933Radial† | 5175.8 | 76.18 | 1.47% | [10000] ug/L |
| Cd 226.502† | 70937.0 | 122.57 | 0.17% | [1000] ug/L |
| Co 228.616† | 38263.4 | 127.38 | 0.33% | [1000] ug/L |
| Cr 267.716† | 76859.2 | 122.25 | 0.16% | [1000] ug/L |
| Cu 324.752† | 309535.7 | 622.39 | 0.20% | [1000] ug/L |
| Fe 238.204 Radial† | 824.2 | 4.59 | 0.56% | [10000] ug/L |

| | | | | | |
|--------------------|----------|---------|-------|---------|------|
| K 766.490 Radial† | 50146.2 | 798.45 | 1.59% | [10000] | ug/L |
| Mg 279.077 IEC† | 241.7 | 1.64 | 0.68% | [10000] | ug/L |
| Mn 257.610† | 765553.8 | 1158.21 | 0.15% | [1000] | ug/L |
| Mo 202.031† | 11359.1 | 43.82 | 0.39% | [1000] | ug/L |
| Na 589.592 Radial† | 25587.0 | 443.45 | 1.73% | [10000] | ug/L |
| Ni 231.604† | 31908.7 | 107.52 | 0.34% | [1000] | ug/L |
| P 214.914† | 6973.1 | 21.55 | 0.31% | [5000] | ug/L |
| Pb 220.353† | 6646.1 | 17.84 | 0.27% | [1000] | ug/L |
| S 181.975 Axial† | 1139.6 | 9.78 | 0.86% | [2000] | ug/L |
| Sb 206.836† | 2356.7 | 10.22 | 0.43% | [1000] | ug/L |
| Se 196.026† | 1256.1 | 8.31 | 0.66% | [1000] | ug/L |
| Si 251.611† | 134398.7 | 223.70 | 0.17% | [5000] | ug/L |
| Sn 189.927† | 4514.4 | 16.43 | 0.36% | [1000] | ug/L |
| Sr 421.552† | 117873.3 | 2188.78 | 1.86% | [1000] | ug/L |
| Ti 334.940† | 583026.2 | 439.50 | 0.08% | [1000] | ug/L |
| Tl 190.801† | 2595.5 | 13.42 | 0.52% | [1000] | ug/L |
| U 409.014† | 33873.2 | 73.50 | 0.22% | [1000] | ug/L |
| V 292.402† | 129904.6 | 162.16 | 0.12% | [1000] | ug/L |
| Zn 213.857† | 84185.4 | 183.77 | 0.22% | [1000] | ug/L |
| SiO2† | 134085.8 | 689.33 | 0.51% | [10695] | ug/L |

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/25/2010 08:04:05
 Data Type: Reprocessed on 3/25/2010 09:41:43
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|---------------|
| 1 | Sc 361.383 | 814570.1 | 814570.1 | 96.989 % | 08:07:16 |
| 1 | Sc Radial | 4084.3 | 4084.3 | 101 % | 08:06:19 |
| 1 | Y 371.029 | 681370.4 | 681370.4 | 95.154 % | 08:07:16 |
| 1 | Y RADIAL | 4398.8 | 4398.8 | 97.36 % | 08:06:19 |
| 1 | Al 396.153Radial† | 46686.9 | 46189.2 | [50000] ug/L | 08:05:59 |
| 1 | Ca 317.933Radial† | 24518.1 | 24197.7 | [50000] ug/L | 08:05:59 |
| 1 | Fe 238.204 Radial† | 1599.7 | 1570.9 | [20000] ug/L | 08:06:19 |
| 1 | Mg 279.077 IEC† | 1150.4 | 1135.5 | [50000] ug/L | 08:06:19 |
| 1 | Na 589.592 Radial† | 50513.9 | 50350.1 | [20000] ug/L | 08:05:59 |
| 2 | Sc 361.383 | 811526.2 | 811526.2 | 96.627 % | 08:07:22 |
| 2 | Sc Radial | 4063.0 | 4063.0 | 101 % | 08:06:44 |
| 2 | Y 371.029 | 679014.3 | 679014.3 | 94.824 % | 08:07:22 |
| 2 | Y RADIAL | 4381.4 | 4381.4 | 96.98 % | 08:06:44 |
| 2 | Al 396.153Radial† | 46908.1 | 46650.8 | [50000] ug/L | 08:06:24 |
| 2 | Ca 317.933Radial† | 24653.9 | 24459.6 | [50000] ug/L | 08:06:24 |
| 2 | Fe 238.204 Radial† | 1623.7 | 1603.0 | [20000] ug/L | 08:06:44 |
| 2 | Mg 279.077 IEC† | 1154.0 | 1145.0 | [50000] ug/L | 08:06:44 |
| 2 | Na 589.592 Radial† | 50550.6 | 50648.4 | [20000] ug/L | 08:06:24 |
| 3 | Sc 361.383 | 813679.7 | 813679.7 | 96.883 % | 08:07:27 |
| 3 | Sc Radial | 4043.8 | 4043.8 | 100 % | 08:07:09 |
| 3 | Y 371.029 | 680826.7 | 680826.7 | 95.078 % | 08:07:27 |
| 3 | Y RADIAL | 4360.6 | 4360.6 | 96.52 % | 08:07:09 |
| 3 | Al 396.153Radial† | 47719.4 | 47681.3 | [50000] ug/L | 08:06:49 |
| 3 | Ca 317.933Radial† | 25074.0 | 24995.0 | [50000] ug/L | 08:06:49 |
| 3 | Fe 238.204 Radial† | 1600.5 | 1587.6 | [20000] ug/L | 08:07:09 |
| 3 | Mg 279.077 IEC† | 1147.4 | 1143.9 | [50000] ug/L | 08:07:09 |
| 3 | Na 589.592 Radial† | 51265.0 | 51599.4 | [20000] ug/L | 08:06:49 |

Mean Data: S10

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Calib Conc. Units |
|--------------------|--------------------------|----------|-------|-------------------|
| Sc 361.383 | 813258.7 | 1565.00 | 0.19% | 96.833 % |
| Sc Radial | 4063.7 | 20.28 | 0.50% | 101 % |
| Y 371.029 | 680403.8 | 1233.62 | 0.18% | 95.019 % |
| Y RADIAL | 4380.3 | 19.11 | 0.44% | 96.95 % |
| Al 396.153Radial† | 46840.5 | 763.94 | 1.63% | [50000] ug/L |
| Ca 317.933Radial† | 24550.8 | 406.35 | 1.66% | [50000] ug/L |
| Fe 238.204 Radial† | 1587.2 | 16.06 | 1.01% | [20000] ug/L |
| Mg 279.077 IEC† | 1141.4 | 5.19 | 0.45% | [50000] ug/L |
| Na 589.592 Radial† | 50866.0 | 652.44 | 1.28% | [20000] ug/L |

Calibration Summary

| Analyte | Stds. | Equation | Intercept | Slope | Curvature | Corr. Coef. | Reslope |
|------------------|-------|------------|-----------|--------|-----------|-------------|---------|
| Ag 328.068 | 3 | Lin Thru 0 | 0.0 | 198.4 | 0.00000 | 0.999994 | |
| Al 396.153Radial | 3 | Lin Thru 0 | 0.0 | 0.9383 | 0.00000 | 0.999975 | |
| As 188.979 | 3 | Lin Thru 0 | 0.0 | 1.865 | 0.00000 | 0.999994 | |
| B 249.677 | 3 | Lin Thru 0 | 0.0 | 36.38 | 0.00000 | 0.999976 | |
| Ba 233.527 | 3 | Lin Thru 0 | 0.0 | 106.7 | 0.00000 | 0.999994 | |
| Be 313.107 | 3 | Lin Thru 0 | 0.0 | 2463 | 0.00000 | 0.999998 | |
| Ca 317.933Radial | 3 | Lin Thru 0 | 0.0 | 0.4922 | 0.00000 | 0.999942 | |
| Cd 226.502 | 3 | Lin Thru 0 | 0.0 | 70.90 | 0.00000 | 1.000000 | |
| Co 228.616 | 3 | Lin Thru 0 | 0.0 | 38.42 | 0.00000 | 0.999966 | |
| Cr 267.716 | 3 | Lin Thru 0 | 0.0 | 76.81 | 0.00000 | 0.999995 | |
| Cu 324.752 | 3 | Lin Thru 0 | 0.0 | 308.4 | 0.00000 | 0.999971 | |
| Fe 238.204 Radia | 2 | Lin Thru 0 | 0.0 | 0.0800 | 0.00000 | 0.999883 | |

| | | | | | | |
|------------------|---|------------|-----|--------|---------|----------|
| K 766.490 Radial | 3 | Lin Thru 0 | 0.0 | 5.009 | 0.00000 | 0.999984 |
| Mg 279.077 IEC | 3 | Lin Thru 0 | 0.0 | 0.0229 | 0.00000 | 0.999924 |
| Mn 257.610 | 3 | Lin Thru 0 | 0.0 | 762.2 | 0.00000 | 0.999950 |
| Mo 202.031 | 3 | Lin Thru 0 | 0.0 | 11.37 | 0.00000 | 0.999994 |
| Na 589.592 Radia | 2 | Lin Thru 0 | 0.0 | 2.546 | 0.00000 | 0.999997 |
| Ni 231.604 | 3 | Lin Thru 0 | 0.0 | 32.03 | 0.00000 | 0.999974 |
| P 214.914 | 3 | Lin Thru 0 | 0.0 | 1.391 | 0.00000 | 0.999984 |
| Pb 220.353 | 3 | Lin Thru 0 | 0.0 | 6.633 | 0.00000 | 0.999988 |
| S 181.975 Axial | 3 | Lin Thru 0 | 0.0 | 0.5705 | 0.00000 | 0.999997 |
| Sb 206.836 | 3 | Lin Thru 0 | 0.0 | 2.354 | 0.00000 | 0.999997 |
| Se 196.026 | 3 | Lin Thru 0 | 0.0 | 1.255 | 0.00000 | 0.999998 |
| Si 251.611 | 3 | Lin Thru 0 | 0.0 | 26.86 | 0.00000 | 0.999998 |
| Sn 189.927 | 3 | Lin Thru 0 | 0.0 | 4.515 | 0.00000 | 1.000000 |
| Sr 421.552 | 3 | Lin Thru 0 | 0.0 | 117.4 | 0.00000 | 0.999973 |
| Ti 334.940 | 3 | Lin Thru 0 | 0.0 | 581.2 | 0.00000 | 0.999979 |
| Tl 190.801 | 3 | Lin Thru 0 | 0.0 | 2.586 | 0.00000 | 0.999971 |
| U 409.014 | 3 | Lin Thru 0 | 0.0 | 33.99 | 0.00000 | 0.999977 |
| V 292.402 | 3 | Lin Thru 0 | 0.0 | 129.7 | 0.00000 | 0.999995 |
| Zn 213.857 | 3 | Lin Thru 0 | 0.0 | 84.18 | 0.00000 | 0.999996 |
| SiO2 | 3 | Lin Thru 0 | 0.0 | 12.52 | 0.00000 | 0.999993 |

Sequence No.: 6
 Sample ID: ICV
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 3/25/2010 08:09:39
 Data Type: Reprocessed on 3/25/2010 09:41:43
 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 361.383 | 843298.4 | 843298.4 | 100.41 % | | 08:12:50 |
| 1 | Sc Radial | 4058.8 | 4058.8 | 101 % | | 08:11:52 |
| 1 | Y 371.029 | 711724.4 | 711724.4 | 99.392 % | | 08:12:50 |
| 1 | Y RADIAL | 4543.6 | 4543.6 | 100.6 % | | 08:11:32 |
| 1 | Ag 328.068† | 50729.3 | 50268.8 | 256.51 ug/L | 256.51 ppb | 08:12:50 |
| 1 | Al 396.153Radial† | 4683.0 | 4733.8 | 5019.8 ug/L | 5019.8 ppb | 08:11:32 |
| 1 | As 188.979† | 850.7 | 868.1 | 469.50 ug/L | 469.50 ppb | 08:13:10 |
| 1 | B 249.677† | 18280.2 | 18455.8 | 505.05 ug/L | 505.05 ppb | 08:12:50 |
| 1 | Ba 233.527† | 53540.9 | 53303.8 | 500.94 ug/L | 500.94 ppb | 08:12:50 |
| 1 | Be 313.107† | 629873.9 | 631564.9 | 257.53 ug/L | 257.53 ppb | 08:12:50 |
| 1 | Ca 317.933Radial† | 2489.7 | 2457.2 | 4992.5 ug/L | 4992.5 ppb | 08:11:52 |
| 1 | Cd 226.502† | 34793.5 | 34817.8 | 490.96 ug/L | 490.96 ppb | 08:12:50 |
| 1 | Co 228.616† | 19521.9 | 19481.2 | 507.19 ug/L | 507.19 ppb | 08:12:50 |
| 1 | Cr 267.716† | 37001.8 | 36755.7 | 479.57 ug/L | 479.57 ppb | 08:12:50 |
| 1 | Cu 324.752† | 159928.8 | 152923.1 | 495.85 ug/L | 495.85 ppb | 08:12:50 |
| 1 | Fe 238.204 Radial† | 407.9 | 396.4 | 4971.6 ug/L | 4971.6 ppb | 08:11:52 |
| 1 | K 766.490 Radial† | 14878.9 | 11984.1 | 2389.0 ug/L | 2389.0 ppb | 08:11:32 |
| 1 | Mg 279.077 IEC† | 126.1 | 124.6 | 5444.5 ug/L | 5444.5 ppb | 08:11:52 |
| 1 | Mn 257.610† | 388057.6 | 386020.7 | 506.75 ug/L | 506.75 ppb | 08:12:50 |
| 1 | Mo 202.031† | 5979.0 | 5940.4 | 522.71 ug/L | 522.71 ppb | 08:13:10 |
| 1 | Na 589.592 Radial† | 5679.6 | 6105.5 | 2397.7 ug/L | 2397.7 ppb | 08:11:32 |
| 1 | Ni 231.604† | 16230.7 | 16070.8 | 501.51 ug/L | 501.51 ppb | 08:12:50 |
| 1 | P 214.914† | 3597.5 | 3414.5 | 2358.0 ug/L | 2358.0 ppb | 08:13:10 |
| 1 | Pb 220.353† | 3186.3 | 3232.1 | 488.77 ug/L | 488.77 ppb | 08:13:10 |
| 1 | S 181.975 Axial† | 1426.8 | 1396.5 | 2446.9 ug/L | 2446.9 ppb | 08:13:10 |
| 1 | Sb 206.836† | 1202.7 | 1171.1 | 516.46 ug/L | 516.46 ppb | 08:13:10 |
| 1 | Se 196.026† | 3154.3 | 3158.4 | 2535.2 ug/L | 2535.2 ppb | 08:13:10 |
| 1 | Si 251.611† | 130767.6 | 129708.3 | 4823.0 ug/L | 4823.0 ppb | 08:12:50 |
| 1 | Sn 189.927† | 2381.5 | 2368.7 | 525.23 ug/L | 525.23 ppb | 08:13:10 |
| 1 | Sr 421.552† | 60508.2 | 60066.0 | 511.46 ug/L | 511.46 ppb | 08:11:32 |
| 1 | Ti 334.940† | 283956.8 | 283880.8 | 488.25 ug/L | 488.25 ppb | 08:12:50 |
| 1 | Tl 190.801† | 1308.4 | 1328.1 | 516.81 ug/L | 516.81 ppb | 08:13:10 |
| 1 | U 409.014† | 14740.8 | 16715.8 | 490.22 ug/L | 490.22 ppb | 08:12:50 |
| 1 | V 292.402† | 63391.1 | 64559.8 | 504.70 ug/L | 504.70 ppb | 08:12:50 |
| 1 | Zn 213.857† | 43188.5 | 42405.7 | 499.16 ug/L | 499.16 ppb | 08:12:50 |
| 1 | SiO2† | 130561.9 | 129475.5 | 10330 ug/L | 10330 ppb | 08:14:07 |
| 2 | Sc 361.383 | 842302.4 | 842302.4 | 100.29 % | | 08:13:16 |
| 2 | Sc Radial | 4067.3 | 4067.3 | 101 % | | 08:12:17 |
| 2 | Y 371.029 | 712092.4 | 712092.4 | 99.444 % | | 08:13:16 |
| 2 | Y RADIAL | 4460.7 | 4460.7 | 98.73 % | | 08:11:57 |
| 2 | Ag 328.068† | 50524.5 | 50124.3 | 255.82 ug/L | 255.82 ppb | 08:13:16 |
| 2 | Al 396.153Radial† | 4620.0 | 4661.7 | 4942.8 ug/L | 4942.8 ppb | 08:11:57 |
| 2 | As 188.979† | 845.7 | 864.1 | 467.39 ug/L | 467.39 ppb | 08:13:36 |
| 2 | B 249.677† | 18250.8 | 18448.0 | 504.82 ug/L | 504.82 ppb | 08:13:16 |
| 2 | Ba 233.527† | 53459.3 | 53285.5 | 500.78 ug/L | 500.78 ppb | 08:13:16 |
| 2 | Be 313.107† | 628837.8 | 631273.6 | 257.41 ug/L | 257.41 ppb | 08:13:16 |
| 2 | Ca 317.933Radial† | 2509.4 | 2471.6 | 5021.6 ug/L | 5021.6 ppb | 08:12:17 |
| 2 | Cd 226.502† | 34635.2 | 34701.0 | 489.30 ug/L | 489.30 ppb | 08:13:16 |
| 2 | Co 228.616† | 19421.1 | 19403.6 | 505.17 ug/L | 505.17 ppb | 08:13:16 |
| 2 | Cr 267.716† | 36958.2 | 36755.9 | 479.58 ug/L | 479.58 ppb | 08:13:16 |
| 2 | Cu 324.752† | 159577.2 | 152760.8 | 495.33 ug/L | 495.33 ppb | 08:13:16 |
| 2 | Fe 238.204 Radial† | 418.6 | 406.1 | 5093.4 ug/L | 5093.4 ppb | 08:12:17 |
| 2 | K 766.490 Radial† | 14951.5 | 12025.2 | 2397.2 ug/L | 2397.2 ppb | 08:11:57 |
| 2 | Mg 279.077 IEC† | 122.9 | 121.1 | 5292.0 ug/L | 5292.0 ppb | 08:12:17 |
| 2 | Mn 257.610† | 386444.7 | 384869.6 | 505.25 ug/L | 505.25 ppb | 08:13:16 |
| 2 | Mo 202.031† | 5982.3 | 5950.7 | 523.62 ug/L | 523.62 ppb | 08:13:36 |
| 2 | Na 589.592 Radial† | 5628.5 | 6043.1 | 2373.2 ug/L | 2373.2 ppb | 08:11:57 |
| 2 | Ni 231.604† | 16204.1 | 16063.4 | 501.28 ug/L | 501.28 ppb | 08:13:16 |

| | | | | | | |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914† | 3559.1 | 3380.6 | 2333.6 ug/L | 2333.6 ppb | 08:13:36 |
| 2 | Pb 220.353† | 3179.4 | 3229.0 | 488.27 ug/L | 488.27 ppb | 08:13:36 |
| 2 | S 181.975 Axial† | 1405.2 | 1376.7 | 2412.2 ug/L | 2412.2 ppb | 08:13:36 |
| 2 | Sb 206.836† | 1195.3 | 1165.2 | 513.96 ug/L | 513.96 ppb | 08:13:36 |
| 2 | Se 196.026† | 3149.2 | 3157.0 | 2534.5 ug/L | 2534.5 ppb | 08:13:36 |
| 2 | Si 251.611† | 130475.1 | 129570.6 | 4817.9 ug/L | 4817.9 ppb | 08:13:16 |
| 2 | Sn 189.927† | 2382.9 | 2372.9 | 526.16 ug/L | 526.16 ppb | 08:13:36 |
| 2 | Sr 421.552† | 59644.2 | 59083.3 | 503.09 ug/L | 503.09 ppb | 08:11:57 |
| 2 | Ti 334.940† | 283263.7 | 283524.1 | 487.66 ug/L | 487.66 ppb | 08:13:16 |
| 2 | Tl 190.801† | 1313.2 | 1334.5 | 519.26 ug/L | 519.26 ppb | 08:13:36 |
| 2 | U 409.014† | 14719.5 | 16711.9 | 490.09 ug/L | 490.09 ppb | 08:13:16 |
| 2 | V 292.402† | 63393.4 | 64636.8 | 505.28 ug/L | 505.28 ppb | 08:13:16 |
| 2 | Zn 213.857† | 43022.0 | 42290.5 | 497.78 ug/L | 497.78 ppb | 08:13:16 |
| 2 | SiO2† | 130875.2 | 129941.7 | 10367 ug/L | 10367 ppb | 08:14:12 |
| 3 | Sc 361.383 | 844277.2 | 844277.2 | 100.53 % | | 08:13:42 |
| 3 | Sc Radial | 4040.1 | 4040.1 | 100 % | | 08:12:42 |
| 3 | Y 371.029 | 715025.4 | 715025.4 | 99.853 % | | 08:13:42 |
| 3 | Y RADIAL | 4511.5 | 4511.5 | 99.85 % | | 08:12:22 |
| 3 | Ag 328.068† | 50732.1 | 50213.0 | 256.25 ug/L | 256.25 ppb | 08:13:42 |
| 3 | Al 396.153Radial† | 4672.0 | 4744.4 | 5030.9 ug/L | 5030.9 ppb | 08:12:22 |
| 3 | As 188.979† | 859.7 | 876.0 | 473.77 ug/L | 473.77 ppb | 08:14:02 |
| 3 | B 249.677† | 18268.9 | 18423.4 | 504.15 ug/L | 504.15 ppb | 08:13:42 |
| 3 | Ba 233.527† | 53393.8 | 53095.7 | 498.99 ug/L | 498.99 ppb | 08:13:42 |
| 3 | Be 313.107† | 630940.7 | 631899.0 | 257.66 ug/L | 257.66 ppb | 08:13:42 |
| 3 | Ca 317.933Radial† | 2492.0 | 2471.0 | 5020.5 ug/L | 5020.5 ppb | 08:12:42 |
| 3 | Cd 226.502† | 34749.8 | 34734.2 | 489.78 ug/L | 489.78 ppb | 08:13:42 |
| 3 | Co 228.616† | 19515.8 | 19452.5 | 506.45 ug/L | 506.45 ppb | 08:13:42 |
| 3 | Cr 267.716† | 37132.6 | 36843.2 | 480.71 ug/L | 480.71 ppb | 08:13:42 |
| 3 | Cu 324.752† | 159808.9 | 152619.1 | 494.87 ug/L | 494.87 ppb | 08:13:42 |
| 3 | Fe 238.204 Radial† | 411.6 | 401.9 | 5041.1 ug/L | 5041.1 ppb | 08:12:42 |
| 3 | K 766.490 Radial† | 15096.1 | 12269.6 | 2446.0 ug/L | 2446.0 ppb | 08:12:22 |
| 3 | Mg 279.077 IEC† | 122.6 | 121.7 | 5315.4 ug/L | 5315.4 ppb | 08:12:42 |
| 3 | Mn 257.610† | 386713.6 | 384235.8 | 504.42 ug/L | 504.42 ppb | 08:13:42 |
| 3 | Mo 202.031† | 6019.8 | 5974.0 | 525.67 ug/L | 525.67 ppb | 08:14:02 |
| 3 | Na 589.592 Radial† | 5701.0 | 6153.1 | 2416.4 ug/L | 2416.4 ppb | 08:12:22 |
| 3 | Ni 231.604† | 16184.2 | 16005.8 | 499.48 ug/L | 499.48 ppb | 08:13:42 |
| 3 | P 214.914† | 3628.1 | 3440.9 | 2377.1 ug/L | 2377.1 ppb | 08:14:02 |
| 3 | Pb 220.353† | 3191.4 | 3233.5 | 488.99 ug/L | 488.99 ppb | 08:14:02 |
| 3 | S 181.975 Axial† | 1430.7 | 1398.8 | 2451.0 ug/L | 2451.0 ppb | 08:14:02 |
| 3 | Sb 206.836† | 1214.4 | 1181.4 | 520.96 ug/L | 520.96 ppb | 08:14:02 |
| 3 | Se 196.026† | 3167.2 | 3167.5 | 2542.7 ug/L | 2542.7 ppb | 08:14:02 |
| 3 | Si 251.611† | 130436.3 | 129227.7 | 4805.1 ug/L | 4805.1 ppb | 08:13:42 |
| 3 | Sn 189.927† | 2406.3 | 2390.6 | 530.07 ug/L | 530.07 ppb | 08:14:02 |
| 3 | Sr 421.552† | 60231.3 | 60068.5 | 511.48 ug/L | 511.48 ppb | 08:12:22 |
| 3 | Ti 334.940† | 283386.8 | 282985.9 | 486.73 ug/L | 486.73 ppb | 08:13:42 |
| 3 | Tl 190.801† | 1324.7 | 1342.8 | 522.49 ug/L | 522.49 ppb | 08:14:02 |
| 3 | U 409.014† | 14536.5 | 16495.5 | 483.73 ug/L | 483.73 ppb | 08:13:42 |
| 3 | V 292.402† | 63455.8 | 64551.0 | 504.65 ug/L | 504.65 ppb | 08:13:42 |
| 3 | Zn 213.857† | 43118.0 | 42285.8 | 497.74 ug/L | 497.74 ppb | 08:13:42 |
| 3 | SiO2† | 130153.9 | 128918.9 | 10286 ug/L | 10286 ppb | 08:14:17 |

Mean Data: ICV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 843292.7 | 100.41 % | 0.118 | | | 0.12% |
| Sc Radial | 4055.4 | 101 % | 0.3 | | | 0.34% |
| Y 371.029 | 712947.4 | 99.563 % | 0.2526 | | | 0.25% |
| Y RADIAL | 4505.2 | 99.72 % | 0.925 | | | 0.93% |
| Ag 328.068† | 50202.0 | 256.19 ug/L | 0.348 | 256.19 ppb | 0.348 | 0.14% |
| QC value within limits for Ag 328.068 Recovery = 102.48% | | | | | | |
| Al 396.153Radial† | 4713.3 | 4997.9 ug/L | 47.98 | 4997.9 ppb | 47.98 | 0.96% |
| QC value within limits for Al 396.153Radial Recovery = 99.96% | | | | | | |
| As 188.979† | 869.4 | 470.22 ug/L | 3.249 | 470.22 ppb | 3.249 | 0.69% |
| QC value within limits for As 188.979 Recovery = 94.04% | | | | | | |
| B 249.677† | 18442.4 | 504.67 ug/L | 0.467 | 504.67 ppb | 0.467 | 0.09% |
| QC value within limits for B 249.677 Recovery = 100.93% | | | | | | |
| Ba 233.527† | 53228.3 | 500.24 ug/L | 1.080 | 500.24 ppb | 1.080 | 0.22% |
| QC value within limits for Ba 233.527 Recovery = 100.05% | | | | | | |
| Be 313.107† | 631579.2 | 257.53 ug/L | 0.126 | 257.53 ppb | 0.126 | 0.05% |
| QC value within limits for Be 313.107 Recovery = 103.01% | | | | | | |

| | | | | | | |
|---|----------|-------------|-------|------------|-------|-------|
| Ca 317.933Radial† | 2466.6 | 5011.5 ug/L | 16.52 | 5011.5 ppb | 16.52 | 0.33% |
| QC value within limits for Ca 317.933Radial Recovery = 100.23% | | | | | | |
| Cd 226.502† | 34751.0 | 490.01 ug/L | 0.856 | 490.01 ppb | 0.856 | 0.17% |
| QC value within limits for Cd 226.502 Recovery = 98.00% | | | | | | |
| Co 228.616† | 19445.8 | 506.27 ug/L | 1.020 | 506.27 ppb | 1.020 | 0.20% |
| QC value within limits for Co 228.616 Recovery = 101.25% | | | | | | |
| Cr 267.716† | 36784.9 | 479.95 ug/L | 0.659 | 479.95 ppb | 0.659 | 0.14% |
| QC value within limits for Cr 267.716 Recovery = 95.99% | | | | | | |
| Cu 324.752† | 152767.7 | 495.35 ug/L | 0.489 | 495.35 ppb | 0.489 | 0.10% |
| QC value within limits for Cu 324.752 Recovery = 99.07% | | | | | | |
| Fe 238.204 Radial† | 401.5 | 5035.3 ug/L | 61.10 | 5035.3 ppb | 61.10 | 1.21% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.71% | | | | | | |
| K 766.490 Radial† | 12093.0 | 2410.7 ug/L | 30.80 | 2410.7 ppb | 30.80 | 1.28% |
| QC value within limits for K 766.490 Radial Recovery = 96.43% | | | | | | |
| Mg 279.077 IEC† | 122.5 | 5350.6 ug/L | 82.15 | 5350.6 ppb | 82.15 | 1.54% |
| QC value within limits for Mg 279.077 IEC Recovery = 107.01% | | | | | | |
| Mn 257.610† | 385042.1 | 505.47 ug/L | 1.180 | 505.47 ppb | 1.180 | 0.23% |
| QC value within limits for Mn 257.610 Recovery = 101.09% | | | | | | |
| Mo 202.031† | 5955.1 | 524.00 ug/L | 1.515 | 524.00 ppb | 1.515 | 0.29% |
| QC value within limits for Mo 202.031 Recovery = 104.80% | | | | | | |
| Na 589.592 Radial† | 6100.6 | 2395.8 ug/L | 21.67 | 2395.8 ppb | 21.67 | 0.90% |
| QC value within limits for Na 589.592 Radial Recovery = 95.83% | | | | | | |
| Ni 231.604† | 16046.7 | 500.75 ug/L | 1.111 | 500.75 ppb | 1.111 | 0.22% |
| QC value within limits for Ni 231.604 Recovery = 100.15% | | | | | | |
| P 214.914† | 3412.0 | 2356.2 ug/L | 21.83 | 2356.2 ppb | 21.83 | 0.93% |
| QC value within limits for P 214.914 Recovery = 94.25% | | | | | | |
| Pb 220.353† | 3231.5 | 488.68 ug/L | 0.368 | 488.68 ppb | 0.368 | 0.08% |
| QC value within limits for Pb 220.353 Recovery = 97.74% | | | | | | |
| S 181.975 Axial† | 1390.7 | 2436.7 ug/L | 21.32 | 2436.7 ppb | 21.32 | 0.88% |
| QC value within limits for S 181.975 Axial Recovery = 97.47% | | | | | | |
| Sb 206.836† | 1172.6 | 517.12 ug/L | 3.550 | 517.12 ppb | 3.550 | 0.69% |
| QC value within limits for Sb 206.836 Recovery = 103.42% | | | | | | |
| Se 196.026† | 3161.0 | 2537.5 ug/L | 4.58 | 2537.5 ppb | 4.58 | 0.18% |
| QC value within limits for Se 196.026 Recovery = 101.50% | | | | | | |
| Si 251.611† | 129502.2 | 4815.3 ug/L | 9.23 | 4815.3 ppb | 9.23 | 0.19% |
| QC value within limits for Si 251.611 Recovery = 96.31% | | | | | | |
| Sn 189.927† | 2377.4 | 527.15 ug/L | 2.570 | 527.15 ppb | 2.570 | 0.49% |
| QC value within limits for Sn 189.927 Recovery = 105.43% | | | | | | |
| Sr 421.552† | 59739.3 | 508.68 ug/L | 4.837 | 508.68 ppb | 4.837 | 0.95% |
| QC value within limits for Sr 421.552 Recovery = 101.74% | | | | | | |
| Ti 334.940† | 283463.6 | 487.55 ug/L | 0.767 | 487.55 ppb | 0.767 | 0.16% |
| QC value within limits for Ti 334.940 Recovery = 97.51% | | | | | | |
| Tl 190.801† | 1335.1 | 519.52 ug/L | 2.846 | 519.52 ppb | 2.846 | 0.55% |
| QC value within limits for Tl 190.801 Recovery = 103.90% | | | | | | |
| U 409.014† | 16641.1 | 488.01 ug/L | 3.711 | 488.01 ppb | 3.711 | 0.76% |
| QC value within limits for U 409.014 Recovery = 97.60% | | | | | | |
| V 292.402† | 64582.5 | 504.87 ug/L | 0.354 | 504.87 ppb | 0.354 | 0.07% |
| QC value within limits for V 292.402 Recovery = 100.97% | | | | | | |
| Zn 213.857† | 42327.3 | 498.23 ug/L | 0.810 | 498.23 ppb | 0.810 | 0.16% |
| QC value within limits for Zn 213.857 Recovery = 99.65% | | | | | | |
| SiO2† | 129445.3 | 10328 ug/L | 40.9 | 10328 ppb | 40.9 | 0.40% |
| QC value within limits for SiO2 Recovery = 96.57% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 7
 Sample ID: ICB
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 10
 Date Collected: 3/25/2010 08:16:28
 Data Type: Reprocessed on 3/25/2010 09:41:45
 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 361.383 | 790407.3 | 790407.3 | 94.112 % | | 08:19:38 |
| 1 | Sc Radial | 4085.3 | 4085.3 | 101 % | | 08:18:21 |
| 1 | Y 371.029 | 672726.6 | 672726.6 | 93.946 % | | 08:19:38 |
| 1 | Y RADIAL | 4469.1 | 4469.1 | 98.92 % | | 08:18:21 |
| 1 | Ag 328.068† | 171.1 | -71.6 | -0.3723 ug/L | -0.3723 ppb | 08:19:38 |
| 1 | Al 396.153Radial† | -77.5 | 3.1 | 3.3017 ug/L | 3.3017 ppb | 08:18:41 |
| 1 | As 188.979† | -21.4 | -1.9 | -1.0528 ug/L | -1.0528 ppb | 08:19:58 |
| 1 | B 249.677† | -128.4 | 113.7 | 3.1337 ug/L | 3.1337 ppb | 08:19:58 |
| 1 | Ba 233.527† | 14.7 | -2.9 | -0.0292 ug/L | -0.0292 ppb | 08:19:58 |
| 1 | Be 313.107† | -4306.4 | -313.1 | -0.1274 ug/L | -0.1274 ppb | 08:19:38 |
| 1 | Ca 317.933Radial† | 20.1 | 2.7 | 5.4300 ug/L | 5.4300 ppb | 08:18:41 |
| 1 | Cd 226.502† | -179.0 | -23.8 | -0.3316 ug/L | -0.3316 ppb | 08:19:58 |
| 1 | Co 228.616† | -30.3 | 6.7 | 0.1761 ug/L | 0.1761 ppb | 08:19:58 |
| 1 | Cr 267.716† | 113.5 | 25.6 | 0.3303 ug/L | 0.3303 ppb | 08:19:58 |
| 1 | Cu 324.752† | 6430.7 | 480.2 | 1.5584 ug/L | 1.5584 ppb | 08:19:38 |
| 1 | Fe 238.204 Radial† | 5.1 | -4.0 | -49.564 ug/L | -49.564 ppb | 08:18:41 |
| 1 | K 766.490 Radial† | 2825.1 | -13.8 | -2.7431 ug/L | -2.7431 ppb | 08:18:21 |
| 1 | Mg 279.077 IEC† | 1.3 | 0.6 | 27.162 ug/L | 27.162 ppb | 08:18:41 |
| 1 | Mn 257.610† | 519.0 | 99.1 | 0.1240 ug/L | 0.1240 ppb | 08:19:58 |
| 1 | Mo 202.031† | 19.9 | 7.0 | 0.6106 ug/L | 0.6106 ppb | 08:19:58 |
| 1 | Na 589.592 Radial† | -530.1 | -62.5 | -24.563 ug/L | -24.563 ppb | 08:18:21 |
| 1 | Ni 231.604† | 74.4 | -14.6 | -0.4549 ug/L | -0.4549 ppb | 08:19:58 |
| 1 | P 214.914† | 187.1 | 30.5 | 21.713 ug/L | 21.713 ppb | 08:19:58 |
| 1 | Pb 220.353† | -67.1 | -12.5 | -1.8733 ug/L | -1.8733 ppb | 08:19:58 |
| 1 | S 181.975 Axial† | 28.4 | 5.8 | 10.227 ug/L | 10.227 ppb | 08:19:58 |
| 1 | Sb 206.836† | 27.4 | 2.5 | 1.1290 ug/L | 1.1290 ppb | 08:19:58 |
| 1 | Se 196.026† | -18.2 | -2.3 | -2.0135 ug/L | -2.0135 ppb | 08:19:58 |
| 1 | Si 251.611† | 517.2 | 24.1 | 0.8896 ug/L | 0.8896 ppb | 08:19:58 |
| 1 | Sn 189.927† | 14.0 | 11.7 | 2.6045 ug/L | 2.6045 ppb | 08:19:58 |
| 1 | Sr 421.552† | 37.5 | -33.0 | -0.2810 ug/L | -0.2810 ppb | 08:18:21 |
| 1 | Ti 334.940† | -1088.6 | -73.4 | -0.1248 ug/L | -0.1248 ppb | 08:19:38 |
| 1 | Tl 190.801† | -24.7 | -1.2 | -0.4711 ug/L | -0.4711 ppb | 08:19:58 |
| 1 | U 409.014† | -2143.0 | -241.9 | -7.1127 ug/L | -7.1127 ppb | 08:19:38 |
| 1 | V 292.402† | -1389.8 | -49.2 | -0.3767 ug/L | -0.3767 ppb | 08:19:38 |
| 1 | Zn 213.857† | 570.5 | -0.2 | 0.0054 ug/L | 0.0054 ppb | 08:19:58 |
| 1 | SiO2† | 545.1 | 25.9 | 2.0515 ug/L | 2.0515 ppb | 08:20:54 |
| 2 | Sc 361.383 | 841118.2 | 841118.2 | 100.15 % | | 08:20:03 |
| 2 | Sc Radial | 4098.1 | 4098.1 | 102 % | | 08:18:46 |
| 2 | Y 371.029 | 717854.0 | 717854.0 | 100.25 % | | 08:20:03 |
| 2 | Y RADIAL | 4508.9 | 4508.9 | 99.80 % | | 08:18:46 |
| 2 | Ag 328.068† | 221.7 | -32.0 | -0.1764 ug/L | -0.1764 ppb | 08:20:03 |
| 2 | Al 396.153Radial† | -75.4 | 5.4 | 5.7212 ug/L | 5.7212 ppb | 08:19:06 |
| 2 | As 188.979† | -24.6 | -3.7 | -2.0054 ug/L | -2.0054 ppb | 08:20:23 |
| 2 | B 249.677† | -114.4 | 135.9 | 3.7419 ug/L | 3.7419 ppb | 08:20:23 |
| 2 | Ba 233.527† | 27.1 | 8.6 | 0.0792 ug/L | 0.0792 ppb | 08:20:23 |
| 2 | Be 313.107† | -4276.6 | -7.4 | -0.0032 ug/L | -0.0032 ppb | 08:20:03 |
| 2 | Ca 317.933Radial† | 19.8 | 2.3 | 4.5979 ug/L | 4.5979 ppb | 08:19:06 |
| 2 | Cd 226.502† | -159.5 | 7.2 | 0.1060 ug/L | 0.1060 ppb | 08:20:23 |
| 2 | Co 228.616† | -39.1 | -0.1 | -0.0013 ug/L | -0.0013 ppb | 08:20:23 |
| 2 | Cr 267.716† | 119.8 | 24.7 | 0.3154 ug/L | 0.3154 ppb | 08:20:23 |
| 2 | Cu 324.752† | 6337.5 | -24.8 | -0.0847 ug/L | -0.0847 ppb | 08:20:03 |
| 2 | Fe 238.204 Radial† | 6.0 | -3.1 | -38.632 ug/L | -38.632 ppb | 08:19:06 |
| 2 | K 766.490 Radial† | 2787.7 | -59.3 | -11.836 ug/L | -11.836 ppb | 08:18:46 |
| 2 | Mg 279.077 IEC† | 0.2 | -0.6 | -24.083 ug/L | -24.083 ppb | 08:19:06 |
| 2 | Mn 257.610† | 685.8 | 232.3 | 0.3020 ug/L | 0.3020 ppb | 08:20:23 |
| 2 | Mo 202.031† | 17.5 | 3.2 | 0.2819 ug/L | 0.2819 ppb | 08:20:23 |
| 2 | Na 589.592 Radial† | -513.1 | -44.2 | -17.340 ug/L | -17.340 ppb | 08:18:46 |
| 2 | Ni 231.604† | 92.7 | -1.0 | -0.0313 ug/L | -0.0313 ppb | 08:20:23 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 180.2 | 11.7 | 8.4942 ug/L | 8.4942 ppb | 08:20:23 |
| 2 | Pb 220.353† | -61.2 | -2.3 | -0.3437 ug/L | -0.3437 ppb | 08:20:23 |
| 2 | S 181.975 Axial† | 27.3 | 2.8 | 4.9851 ug/L | 4.9851 ppb | 08:20:23 |
| 2 | Sb 206.836† | 33.5 | 6.8 | 2.9086 ug/L | 2.9086 ppb | 08:20:23 |
| 2 | Se 196.026† | -20.0 | -3.0 | -2.4887 ug/L | -2.4887 ppb | 08:20:23 |
| 2 | Si 251.611† | 525.2 | -1.1 | -0.0427 ug/L | -0.0427 ppb | 08:20:23 |
| 2 | Sn 189.927† | 7.1 | 4.0 | 0.8900 ug/L | 0.8900 ppb | 08:20:23 |
| 2 | Sr 421.552† | 86.9 | 15.5 | 0.1316 ug/L | 0.1316 ppb | 08:18:46 |
| 2 | Ti 334.940† | -1128.2 | -43.2 | -0.0737 ug/L | -0.0737 ppb | 08:20:03 |
| 2 | Tl 190.801† | -26.6 | -1.5 | -0.5673 ug/L | -0.5673 ppb | 08:20:23 |
| 2 | U 409.014† | -1895.5 | 142.5 | 4.1969 ug/L | 4.1969 ppb | 08:20:03 |
| 2 | V 292.402† | -1419.6 | 10.1 | 0.0948 ug/L | 0.0948 ppb | 08:20:03 |
| 2 | Zn 213.857† | 616.1 | 8.8 | 0.1102 ug/L | 0.1102 ppb | 08:20:23 |
| 2 | SiO2† | 520.2 | -34.0 | -2.7225 ug/L | -2.7225 ppb | 08:20:59 |
| 3 | Sc 361.383 | 829519.0 | 829519.0 | 98.769 % | | 08:20:28 |
| 3 | Sc Radial | 4117.3 | 4117.3 | 102 % | | 08:19:11 |
| 3 | Y 371.029 | 708342.3 | 708342.3 | 98.920 % | | 08:20:28 |
| 3 | Y RADIAL | 4472.5 | 4472.5 | 98.99 % | | 08:19:11 |
| 3 | Ag 328.068† | 92.8 | -159.5 | -0.8146 ug/L | -0.8146 ppb | 08:20:28 |
| 3 | Al 396.153Radial† | -80.7 | 0.6 | 0.6253 ug/L | 0.6253 ppb | 08:19:31 |
| 3 | As 188.979† | -21.3 | -0.8 | -0.4168 ug/L | -0.4168 ppb | 08:20:48 |
| 3 | B 249.677† | -143.8 | 104.5 | 2.8773 ug/L | 2.8773 ppb | 08:20:48 |
| 3 | Ba 233.527† | 18.6 | 0.3 | 0.0023 ug/L | 0.0023 ppb | 08:20:48 |
| 3 | Be 313.107† | -4215.8 | -5.7 | -0.0027 ug/L | -0.0027 ppb | 08:20:28 |
| 3 | Ca 317.933Radial† | 13.6 | -3.8 | -7.7871 ug/L | -7.7871 ppb | 08:19:31 |
| 3 | Cd 226.502† | -164.1 | 0.3 | 0.0070 ug/L | 0.0070 ppb | 08:20:48 |
| 3 | Co 228.616† | -38.9 | -0.4 | -0.0107 ug/L | -0.0107 ppb | 08:20:48 |
| 3 | Cr 267.716† | 106.4 | 12.8 | 0.1620 ug/L | 0.1620 ppb | 08:20:48 |
| 3 | Cu 324.752† | 6387.0 | 113.8 | 0.3654 ug/L | 0.3654 ppb | 08:20:28 |
| 3 | Fe 238.204 Radial† | 7.4 | -1.8 | -22.253 ug/L | -22.253 ppb | 08:19:31 |
| 3 | K 766.490 Radial† | 2798.2 | -61.8 | -12.318 ug/L | -12.318 ppb | 08:19:11 |
| 3 | Mg 279.077 IEC† | 2.7 | 1.9 | 83.821 ug/L | 83.821 ppb | 08:19:31 |
| 3 | Mn 257.610† | 712.2 | 268.6 | 0.3468 ug/L | 0.3468 ppb | 08:20:48 |
| 3 | Mo 202.031† | 15.6 | 1.6 | 0.1355 ug/L | 0.1355 ppb | 08:20:48 |
| 3 | Na 589.592 Radial† | -535.8 | -64.1 | -25.159 ug/L | -25.159 ppb | 08:19:11 |
| 3 | Ni 231.604† | 84.0 | -8.5 | -0.2657 ug/L | -0.2657 ppb | 08:20:48 |
| 3 | P 214.914† | 171.3 | 5.2 | 3.6896 ug/L | 3.6896 ppb | 08:20:48 |
| 3 | Pb 220.353† | -60.4 | -2.3 | -0.3440 ug/L | -0.3440 ppb | 08:20:48 |
| 3 | S 181.975 Axial† | 28.4 | 4.4 | 7.6424 ug/L | 7.6424 ppb | 08:20:48 |
| 3 | Sb 206.836† | 25.7 | -0.6 | -0.2250 ug/L | -0.2250 ppb | 08:20:48 |
| 3 | Se 196.026† | -14.2 | 2.6 | 2.0180 ug/L | 2.0180 ppb | 08:20:48 |
| 3 | Si 251.611† | 514.6 | -4.4 | -0.1658 ug/L | -0.1658 ppb | 08:20:48 |
| 3 | Sn 189.927† | 11.4 | 8.4 | 1.8702 ug/L | 1.8702 ppb | 08:20:48 |
| 3 | Sr 421.552† | 53.4 | -17.8 | -0.1511 ug/L | -0.1511 ppb | 08:19:11 |
| 3 | Ti 334.940† | -1164.3 | -95.4 | -0.1742 ug/L | -0.1742 ppb | 08:20:28 |
| 3 | Tl 190.801† | -18.9 | 5.9 | 2.3009 ug/L | 2.3009 ppb | 08:20:48 |
| 3 | U 409.014† | -1857.5 | 154.5 | 4.5476 ug/L | 4.5476 ppb | 08:20:28 |
| 3 | V 292.402† | -1414.0 | -4.1 | -0.0160 ug/L | -0.0160 ppb | 08:20:28 |
| 3 | Zn 213.857† | 614.0 | 15.2 | 0.1852 ug/L | 0.1852 ppb | 08:20:48 |
| 3 | SiO2† | 522.5 | -24.3 | -1.9476 ug/L | -1.9476 ppb | 08:21:04 |

Mean Data: ICB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 820348.2 | 97.677 % | | 3.1637 | | | 3.24% |
| Sc Radial | 4100.3 | 102 % | | 0.4 | | | 0.39% |
| Y 371.029 | 699641.0 | 97.705 % | | 3.3221 | | | 3.40% |
| Y RADIAL | 4483.5 | 99.24 % | | 0.489 | | | 0.49% |
| Ag 328.068† | -87.7 | -0.4544 ug/L | | 0.32692 | -0.4544 ppb | 0.32692 | 71.94% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 3.0 | 3.2161 ug/L | | 2.54903 | 3.2161 ppb | 2.54903 | 79.26% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -2.1 | -1.1583 ug/L | | 0.79954 | -1.1583 ppb | 0.79954 | 69.03% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | 118.1 | 3.2509 ug/L | | 0.44409 | 3.2509 ppb | 0.44409 | 13.66% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 2.0 | 0.0174 ug/L | | 0.05575 | 0.0174 ppb | 0.05575 | 319.65% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -108.7 | -0.0444 ug/L | | 0.07187 | -0.0444 ppb | 0.07187 | 161.79% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |

| | | | | | |
|--|-------|--------------|---------|-------------|-----------------|
| Ca 317.933Radial† | 0.4 | 0.7469 ug/L | 7.40238 | 0.7469 ppb | 7.40238 991.03% |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated | | | | | |
| Cd 226.502† | -5.4 | -0.0729 ug/L | 0.22944 | -0.0729 ppb | 0.22944 314.90% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | |
| Co 228.616† | 2.0 | 0.0547 ug/L | 0.10521 | 0.0547 ppb | 0.10521 192.38% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | |
| Cr 267.716† | 21.0 | 0.2692 ug/L | 0.09313 | 0.2692 ppb | 0.09313 34.59% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | |
| Cu 324.752† | 189.8 | 0.6130 ug/L | 0.84911 | 0.6130 ppb | 0.84911 138.51% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | |
| Fe 238.204 Radial† | -2.9 | -36.816 ug/L | 13.7461 | -36.816 ppb | 13.7461 37.34% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | |
| K 766.490 Radial† | -45.0 | -8.9659 ug/L | 5.39443 | -8.9659 ppb | 5.39443 60.17% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | |
| Mg 279.077 IEC† | 0.7 | 28.967 ug/L | 53.9747 | 28.967 ppb | 53.9747 186.33% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | |
| Mn 257.610† | 200.0 | 0.2576 ug/L | 0.11789 | 0.2576 ppb | 0.11789 45.77% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | |
| Mo 202.031† | 3.9 | 0.3427 ug/L | 0.24331 | 0.3427 ppb | 0.24331 71.00% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | |
| Na 589.592 Radial† | -56.9 | -22.354 ug/L | 4.3525 | -22.354 ppb | 4.3525 19.47% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | |
| Ni 231.604† | -8.0 | -0.2506 ug/L | 0.21219 | -0.2506 ppb | 0.21219 84.66% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | |
| P 214.914† | 15.8 | 11.299 ug/L | 9.3331 | 11.299 ppb | 9.3331 82.60% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | |
| Pb 220.353† | -5.7 | -0.8537 ug/L | 0.88298 | -0.8537 ppb | 0.88298 103.43% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | |
| S 181.975 Axial† | 4.3 | 7.6181 ug/L | 2.62088 | 7.6181 ppb | 2.62088 34.40% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | |
| Sb 206.836† | 2.9 | 1.2709 ug/L | 1.57162 | 1.2709 ppb | 1.57162 123.67% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | |
| Se 196.026† | -0.9 | -0.8281 ug/L | 2.47623 | -0.8281 ppb | 2.47623 299.03% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | |
| Si 251.611† | 6.2 | 0.2270 ug/L | 0.57709 | 0.2270 ppb | 0.57709 254.19% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | |
| Sn 189.927† | 8.1 | 1.7882 ug/L | 0.86018 | 1.7882 ppb | 0.86018 48.10% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | |
| Sr 421.552† | -11.8 | -0.1001 ug/L | 0.21098 | -0.1001 ppb | 0.21098 210.68% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | |
| Ti 334.940† | -70.7 | -0.1242 ug/L | 0.05025 | -0.1242 ppb | 0.05025 40.46% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | |
| Tl 190.801† | 1.1 | 0.4208 ug/L | 1.62893 | 0.4208 ppb | 1.62893 387.08% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | |
| U 409.014† | 18.4 | 0.5439 ug/L | 6.63313 | 0.5439 ppb | 6.63313 >999.9% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | |
| V 292.402† | -14.4 | -0.0993 ug/L | 0.24658 | -0.0993 ppb | 0.24658 248.34% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | |
| Zn 213.857† | 7.9 | 0.1003 ug/L | 0.09034 | 0.1003 ppb | 0.09034 90.10% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | |
| SiO2† | -10.8 | -0.8729 ug/L | 2.56207 | -0.8729 ppb | 2.56207 293.52% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | |
| All analyte(s) passed QC. | | | | | |

Sequence No.: 8
 Sample ID: PQL
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 11
 Date Collected: 3/25/2010 08:23:16
 Data Type: Reprocessed on 3/25/2010 09:41:46
 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 361.383 | 826591.3 | 826591.3 | 98.421 % | | 08:26:26 |
| 1 | Sc Radial | 4083.8 | 4083.8 | 101 % | | 08:25:29 |
| 1 | Y 371.029 | 704089.2 | 704089.2 | 98.326 % | | 08:26:26 |
| 1 | Y RADIAL | 4492.1 | 4492.1 | 99.43 % | | 08:25:09 |
| 1 | Ag 328.068† | 1237.8 | 1004.3 | 5.0643 ug/L | 5.0643 ppb | 08:26:26 |
| 1 | Al 396.153Radial† | 142.0 | 219.9 | 233.80 ug/L | 233.80 ppb | 08:25:29 |
| 1 | As 188.979† | 36.5 | 57.9 | 31.095 ug/L | 31.095 ppb | 08:26:46 |
| 1 | B 249.677† | 1658.1 | 1934.9 | 53.156 ug/L | 53.156 ppb | 08:26:26 |
| 1 | Ba 233.527† | 584.7 | 575.5 | 5.4105 ug/L | 5.4105 ppb | 08:26:46 |
| 1 | Be 313.107† | 8113.8 | 12506.7 | 5.0891 ug/L | 5.0891 ppb | 08:26:26 |
| 1 | Ca 317.933Radial† | 129.3 | 110.6 | 224.64 ug/L | 224.64 ppb | 08:25:29 |
| 1 | Cd 226.502† | 183.3 | 352.6 | 4.9786 ug/L | 4.9786 ppb | 08:26:46 |
| 1 | Co 228.616† | 161.1 | 202.6 | 5.2870 ug/L | 5.2870 ppb | 08:26:46 |
| 1 | Cr 267.716† | 498.8 | 411.9 | 5.3572 ug/L | 5.3572 ppb | 08:26:46 |
| 1 | Cu 324.752† | 9495.9 | 3295.5 | 10.660 ug/L | 10.660 ppb | 08:26:26 |
| 1 | Fe 238.204 Radial† | 16.1 | 6.9 | 86.363 ug/L | 86.363 ppb | 08:25:29 |
| 1 | K 766.490 Radial† | 3493.6 | 647.6 | 129.08 ug/L | 129.08 ppb | 08:25:09 |
| 1 | Mg 279.077 IEC† | 8.3 | 7.5 | 328.39 ug/L | 328.39 ppb | 08:25:29 |
| 1 | Mn 257.610† | 8546.9 | 8231.6 | 10.795 ug/L | 10.795 ppb | 08:26:26 |
| 1 | Mo 202.031† | 134.6 | 122.5 | 10.782 ug/L | 10.782 ppb | 08:26:46 |
| 1 | Na 589.592 Radial† | 287.2 | 744.6 | 292.42 ug/L | 292.42 ppb | 08:25:09 |
| 1 | Ni 231.604† | 267.3 | 178.0 | 5.5534 ug/L | 5.5534 ppb | 08:26:46 |
| 1 | P 214.914† | 386.4 | 224.4 | 159.26 ug/L | 159.26 ppb | 08:26:46 |
| 1 | Pb 220.353† | 11.1 | 70.1 | 10.627 ug/L | 10.627 ppb | 08:26:46 |
| 1 | S 181.975 Axial† | 89.4 | 66.4 | 116.42 ug/L | 116.42 ppb | 08:26:46 |
| 1 | Sb 206.836† | 45.6 | 19.7 | 8.7750 ug/L | 8.7750 ppb | 08:26:46 |
| 1 | Se 196.026† | 28.6 | 46.0 | 37.067 ug/L | 37.067 ppb | 08:26:46 |
| 1 | Si 251.611† | 3151.9 | 2677.0 | 99.542 ug/L | 99.542 ppb | 08:26:46 |
| 1 | Sn 189.927† | 54.3 | 52.0 | 11.563 ug/L | 11.563 ppb | 08:26:46 |
| 1 | Sr 421.552† | 611.9 | 534.4 | 4.5492 ug/L | 4.5492 ppb | 08:25:09 |
| 1 | Ti 334.940† | 1796.7 | 2908.9 | 4.9818 ug/L | 4.9818 ppb | 08:26:26 |
| 1 | Tl 190.801† | 22.0 | 47.5 | 18.406 ug/L | 18.406 ppb | 08:26:46 |
| 1 | U 409.014† | -149.1 | 1883.7 | 55.405 ug/L | 55.405 ppb | 08:26:26 |
| 1 | V 292.402† | -682.7 | 733.8 | 5.9020 ug/L | 5.9020 ppb | 08:26:26 |
| 1 | Zn 213.857† | 1588.8 | 1007.8 | 11.910 ug/L | 11.910 ppb | 08:26:46 |
| 1 | SiO2† | 3354.8 | 2855.3 | 227.83 ug/L | 227.83 ppb | 08:27:42 |
| 2 | Sc 361.383 | 843989.6 | 843989.6 | 100.49 % | | 08:26:51 |
| 2 | Sc Radial | 4077.7 | 4077.7 | 101 % | | 08:25:54 |
| 2 | Y 371.029 | 720812.2 | 720812.2 | 100.66 % | | 08:26:51 |
| 2 | Y RADIAL | 4503.9 | 4503.9 | 99.69 % | | 08:25:34 |
| 2 | Ag 328.068† | 1216.8 | 957.4 | 4.8345 ug/L | 4.8345 ppb | 08:26:51 |
| 2 | Al 396.153Radial† | 128.8 | 207.0 | 220.15 ug/L | 220.15 ppb | 08:25:54 |
| 2 | As 188.979† | 33.2 | 53.9 | 28.929 ug/L | 28.929 ppb | 08:27:11 |
| 2 | B 249.677† | 1632.7 | 1874.8 | 51.503 ug/L | 51.503 ppb | 08:26:51 |
| 2 | Ba 233.527† | 567.8 | 546.5 | 5.1377 ug/L | 5.1377 ppb | 08:27:11 |
| 2 | Be 313.107† | 8455.7 | 12677.0 | 5.1586 ug/L | 5.1586 ppb | 08:26:51 |
| 2 | Ca 317.933Radial† | 124.1 | 105.6 | 214.51 ug/L | 214.51 ppb | 08:25:54 |
| 2 | Cd 226.502† | 205.4 | 370.8 | 5.2324 ug/L | 5.2324 ppb | 08:27:11 |
| 2 | Co 228.616† | 162.5 | 200.6 | 5.2316 ug/L | 5.2316 ppb | 08:27:11 |
| 2 | Cr 267.716† | 493.2 | 395.8 | 5.1505 ug/L | 5.1505 ppb | 08:27:11 |
| 2 | Cu 324.752† | 9723.9 | 3323.5 | 10.753 ug/L | 10.753 ppb | 08:26:51 |
| 2 | Fe 238.204 Radial† | 17.5 | 8.3 | 104.33 ug/L | 104.33 ppb | 08:25:54 |
| 2 | K 766.490 Radial† | 3613.2 | 771.1 | 153.75 ug/L | 153.75 ppb | 08:25:34 |
| 2 | Mg 279.077 IEC† | 9.0 | 8.2 | 360.01 ug/L | 360.01 ppb | 08:25:54 |
| 2 | Mn 257.610† | 8853.5 | 8357.7 | 10.961 ug/L | 10.961 ppb | 08:26:51 |
| 2 | Mo 202.031† | 127.6 | 112.8 | 9.9272 ug/L | 9.9272 ppb | 08:27:11 |
| 2 | Na 589.592 Radial† | 237.5 | 695.8 | 273.25 ug/L | 273.25 ppb | 08:25:34 |
| 2 | Ni 231.604† | 272.0 | 177.1 | 5.5256 ug/L | 5.5256 ppb | 08:27:11 |

| | | | | | | |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914† | 387.6 | 217.4 | 154.23 ug/L | 154.23 ppb | 08:27:11 |
| 2 | Pb 220.353† | 4.9 | 63.7 | 9.6539 ug/L | 9.6539 ppb | 08:27:11 |
| 2 | S 181.975 Axial† | 85.8 | 61.0 | 106.83 ug/L | 106.83 ppb | 08:27:11 |
| 2 | Sb 206.836† | 55.7 | 28.8 | 12.616 ug/L | 12.616 ppb | 08:27:11 |
| 2 | Se 196.026† | 14.8 | 31.6 | 25.644 ug/L | 25.644 ppb | 08:27:11 |
| 2 | Si 251.611† | 3105.2 | 2564.6 | 95.364 ug/L | 95.364 ppb | 08:27:11 |
| 2 | Sn 189.927† | 52.9 | 49.5 | 11.005 ug/L | 11.005 ppb | 08:27:11 |
| 2 | Sr 421.552† | 608.3 | 531.7 | 4.5264 ug/L | 4.5264 ppb | 08:25:34 |
| 2 | Ti 334.940† | 1927.8 | 3001.7 | 5.1391 ug/L | 5.1391 ppb | 08:26:51 |
| 2 | Tl 190.801† | 26.9 | 51.9 | 20.124 ug/L | 20.124 ppb | 08:27:11 |
| 2 | U 409.014† | -263.9 | 1772.6 | 52.133 ug/L | 52.133 ppb | 08:26:51 |
| 2 | V 292.402† | -760.9 | 670.3 | 5.3920 ug/L | 5.3920 ppb | 08:26:51 |
| 2 | Zn 213.857† | 1593.0 | 978.8 | 11.563 ug/L | 11.563 ppb | 08:27:11 |
| 2 | SiO2† | 3254.6 | 2685.3 | 214.27 ug/L | 214.27 ppb | 08:27:47 |
| 3 | Sc 361.383 | 821797.4 | 821797.4 | 97.850 % | | 08:27:17 |
| 3 | Sc Radial | 4060.7 | 4060.7 | 101 % | | 08:26:19 |
| 3 | Y 371.029 | 700918.2 | 700918.2 | 97.883 % | | 08:27:17 |
| 3 | Y RADIAL | 4461.2 | 4461.2 | 98.74 % | | 08:25:59 |
| 3 | Ag 328.068† | 1158.2 | 930.2 | 4.6763 ug/L | 4.6763 ppb | 08:27:17 |
| 3 | Al 396.153Radial† | 124.0 | 202.9 | 215.75 ug/L | 215.75 ppb | 08:26:19 |
| 3 | As 188.979† | 31.7 | 53.2 | 28.563 ug/L | 28.563 ppb | 08:27:37 |
| 3 | B 249.677† | 1551.8 | 1836.1 | 50.446 ug/L | 50.446 ppb | 08:27:17 |
| 3 | Ba 233.527† | 564.1 | 558.0 | 5.2415 ug/L | 5.2415 ppb | 08:27:37 |
| 3 | Be 313.107† | 8184.9 | 12627.4 | 5.1382 ug/L | 5.1382 ppb | 08:27:17 |
| 3 | Ca 317.933Radial† | 128.6 | 110.6 | 224.68 ug/L | 224.68 ppb | 08:26:19 |
| 3 | Cd 226.502† | 205.8 | 376.7 | 5.3210 ug/L | 5.3210 ppb | 08:27:37 |
| 3 | Co 228.616† | 154.1 | 196.4 | 5.1221 ug/L | 5.1221 ppb | 08:27:37 |
| 3 | Cr 267.716† | 503.6 | 419.7 | 5.4548 ug/L | 5.4548 ppb | 08:27:37 |
| 3 | Cu 324.752† | 9498.3 | 3354.2 | 10.849 ug/L | 10.849 ppb | 08:27:17 |
| 3 | Fe 238.204 Radial† | 13.6 | 4.5 | 56.847 ug/L | 56.847 ppb | 08:26:19 |
| 3 | K 766.490 Radial† | 3627.6 | 800.3 | 159.57 ug/L | 159.57 ppb | 08:25:59 |
| 3 | Mg 279.077 IEC† | 9.5 | 8.7 | 381.64 ug/L | 381.64 ppb | 08:26:19 |
| 3 | Mn 257.610† | 8517.2 | 8251.9 | 10.817 ug/L | 10.817 ppb | 08:27:17 |
| 3 | Mo 202.031† | 120.8 | 109.3 | 9.6162 ug/L | 9.6162 ppb | 08:27:37 |
| 3 | Na 589.592 Radial† | 232.9 | 692.2 | 271.84 ug/L | 271.84 ppb | 08:25:59 |
| 3 | Ni 231.604† | 261.8 | 174.0 | 5.4295 ug/L | 5.4295 ppb | 08:27:37 |
| 3 | P 214.914† | 381.5 | 221.7 | 157.29 ug/L | 157.29 ppb | 08:27:37 |
| 3 | Pb 220.353† | 17.2 | 76.4 | 11.584 ug/L | 11.584 ppb | 08:27:37 |
| 3 | S 181.975 Axial† | 91.3 | 69.0 | 120.85 ug/L | 120.85 ppb | 08:27:37 |
| 3 | Sb 206.836† | 47.9 | 22.4 | 9.8400 ug/L | 9.8400 ppb | 08:27:37 |
| 3 | Se 196.026† | 24.8 | 42.3 | 33.989 ug/L | 33.989 ppb | 08:27:37 |
| 3 | Si 251.611† | 3145.0 | 2688.6 | 99.988 ug/L | 99.988 ppb | 08:27:37 |
| 3 | Sn 189.927† | 44.5 | 42.4 | 9.4196 ug/L | 9.4196 ppb | 08:27:37 |
| 3 | Sr 421.552† | 628.9 | 554.7 | 4.7217 ug/L | 4.7217 ppb | 08:25:59 |
| 3 | Ti 334.940† | 1804.1 | 2927.1 | 5.0089 ug/L | 5.0089 ppb | 08:27:17 |
| 3 | Tl 190.801† | 26.5 | 52.2 | 20.234 ug/L | 20.234 ppb | 08:27:37 |
| 3 | U 409.014† | -157.1 | 1874.7 | 55.142 ug/L | 55.142 ppb | 08:27:17 |
| 3 | V 292.402† | -863.1 | 545.4 | 4.4378 ug/L | 4.4378 ppb | 08:27:17 |
| 3 | Zn 213.857† | 1592.8 | 1021.4 | 12.076 ug/L | 12.076 ppb | 08:27:37 |
| 3 | SiO2† | 3297.8 | 2816.9 | 224.80 ug/L | 224.80 ppb | 08:27:52 |

Mean Data: PQL

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 830792.8 | 98.921 % | 1.3904 | | | 1.41% |
| Sc Radial | 4074.1 | 101 % | 0.3 | | | 0.29% |
| Y 371.029 | 708606.5 | 98.957 % | 1.4927 | | | 1.51% |
| Y RADIAL | 4485.7 | 99.29 % | 0.489 | | | 0.49% |
| Ag 328.068† | 964.0 | 4.8584 ug/L | 0.19512 | 4.8584 ppb | 0.19512 | 4.02% |
| QC value within limits for Ag 328.068 Recovery = 97.17% | | | | | | |
| Al 396.153Radial† | 209.9 | 223.23 ug/L | 9.413 | 223.23 ppb | 9.413 | 4.22% |
| QC value within limits for Al 396.153Radial Recovery = 111.62% | | | | | | |
| As 188.979† | 55.0 | 29.529 ug/L | 1.3688 | 29.529 ppb | 1.3688 | 4.64% |
| QC value within limits for As 188.979 Recovery = 98.43% | | | | | | |
| B 249.677† | 1881.9 | 51.702 ug/L | 1.3663 | 51.702 ppb | 1.3663 | 2.64% |
| QC value within limits for B 249.677 Recovery = 103.40% | | | | | | |
| Ba 233.527† | 560.0 | 5.2632 ug/L | 0.13771 | 5.2632 ppb | 0.13771 | 2.62% |
| QC value within limits for Ba 233.527 Recovery = 105.26% | | | | | | |
| Be 313.107† | 12603.7 | 5.1286 ug/L | 0.03571 | 5.1286 ppb | 0.03571 | 0.70% |
| QC value within limits for Be 313.107 Recovery = 102.57% | | | | | | |

| | | | | | | |
|--|--------|-------------|---------|------------|---------|--------|
| Ca 317.933Radial† | 108.9 | 221.27 ug/L | 5.862 | 221.27 ppb | 5.862 | 2.65% |
| QC value within limits for Ca 317.933Radial Recovery = 110.64% | | | | | | |
| Cd 226.502† | 366.7 | 5.1773 ug/L | 0.17772 | 5.1773 ppb | 0.17772 | 3.43% |
| QC value within limits for Cd 226.502 Recovery = 103.55% | | | | | | |
| Co 228.616† | 199.9 | 5.2136 ug/L | 0.08388 | 5.2136 ppb | 0.08388 | 1.61% |
| QC value within limits for Co 228.616 Recovery = 104.27% | | | | | | |
| Cr 267.716† | 409.1 | 5.3208 ug/L | 0.15539 | 5.3208 ppb | 0.15539 | 2.92% |
| QC value within limits for Cr 267.716 Recovery = 106.42% | | | | | | |
| Cu 324.752† | 3324.4 | 10.754 ug/L | 0.0945 | 10.754 ppb | 0.0945 | 0.88% |
| QC value within limits for Cu 324.752 Recovery = 107.54% | | | | | | |
| Fe 238.204 Radial† | 6.6 | 82.514 ug/L | 23.9757 | 82.514 ppb | 23.9757 | 29.06% |
| QC value within limits for Fe 238.204 Radial Recovery = 82.51% | | | | | | |
| K 766.490 Radial† | 739.7 | 147.46 ug/L | 16.187 | 147.46 ppb | 16.187 | 10.98% |
| QC value within limits for K 766.490 Radial Recovery = 98.31% | | | | | | |
| Mg 279.077 IEC† | 8.2 | 356.68 ug/L | 26.784 | 356.68 ppb | 26.784 | 7.51% |
| QC value within limits for Mg 279.077 IEC Recovery = 118.89% | | | | | | |
| Mn 257.610† | 8280.4 | 10.858 ug/L | 0.0902 | 10.858 ppb | 0.0902 | 0.83% |
| QC value within limits for Mn 257.610 Recovery = 108.58% | | | | | | |
| Mo 202.031† | 114.9 | 10.109 ug/L | 0.6038 | 10.109 ppb | 0.6038 | 5.97% |
| QC value within limits for Mo 202.031 Recovery = 101.09% | | | | | | |
| Na 589.592 Radial† | 710.9 | 279.17 ug/L | 11.495 | 279.17 ppb | 11.495 | 4.12% |
| QC value within limits for Na 589.592 Radial Recovery = 93.06% | | | | | | |
| Ni 231.604† | 176.3 | 5.5028 ug/L | 0.06498 | 5.5028 ppb | 0.06498 | 1.18% |
| QC value within limits for Ni 231.604 Recovery = 110.06% | | | | | | |
| P 214.914† | 221.2 | 156.93 ug/L | 2.535 | 156.93 ppb | 2.535 | 1.62% |
| QC value within limits for P 214.914 Recovery = 104.62% | | | | | | |
| Pb 220.353† | 70.1 | 10.622 ug/L | 0.9648 | 10.622 ppb | 0.9648 | 9.08% |
| QC value within limits for Pb 220.353 Recovery = 106.22% | | | | | | |
| S 181.975 Axial† | 65.5 | 114.70 ug/L | 7.165 | 114.70 ppb | 7.165 | 6.25% |
| QC value within limits for S 181.975 Axial Recovery = 114.70% | | | | | | |
| Sb 206.836† | 23.6 | 10.410 ug/L | 1.9829 | 10.410 ppb | 1.9829 | 19.05% |
| QC value within limits for Sb 206.836 Recovery = 104.10% | | | | | | |
| Se 196.026† | 40.0 | 32.233 ug/L | 5.9104 | 32.233 ppb | 5.9104 | 18.34% |
| QC value within limits for Se 196.026 Recovery = 107.44% | | | | | | |
| Si 251.611† | 2643.4 | 98.298 ug/L | 2.5503 | 98.298 ppb | 2.5503 | 2.59% |
| QC value within limits for Si 251.611 Recovery = 98.30% | | | | | | |
| Sn 189.927† | 48.0 | 10.662 ug/L | 1.1118 | 10.662 ppb | 1.1118 | 10.43% |
| QC value within limits for Sn 189.927 Recovery = 106.62% | | | | | | |
| Sr 421.552† | 540.3 | 4.5991 ug/L | 0.10680 | 4.5991 ppb | 0.10680 | 2.32% |
| QC value within limits for Sr 421.552 Recovery = 91.98% | | | | | | |
| Ti 334.940† | 2945.9 | 5.0433 ug/L | 0.08408 | 5.0433 ppb | 0.08408 | 1.67% |
| QC value within limits for Ti 334.940 Recovery = 100.87% | | | | | | |
| Tl 190.801† | 50.5 | 19.588 ug/L | 1.0253 | 19.588 ppb | 1.0253 | 5.23% |
| QC value within limits for Tl 190.801 Recovery = 97.94% | | | | | | |
| U 409.014† | 1843.6 | 54.227 ug/L | 1.8176 | 54.227 ppb | 1.8176 | 3.35% |
| QC value within limits for U 409.014 Recovery = 108.45% | | | | | | |
| V 292.402† | 649.9 | 5.2439 ug/L | 0.74321 | 5.2439 ppb | 0.74321 | 14.17% |
| QC value within limits for V 292.402 Recovery = 104.88% | | | | | | |
| Zn 213.857† | 1002.7 | 11.850 ug/L | 0.2620 | 11.850 ppb | 0.2620 | 2.21% |
| QC value within limits for Zn 213.857 Recovery = 118.50% | | | | | | |
| SiO2† | 2785.8 | 222.30 ug/L | 7.114 | 222.30 ppb | 7.114 | 3.20% |
| QC value within limits for SiO2 Recovery = 104.37% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 3/25/2010 08:30:04
 Data Type: Reprocessed on 3/25/2010 09:41:47
 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 361.383 | 707696.0 | 707696.0 | 84.264 % | | 08:33:14 |
| 1 | Sc Radial | 3753.1 | 3753.1 | 93.0 % | | 08:32:17 |
| 1 | Y 371.029 | 589906.4 | 589906.4 | 82.381 % | | 08:33:14 |
| 1 | Y RADIAL | 4073.2 | 4073.2 | 90.15 % | | 08:32:17 |
| 1 | Ag 328.068† | -8912.7 | -10830.5 | -4.1156 ug/L | -4.1156 ppb | 08:33:14 |
| 1 | Al 396.153Radial† | 455601.1 | 489757.3 | 521960 ug/L | 521960 ppb | 08:31:57 |
| 1 | As 188.979† | -62.6 | -53.5 | 14.358 ug/L | 14.358 ppb | 08:33:34 |
| 1 | B 249.677† | 263.9 | 563.3 | -14.460 ug/L | -14.460 ppb | 08:33:14 |
| 1 | Ba 233.527† | -536.4 | -655.1 | -0.5012 ug/L | -0.5012 ppb | 08:33:34 |
| 1 | Be 313.107† | -4506.7 | -1085.6 | -0.4961 ug/L | -0.4961 ppb | 08:33:14 |
| 1 | Ca 317.933Radial† | 220929.8 | 237437.0 | 482410 ug/L | 482410 ppb | 08:31:57 |
| 1 | Cd 226.502† | 1030.2 | 1389.0 | 0.5556 ug/L | 0.5556 ppb | 08:33:34 |
| 1 | Co 228.616† | 19.2 | 61.6 | -1.0498 ug/L | -1.0498 ppb | 08:33:34 |
| 1 | Cr 267.716† | -1281.9 | -1616.3 | -1.5033 ug/L | -1.5033 ppb | 08:33:34 |
| 1 | Cu 324.752† | 3398.9 | -2319.2 | 2.2207 ug/L | 2.2207 ppb | 08:33:14 |
| 1 | Fe 238.204 Radial† | 13726.1 | 14743.7 | 184360 ug/L | 184360 ppb | 08:32:17 |
| 1 | K 766.490 Radial† | 2382.7 | -242.3 | -209.78 ug/L | -209.78 ppb | 08:31:57 |
| 1 | Mg 279.077 IEC† | 10343.0 | 11115.9 | 485390 ug/L | 485390 ppb | 08:32:17 |
| 1 | Mn 257.610† | -816.6 | -1421.5 | -3.5103 ug/L | -3.5103 ppb | 08:33:14 |
| 1 | Mo 202.031† | -189.3 | -238.9 | -0.9493 ug/L | -0.9493 ppb | 08:33:34 |
| 1 | Na 589.592 Radial† | -88.5 | 365.7 | 143.63 ug/L | 143.63 ppb | 08:32:17 |
| 1 | Ni 231.604† | 177.7 | 117.2 | 3.6595 ug/L | 3.6595 ppb | 08:33:34 |
| 1 | P 214.914† | 159.7 | 21.4 | -2.2902 ug/L | -2.2902 ppb | 08:33:34 |
| 1 | Pb 220.353† | -662.3 | -727.2 | -13.675 ug/L | -13.675 ppb | 08:33:34 |
| 1 | S 181.975 Axial† | 36.9 | 19.5 | -63.706 ug/L | -63.706 ppb | 08:33:34 |
| 1 | Sb 206.836† | 49.0 | 31.5 | -4.3685 ug/L | -4.3685 ppb | 08:33:34 |
| 1 | Se 196.026† | -821.2 | -957.6 | -17.279 ug/L | -17.279 ppb | 08:33:34 |
| 1 | Si 251.611† | 433.5 | -10.9 | -0.1488 ug/L | -0.1488 ppb | 08:33:34 |
| 1 | Sn 189.927† | -315.6 | -377.7 | -8.5258 ug/L | -8.5258 ppb | 08:33:34 |
| 1 | Sr 421.552† | 418.8 | 380.1 | -0.3651 ug/L | -0.3651 ppb | 08:32:17 |
| 1 | Ti 334.940† | -12845.8 | -14161.4 | 0.6710 ug/L | 0.6710 ppb | 08:33:14 |
| 1 | Tl 190.801† | -67.0 | -54.5 | -21.310 ug/L | -21.310 ppb | 08:33:34 |
| 1 | U 409.014† | -796.6 | 1089.8 | 11.096 ug/L | 11.096 ppb | 08:33:14 |
| 1 | V 292.402† | 330.5 | 1819.7 | -3.6472 ug/L | -3.6472 ppb | 08:33:34 |
| 1 | Zn 213.857† | 2633.3 | 2518.6 | 2.3177 ug/L | 2.3177 ppb | 08:33:34 |
| 1 | SiO2† | 557.1 | 107.7 | 9.1800 ug/L | 9.1800 ppb | 08:34:31 |
| 2 | Sc 361.383 | 714756.1 | 714756.1 | 85.105 % | | 08:33:40 |
| 2 | Sc Radial | 3804.1 | 3804.1 | 94.3 % | | 08:32:42 |
| 2 | Y 371.029 | 595723.2 | 595723.2 | 83.193 % | | 08:33:40 |
| 2 | Y RADIAL | 4134.7 | 4134.7 | 91.52 % | | 08:32:42 |
| 2 | Ag 328.068† | -8924.4 | -10739.8 | -4.2222 ug/L | -4.2222 ppb | 08:33:40 |
| 2 | Al 396.153Radial† | 448737.6 | 475911.1 | 507210 ug/L | 507210 ppb | 08:32:22 |
| 2 | As 188.979† | -68.6 | -59.8 | 10.430 ug/L | 10.430 ppb | 08:34:00 |
| 2 | B 249.677† | 386.0 | 703.7 | -10.206 ug/L | -10.206 ppb | 08:33:40 |
| 2 | Ba 233.527† | -533.4 | -645.3 | -0.4834 ug/L | -0.4834 ppb | 08:34:00 |
| 2 | Be 313.107† | -4542.5 | -1074.8 | -0.4899 ug/L | -0.4899 ppb | 08:33:40 |
| 2 | Ca 317.933Radial† | 217322.3 | 230426.6 | 468170 ug/L | 468170 ppb | 08:32:22 |
| 2 | Cd 226.502† | 1040.9 | 1389.5 | 0.8138 ug/L | 0.8138 ppb | 08:34:00 |
| 2 | Co 228.616† | 11.0 | 51.9 | -1.2697 ug/L | -1.2697 ppb | 08:34:00 |
| 2 | Cr 267.716† | -1297.6 | -1619.6 | -1.8072 ug/L | -1.8072 ppb | 08:34:00 |
| 2 | Cu 324.752† | 3504.0 | -2235.4 | 2.3596 ug/L | 2.3596 ppb | 08:33:40 |
| 2 | Fe 238.204 Radial† | 13729.5 | 14549.4 | 181940 ug/L | 181940 ppb | 08:32:42 |
| 2 | K 766.490 Radial† | 2512.3 | -139.3 | -184.44 ug/L | -184.44 ppb | 08:32:22 |
| 2 | Mg 279.077 IEC† | 10344.2 | 10968.0 | 478940 ug/L | 478940 ppb | 08:32:42 |
| 2 | Mn 257.610† | -957.2 | -1577.1 | -3.6903 ug/L | -3.6903 ppb | 08:33:40 |
| 2 | Mo 202.031† | -184.9 | -231.4 | -0.6508 ug/L | -0.6508 ppb | 08:34:00 |
| 2 | Na 589.592 Radial† | -121.0 | 332.5 | 130.60 ug/L | 130.60 ppb | 08:32:42 |
| 2 | Ni 231.604† | 149.0 | 81.5 | 2.5433 ug/L | 2.5433 ppb | 08:34:00 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 158.1 | 17.6 | -6.7776 ug/L | -6.7776 ppb | 08:34:00 |
| 2 | Pb 220.353† | -674.8 | -734.1 | -17.837 ug/L | -17.837 ppb | 08:34:00 |
| 2 | S 181.975 Axial† | 47.8 | 31.8 | -39.291 ug/L | -39.291 ppb | 08:34:00 |
| 2 | Sb 206.836† | 52.4 | 35.0 | -2.4608 ug/L | -2.4608 ppb | 08:34:00 |
| 2 | Se 196.026† | -823.9 | -951.2 | -25.025 ug/L | -25.025 ppb | 08:34:00 |
| 2 | Si 251.611† | 401.0 | -54.3 | -1.7698 ug/L | -1.7698 ppb | 08:34:00 |
| 2 | Sn 189.927† | -326.2 | -386.4 | -12.851 ug/L | -12.851 ppb | 08:34:00 |
| 2 | Sr 421.552† | 438.9 | 395.4 | -0.1289 ug/L | -0.1289 ppb | 08:32:42 |
| 2 | Ti 334.940† | -12588.1 | -13708.0 | 0.0650 ug/L | 0.0650 ppb | 08:33:40 |
| 2 | Tl 190.801† | -67.8 | -54.5 | -21.325 ug/L | -21.325 ppb | 08:34:00 |
| 2 | U 409.014† | -592.5 | 1338.9 | 18.703 ug/L | 18.703 ppb | 08:33:40 |
| 2 | V 292.402† | 320.5 | 1804.1 | -3.5155 ug/L | -3.5155 ppb | 08:34:00 |
| 2 | Zn 213.857† | 2633.7 | 2488.2 | 2.3265 ug/L | 2.3265 ppb | 08:34:00 |
| 2 | SiO2† | 390.5 | -94.6 | -7.0021 ug/L | -7.0021 ppb | 08:34:36 |
| 3 | Sc 361.383 | 718206.8 | 718206.8 | 85.516 % | | 08:34:05 |
| 3 | Sc Radial | 3716.1 | 3716.1 | 92.1 % | | 08:33:08 |
| 3 | Y 371.029 | 599800.3 | 599800.3 | 83.762 % | | 08:34:05 |
| 3 | Y RADIAL | 4026.8 | 4026.8 | 89.13 % | | 08:33:08 |
| 3 | Ag 328.068† | -8750.4 | -10485.9 | -1.7967 ug/L | -1.7967 ppb | 08:34:05 |
| 3 | Al 396.153Radial† | 454483.4 | 493428.6 | 525880 ug/L | 525880 ppb | 08:32:48 |
| 3 | As 188.979† | -69.4 | -60.3 | 11.167 ug/L | 11.167 ppb | 08:34:25 |
| 3 | B 249.677† | 175.8 | 455.8 | -17.734 ug/L | -17.734 ppb | 08:34:05 |
| 3 | Ba 233.527† | -510.9 | -616.0 | -0.0760 ug/L | -0.0760 ppb | 08:34:25 |
| 3 | Be 313.107† | -4449.2 | -940.1 | -0.4338 ug/L | -0.4338 ppb | 08:34:05 |
| 3 | Ca 317.933Radial† | 219506.8 | 238260.9 | 484090 ug/L | 484090 ppb | 08:32:48 |
| 3 | Cd 226.502† | 1083.8 | 1433.8 | 0.9837 ug/L | 0.9837 ppb | 08:34:25 |
| 3 | Co 228.616† | 13.0 | 54.1 | -1.2866 ug/L | -1.2866 ppb | 08:34:25 |
| 3 | Cr 267.716† | -1257.6 | -1565.5 | -0.6353 ug/L | -0.6353 ppb | 08:34:25 |
| 3 | Cu 324.752† | 3439.7 | -2330.4 | 2.2881 ug/L | 2.2881 ppb | 08:34:05 |
| 3 | Fe 238.204 Radial† | 13734.9 | 14900.4 | 186320 ug/L | 186320 ppb | 08:33:08 |
| 3 | K 766.490 Radial† | 2358.7 | -242.9 | -210.45 ug/L | -210.45 ppb | 08:32:48 |
| 3 | Mg 279.077 IEC† | 10357.7 | 11242.7 | 490930 ug/L | 490930 ppb | 08:33:08 |
| 3 | Mn 257.610† | -898.5 | -1503.1 | -3.6504 ug/L | -3.6504 ppb | 08:34:05 |
| 3 | Mo 202.031† | -225.8 | -278.3 | -4.2410 ug/L | -4.2410 ppb | 08:34:25 |
| 3 | Na 589.592 Radial† | -58.3 | 397.6 | 156.14 ug/L | 156.14 ppb | 08:33:08 |
| 3 | Ni 231.604† | 162.8 | 96.8 | 3.0218 ug/L | 3.0218 ppb | 08:34:25 |
| 3 | P 214.914† | 159.0 | 17.7 | -5.5359 ug/L | -5.5359 ppb | 08:34:25 |
| 3 | Pb 220.353† | -672.9 | -728.0 | -13.198 ug/L | -13.198 ppb | 08:34:25 |
| 3 | S 181.975 Axial† | 44.1 | 27.2 | -50.803 ug/L | -50.803 ppb | 08:34:25 |
| 3 | Sb 206.836† | 36.8 | 16.4 | -11.023 ug/L | -11.023 ppb | 08:34:25 |
| 3 | Se 196.026† | -835.6 | -960.1 | -12.044 ug/L | -12.044 ppb | 08:34:25 |
| 3 | Si 251.611† | 412.3 | -43.3 | -1.3118 ug/L | -1.3118 ppb | 08:34:25 |
| 3 | Sn 189.927† | -328.3 | -387.0 | -10.417 ug/L | -10.417 ppb | 08:34:25 |
| 3 | Sr 421.552† | 443.5 | 411.4 | -0.1117 ug/L | -0.1117 ppb | 08:33:08 |
| 3 | Ti 334.940† | -12329.2 | -13334.2 | 1.8662 ug/L | 1.8662 ppb | 08:34:05 |
| 3 | Tl 190.801† | -76.6 | -64.5 | -25.163 ug/L | -25.163 ppb | 08:34:25 |
| 3 | U 409.014† | -818.9 | 1077.5 | 10.510 ug/L | 10.510 ppb | 08:34:05 |
| 3 | V 292.402† | 275.1 | 1749.2 | -4.4206 ug/L | -4.4206 ppb | 08:34:25 |
| 3 | Zn 213.857† | 2658.4 | 2502.3 | 1.8341 ug/L | 1.8341 ppb | 08:34:25 |
| 3 | SiO2† | 405.7 | -79.0 | -5.6448 ug/L | -5.6448 ppb | 08:34:41 |

Mean Data: ICSA

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383 | 713553.0 | 84.961 % | 0.6379 | | | 0.75% |
| Sc Radial | 3757.8 | 93.2 % | 1.10 | | | 1.18% |
| Y 371.029 | 595143.3 | 83.112 % | 0.6944 | | | 0.84% |
| Y RADIAL | 4078.2 | 90.27 % | 1.199 | | | 1.33% |
| Ag 328.068† | -10685.4 | -3.3782 ug/L | 1.37061 | -3.3782 ppb | 1.37061 | 40.57% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 486365.7 | 518350 ug/L | 9845.7 | 518350 ppb | 9845.7 | 1.90% |
| QC value within limits for Al 396.153Radial Recovery = 103.67% | | | | | | |
| As 188.979† | -57.8 | 11.985 ug/L | 2.0881 | 11.985 ppb | 2.0881 | 17.42% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | 574.3 | -14.133 ug/L | 3.7749 | -14.133 ppb | 3.7749 | 26.71% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | -638.8 | -0.3536 ug/L | 0.24052 | -0.3536 ppb | 0.24052 | 68.03% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | -1033.5 | -0.4733 ug/L | 0.03435 | -0.4733 ppb | 0.03435 | 7.26% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |

| | | | | | | |
|--|----------|--------------|---------|-------------|---------|---------|
| Ca 317.933Radial† | 235374.9 | 478220 ug/L | 8746.8 | 478220 ppb | 8746.8 | 1.83% |
| QC value within limits for Ca 317.933Radial Recovery = 95.64% | | | | | | |
| Cd 226.502† | 1404.1 | 0.7843 ug/L | 0.21554 | 0.7843 ppb | 0.21554 | 27.48% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | 55.9 | -1.2020 ug/L | 0.13207 | -1.2020 ppb | 0.13207 | 10.99% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | -1600.5 | -1.3153 ug/L | 0.60814 | -1.3153 ppb | 0.60814 | 46.24% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | -2295.0 | 2.2895 ug/L | 0.06944 | 2.2895 ppb | 0.06944 | 3.03% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 14731.2 | 184210 ug/L | 2198.7 | 184210 ppb | 2198.7 | 1.19% |
| QC value within limits for Fe 238.204 Radial Recovery = 92.10% | | | | | | |
| K 766.490 Radial† | -208.2 | -201.56 ug/L | 14.827 | -201.56 ppb | 14.827 | 7.36% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 11108.9 | 485090 ug/L | 6003.0 | 485090 ppb | 6003.0 | 1.24% |
| QC value within limits for Mg 279.077 IEC Recovery = 97.02% | | | | | | |
| Mn 257.610† | -1500.6 | -3.6170 ug/L | 0.09450 | -3.6170 ppb | 0.09450 | 2.61% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -249.5 | -1.9470 ug/L | 1.99223 | -1.9470 ppb | 1.99223 | 102.32% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 365.3 | 143.46 ug/L | 12.774 | 143.46 ppb | 12.774 | 8.90% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | 98.5 | 3.0749 ug/L | 0.55994 | 3.0749 ppb | 0.55994 | 18.21% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 18.9 | -4.8679 ug/L | 2.31708 | -4.8679 ppb | 2.31708 | 47.60% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | -729.8 | -14.903 ug/L | 2.5520 | -14.903 ppb | 2.5520 | 17.12% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 26.2 | -51.267 ug/L | 12.2141 | -51.267 ppb | 12.2141 | 23.82% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 27.6 | -5.9509 ug/L | 4.49522 | -5.9509 ppb | 4.49522 | 75.54% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -956.3 | -18.116 ug/L | 6.5308 | -18.116 ppb | 6.5308 | 36.05% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | -36.2 | -1.0768 ug/L | 0.83565 | -1.0768 ppb | 0.83565 | 77.61% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | -383.7 | -10.598 ug/L | 2.1685 | -10.598 ppb | 2.1685 | 20.46% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | 395.6 | -0.2019 ug/L | 0.14157 | -0.2019 ppb | 0.14157 | 70.12% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | -13734.5 | 0.8674 ug/L | 0.91650 | 0.8674 ppb | 0.91650 | 105.66% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | -57.8 | -22.599 ug/L | 2.2199 | -22.599 ppb | 2.2199 | 9.82% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 1168.7 | 13.436 ug/L | 4.5709 | 13.436 ppb | 4.5709 | 34.02% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 1791.0 | -3.8611 ug/L | 0.48896 | -3.8611 ppb | 0.48896 | 12.66% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 2503.0 | 2.1594 ug/L | 0.28177 | 2.1594 ppb | 0.28177 | 13.05% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | -21.9 | -1.1556 ug/L | 8.97661 | -1.1556 ppb | 8.97661 | 776.77% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 3/25/2010 08:36:52

Data Type: Reprocessed on 3/25/2010 09:41:48

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc 361.383 | 731947.1 | 731947.1 | 87.152 % | | 08:40:03 |
| 1 | Sc Radial | 3686.7 | 3686.7 | 91.4 % | | 08:39:05 |
| 1 | Y 371.029 | 608253.7 | 608253.7 | 84.943 % | | 08:40:03 |
| 1 | Y RADIAL | 4011.7 | 4011.7 | 88.79 % | | 08:39:05 |
| 1 | Ag 328.068† | 38604.6 | 44042.6 | 273.97 ug/L | 273.97 ppb | 08:40:03 |
| 1 | Al 396.153Radial† | 451258.7 | 493832.2 | 526280 ug/L | 526280 ppb | 08:38:44 |
| 1 | As 188.979† | 785.8 | 922.5 | 540.67 ug/L | 540.67 ppb | 08:40:23 |
| 1 | B 249.677† | 16965.2 | 19716.5 | 510.79 ug/L | 510.79 ppb | 08:40:03 |
| 1 | Ba 233.527† | 45857.1 | 52599.1 | 499.83 ug/L | 499.83 ppb | 08:40:03 |
| 1 | Be 313.107† | 531262.2 | 613847.0 | 250.34 ug/L | 250.34 ppb | 08:40:03 |
| 1 | Ca 317.933Radial† | 217204.1 | 237640.5 | 482830 ug/L | 482830 ppb | 08:38:44 |
| 1 | Cd 226.502† | 30418.6 | 35069.6 | 476.04 ug/L | 476.04 ppb | 08:40:23 |
| 1 | Co 228.616† | 15580.1 | 17916.0 | 463.77 ug/L | 463.77 ppb | 08:40:23 |
| 1 | Cr 267.716† | 31475.2 | 36020.5 | 488.95 ug/L | 488.95 ppb | 08:40:03 |
| 1 | Cu 324.752† | 153032.6 | 169240.9 | 558.20 ug/L | 558.20 ppb | 08:40:03 |
| 1 | Fe 238.204 Radial† | 13436.2 | 14692.5 | 183740 ug/L | 183740 ppb | 08:39:05 |
| 1 | K 766.490 Radial† | 26780.1 | 26498.7 | 5125.7 ug/L | 5125.7 ppb | 08:38:44 |
| 1 | Mg 279.077 IEC† | 10232.0 | 11194.8 | 488850 ug/L | 488850 ppb | 08:39:05 |
| 1 | Mn 257.610† | 324387.0 | 371757.8 | 485.92 ug/L | 485.92 ppb | 08:40:03 |
| 1 | Mo 202.031† | 4774.1 | 5463.7 | 500.36 ug/L | 500.36 ppb | 08:40:23 |
| 1 | Na 589.592 Radial† | 11878.6 | 13458.1 | 5285.2 ug/L | 5285.2 ppb | 08:39:05 |
| 1 | Ni 231.604† | 13130.4 | 14972.5 | 467.24 ug/L | 467.24 ppb | 08:40:23 |
| 1 | P 214.914† | 3322.0 | 3643.6 | 2497.1 ug/L | 2497.1 ppb | 08:40:23 |
| 1 | Pb 220.353† | 2024.7 | 2382.0 | 457.06 ug/L | 457.06 ppb | 08:40:23 |
| 1 | S 181.975 Axial† | 1389.0 | 1569.4 | 2652.3 ug/L | 2652.3 ppb | 08:40:23 |
| 1 | Sb 206.836† | 1194.0 | 1343.4 | 571.06 ug/L | 571.06 ppb | 08:40:23 |
| 1 | Se 196.026† | 2072.2 | 2394.7 | 2655.6 ug/L | 2655.6 ppb | 08:40:23 |
| 1 | Si 251.611† | 124966.7 | 142864.7 | 5313.4 ug/L | 5313.4 ppb | 08:40:03 |
| 1 | Sn 189.927† | 1636.0 | 1874.0 | 490.29 ug/L | 490.29 ppb | 08:40:23 |
| 1 | Sr 421.552† | 52392.6 | 57256.2 | 483.96 ug/L | 483.96 ppb | 08:38:44 |
| 1 | Ti 334.940† | 247324.4 | 284869.9 | 514.53 ug/L | 514.53 ppb | 08:40:03 |
| 1 | Tl 190.801† | 986.7 | 1157.2 | 450.80 ug/L | 450.80 ppb | 08:40:23 |
| 1 | U 409.014† | 13890.4 | 17973.3 | 506.86 ug/L | 506.86 ppb | 08:40:03 |
| 1 | V 292.402† | 57579.1 | 67495.3 | 510.11 ug/L | 510.11 ppb | 08:40:03 |
| 1 | Zn 213.857† | 39794.3 | 45054.6 | 504.03 ug/L | 504.03 ppb | 08:40:03 |
| 1 | SiO2† | 125037.6 | 142918.1 | 11405 ug/L | 11405 ppb | 08:41:20 |
| 2 | Sc 361.383 | 726270.1 | 726270.1 | 86.476 % | | 08:40:29 |
| 2 | Sc Radial | 3712.5 | 3712.5 | 92.0 % | | 08:39:30 |
| 2 | Y 371.029 | 605012.0 | 605012.0 | 84.490 % | | 08:40:29 |
| 2 | Y RADIAL | 4050.3 | 4050.3 | 89.65 % | | 08:39:30 |
| 2 | Ag 328.068† | 38325.1 | 44065.5 | 273.90 ug/L | 273.90 ppb | 08:40:29 |
| 2 | Al 396.153Radial† | 452648.0 | 491907.7 | 524230 ug/L | 524230 ppb | 08:39:10 |
| 2 | As 188.979† | 772.0 | 913.6 | 535.72 ug/L | 535.72 ppb | 08:40:49 |
| 2 | B 249.677† | 16808.9 | 19687.9 | 510.12 ug/L | 510.12 ppb | 08:40:29 |
| 2 | Ba 233.527† | 45343.2 | 52416.1 | 498.09 ug/L | 498.09 ppb | 08:40:29 |
| 2 | Be 313.107† | 525880.1 | 612388.0 | 249.74 ug/L | 249.74 ppb | 08:40:29 |
| 2 | Ca 317.933Radial† | 217159.2 | 235938.7 | 479370 ug/L | 479370 ppb | 08:39:10 |
| 2 | Cd 226.502† | 30255.0 | 35153.1 | 477.29 ug/L | 477.29 ppb | 08:40:49 |
| 2 | Co 228.616† | 15533.4 | 18001.6 | 466.01 ug/L | 466.01 ppb | 08:40:49 |
| 2 | Cr 267.716† | 31159.2 | 35937.4 | 487.79 ug/L | 487.79 ppb | 08:40:29 |
| 2 | Cu 324.752† | 151880.2 | 169280.8 | 558.29 ug/L | 558.29 ppb | 08:40:29 |
| 2 | Fe 238.204 Radial† | 13472.9 | 14630.1 | 182960 ug/L | 182960 ppb | 08:39:30 |
| 2 | K 766.490 Radial† | 26782.6 | 26297.5 | 5086.7 ug/L | 5086.7 ppb | 08:39:10 |
| 2 | Mg 279.077 IEC† | 10249.7 | 11136.1 | 486290 ug/L | 486290 ppb | 08:39:30 |
| 2 | Mn 257.610† | 321017.8 | 370771.1 | 484.65 ug/L | 484.65 ppb | 08:40:29 |
| 2 | Mo 202.031† | 4738.4 | 5465.2 | 500.39 ug/L | 500.39 ppb | 08:40:49 |
| 2 | Na 589.592 Radial† | 11844.4 | 13330.5 | 5235.1 ug/L | 5235.1 ppb | 08:39:30 |
| 2 | Ni 231.604† | 13090.2 | 15043.8 | 469.46 ug/L | 469.46 ppb | 08:40:49 |

| | | | | | | |
|---|--------------------|----------|----------|-------------|------------|----------|
| 2 | P 214.914† | 3342.8 | 3697.3 | 2535.9 ug/L | 2535.9 ppb | 08:40:49 |
| 2 | Pb 220.353† | 2071.4 | 2454.2 | 467.55 ug/L | 467.55 ppb | 08:40:49 |
| 2 | S 181.975 Axial† | 1379.2 | 1570.5 | 2654.6 ug/L | 2654.6 ppb | 08:40:49 |
| 2 | Sb 206.836† | 1214.6 | 1377.9 | 585.94 ug/L | 585.94 ppb | 08:40:49 |
| 2 | Se 196.026† | 2040.9 | 2377.1 | 2638.4 ug/L | 2638.4 ppb | 08:40:49 |
| 2 | Si 251.611† | 123593.1 | 142397.0 | 5296.0 ug/L | 5296.0 ppb | 08:40:29 |
| 2 | Sn 189.927† | 1659.8 | 1916.3 | 499.07 ug/L | 499.07 ppb | 08:40:49 |
| 2 | Sr 421.552† | 52401.1 | 56866.8 | 480.67 ug/L | 480.67 ppb | 08:39:10 |
| 2 | Ti 334.940† | 245240.4 | 284678.1 | 513.95 ug/L | 513.95 ppb | 08:40:29 |
| 2 | Tl 190.801† | 996.2 | 1177.1 | 458.45 ug/L | 458.45 ppb | 08:40:49 |
| 2 | U 409.014† | 13633.2 | 17800.6 | 501.87 ug/L | 501.87 ppb | 08:40:29 |
| 2 | V 292.402† | 57302.5 | 67691.9 | 511.68 ug/L | 511.68 ppb | 08:40:29 |
| 2 | Zn 213.857† | 39339.8 | 44886.0 | 502.12 ug/L | 502.12 ppb | 08:40:29 |
| 2 | SiO2† | 125387.7 | 144444.3 | 11527 ug/L | 11527 ppb | 08:41:26 |
| 3 | Sc 361.383 | 739054.8 | 739054.8 | 87.998 % | | 08:40:55 |
| 3 | Sc Radial | 3705.3 | 3705.3 | 91.9 % | | 08:39:55 |
| 3 | Y 371.029 | 615574.4 | 615574.4 | 85.965 % | | 08:40:55 |
| 3 | Y RADIAL | 4045.5 | 4045.5 | 89.54 % | | 08:39:55 |
| 3 | Ag 328.068† | 38824.9 | 43866.9 | 272.86 ug/L | 272.86 ppb | 08:40:55 |
| 3 | Al 396.153Radial† | 452407.0 | 492598.0 | 524970 ug/L | 524970 ppb | 08:39:35 |
| 3 | As 188.979† | 783.2 | 910.8 | 534.23 ug/L | 534.23 ppb | 08:41:15 |
| 3 | B 249.677† | 17193.6 | 19788.8 | 512.93 ug/L | 512.93 ppb | 08:40:55 |
| 3 | Ba 233.527† | 45966.4 | 52217.3 | 496.22 ug/L | 496.22 ppb | 08:40:55 |
| 3 | Be 313.107† | 533966.0 | 611057.0 | 249.20 ug/L | 249.20 ppb | 08:40:55 |
| 3 | Cd 317.933Radial† | 216685.0 | 235879.6 | 479250 ug/L | 479250 ppb | 08:39:35 |
| 3 | Cd 226.502† | 30422.4 | 34738.2 | 471.45 ug/L | 471.45 ppb | 08:41:15 |
| 3 | Co 228.616† | 15569.1 | 17731.5 | 458.97 ug/L | 458.97 ppb | 08:41:15 |
| 3 | Cr 267.716† | 31541.7 | 35748.8 | 485.32 ug/L | 485.32 ppb | 08:40:55 |
| 3 | Cu 324.752† | 154118.1 | 168785.7 | 556.68 ug/L | 556.68 ppb | 08:40:55 |
| 3 | Fe 238.204 Radial† | 13441.9 | 14624.7 | 182890 ug/L | 182890 ppb | 08:39:55 |
| 3 | K 766.490 Radial† | 26905.6 | 26487.9 | 5124.7 ug/L | 5124.7 ppb | 08:39:35 |
| 3 | Mg 279.077 IEC† | 10230.8 | 11137.2 | 486330 ug/L | 486330 ppb | 08:39:55 |
| 3 | Mn 257.610† | 324939.0 | 368805.5 | 482.06 ug/L | 482.06 ppb | 08:40:55 |
| 3 | Mo 202.031† | 4757.7 | 5392.5 | 493.99 ug/L | 493.99 ppb | 08:41:15 |
| 3 | Na 589.592 Radial† | 11858.3 | 13370.6 | 5250.8 ug/L | 5250.8 ppb | 08:39:55 |
| 3 | Ni 231.604† | 13199.8 | 14906.5 | 465.18 ug/L | 465.18 ppb | 08:41:15 |
| 3 | P 214.914† | 3313.3 | 3597.0 | 2464.3 ug/L | 2464.3 ppb | 08:41:15 |
| 3 | Pb 220.353† | 2043.2 | 2380.7 | 456.63 ug/L | 456.63 ppb | 08:41:15 |
| 3 | S 181.975 Axial† | 1387.2 | 1552.0 | 2622.0 ug/L | 2622.0 ppb | 08:41:15 |
| 3 | Sb 206.836† | 1198.8 | 1335.7 | 567.77 ug/L | 567.77 ppb | 08:41:15 |
| 3 | Se 196.026† | 2046.5 | 2342.6 | 2611.0 ug/L | 2611.0 ppb | 08:41:15 |
| 3 | Si 251.611† | 125437.0 | 142020.1 | 5282.0 ug/L | 5282.0 ppb | 08:40:55 |
| 3 | Sn 189.927† | 1668.0 | 1892.4 | 493.78 ug/L | 493.78 ppb | 08:41:15 |
| 3 | Sr 421.552† | 52363.5 | 56936.1 | 481.26 ug/L | 481.26 ppb | 08:39:35 |
| 3 | Ti 334.940† | 249088.0 | 284144.8 | 513.01 ug/L | 513.01 ppb | 08:40:55 |
| 3 | Tl 190.801† | 978.1 | 1136.5 | 442.79 ug/L | 442.79 ppb | 08:41:15 |
| 3 | U 409.014† | 14115.4 | 18075.8 | 509.98 ug/L | 509.98 ppb | 08:40:55 |
| 3 | V 292.402† | 57975.4 | 67310.2 | 508.68 ug/L | 508.68 ppb | 08:40:55 |
| 3 | Zn 213.857† | 39856.0 | 44685.6 | 499.78 ug/L | 499.78 ppb | 08:40:55 |
| 3 | SiO2† | 124757.2 | 141219.7 | 11270 ug/L | 11270 ppb | 08:41:31 |

Mean Data: ICSAB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 732424.0 | 87.208 % | 0.7627 | | | 0.87% |
| Sc Radial | 3701.5 | 91.8 % | 0.33 | | | 0.36% |
| Y 371.029 | 609613.4 | 85.133 % | 0.7556 | | | 0.89% |
| Y RADIAL | 4035.8 | 89.33 % | 0.465 | | | 0.52% |
| Ag 328.068† | 43991.7 | 273.57 ug/L | 0.621 | 273.57 ppb | 0.621 | 0.23% |
| QC value within limits for Ag 328.068 Recovery = 109.43% | | | | | | |
| Al 396.153Radial† | 492779.3 | 525160 ug/L | 1039.1 | 525160 ppb | 1039.1 | 0.20% |
| QC value within limits for Al 396.153Radial Recovery = 105.03% | | | | | | |
| As 188.979† | 915.6 | 536.87 ug/L | 3.374 | 536.87 ppb | 3.374 | 0.63% |
| QC value within limits for As 188.979 Recovery = 107.37% | | | | | | |
| B 249.677† | 19731.1 | 511.28 ug/L | 1.465 | 511.28 ppb | 1.465 | 0.29% |
| QC value within limits for B 249.677 Recovery = 102.26% | | | | | | |
| Ba 233.527† | 52410.9 | 498.04 ug/L | 1.805 | 498.04 ppb | 1.805 | 0.36% |
| QC value within limits for Ba 233.527 Recovery = 99.61% | | | | | | |
| Be 313.107† | 612430.7 | 249.76 ug/L | 0.568 | 249.76 ppb | 0.568 | 0.23% |
| QC value within limits for Be 313.107 Recovery = 99.90% | | | | | | |

| | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|
| Ca 317.933Radial† | 236486.3 | 480480 ug/L | 2031.8 | 480480 ppb | 2031.8 | 0.42% |
| QC value within limits for Ca 317.933Radial Recovery = 96.10% | | | | | | |
| Cd 226.502† | 34986.9 | 474.93 ug/L | 3.077 | 474.93 ppb | 3.077 | 0.65% |
| QC value within limits for Cd 226.502 Recovery = 94.99% | | | | | | |
| Co 228.616† | 17883.0 | 462.92 ug/L | 3.598 | 462.92 ppb | 3.598 | 0.78% |
| QC value within limits for Co 228.616 Recovery = 92.58% | | | | | | |
| Cr 267.716† | 35902.2 | 487.35 ug/L | 1.855 | 487.35 ppb | 1.855 | 0.38% |
| QC value within limits for Cr 267.716 Recovery = 97.47% | | | | | | |
| Cu 324.752† | 169102.5 | 557.73 ug/L | 0.906 | 557.73 ppb | 0.906 | 0.16% |
| QC value within limits for Cu 324.752 Recovery = 111.55% | | | | | | |
| Fe 238.204 Radial† | 14649.1 | 183200 ug/L | 471.1 | 183200 ppb | 471.1 | 0.26% |
| QC value within limits for Fe 238.204 Radial Recovery = 91.60% | | | | | | |
| K 766.490 Radial† | 26428.0 | 5112.4 ug/L | 22.24 | 5112.4 ppb | 22.24 | 0.43% |
| QC value within limits for K 766.490 Radial Recovery = 102.25% | | | | | | |
| Mg 279.077 IEC† | 11156.1 | 487160 ug/L | 1465.9 | 487160 ppb | 1465.9 | 0.30% |
| QC value within limits for Mg 279.077 IEC Recovery = 97.43% | | | | | | |
| Mn 257.610† | 370444.8 | 484.21 ug/L | 1.965 | 484.21 ppb | 1.965 | 0.41% |
| QC value within limits for Mn 257.610 Recovery = 96.84% | | | | | | |
| Mo 202.031† | 5440.5 | 498.24 ug/L | 3.689 | 498.24 ppb | 3.689 | 0.74% |
| QC value within limits for Mo 202.031 Recovery = 99.65% | | | | | | |
| Na 589.592 Radial† | 13386.4 | 5257.0 ug/L | 25.62 | 5257.0 ppb | 25.62 | 0.49% |
| QC value within limits for Na 589.592 Radial Recovery = 105.14% | | | | | | |
| Ni 231.604† | 14974.3 | 467.29 ug/L | 2.143 | 467.29 ppb | 2.143 | 0.46% |
| QC value within limits for Ni 231.604 Recovery = 93.46% | | | | | | |
| P 214.914† | 3646.0 | 2499.1 ug/L | 35.85 | 2499.1 ppb | 35.85 | 1.43% |
| QC value within limits for P 214.914 Recovery = 99.96% | | | | | | |
| Pb 220.353† | 2405.6 | 460.41 ug/L | 6.185 | 460.41 ppb | 6.185 | 1.34% |
| QC value within limits for Pb 220.353 Recovery = 92.08% | | | | | | |
| S 181.975 Axial† | 1564.0 | 2643.0 ug/L | 18.19 | 2643.0 ppb | 18.19 | 0.69% |
| QC value within limits for S 181.975 Axial Recovery = 105.72% | | | | | | |
| Sb 206.836† | 1352.3 | 574.93 ug/L | 9.682 | 574.93 ppb | 9.682 | 1.68% |
| QC value within limits for Sb 206.836 Recovery = 114.99% | | | | | | |
| Se 196.026† | 2371.5 | 2635.0 ug/L | 22.45 | 2635.0 ppb | 22.45 | 0.85% |
| QC value within limits for Se 196.026 Recovery = 105.40% | | | | | | |
| Si 251.611† | 142427.3 | 5297.1 ug/L | 15.72 | 5297.1 ppb | 15.72 | 0.30% |
| QC value within limits for Si 251.611 Recovery = 105.94% | | | | | | |
| Sn 189.927† | 1894.3 | 494.38 ug/L | 4.421 | 494.38 ppb | 4.421 | 0.89% |
| QC value within limits for Sn 189.927 Recovery = 98.88% | | | | | | |
| Sr 421.552† | 57019.7 | 481.97 ug/L | 1.754 | 481.97 ppb | 1.754 | 0.36% |
| QC value within limits for Sr 421.552 Recovery = 96.39% | | | | | | |
| Ti 334.940† | 284564.3 | 513.83 ug/L | 0.768 | 513.83 ppb | 0.768 | 0.15% |
| QC value within limits for Ti 334.940 Recovery = 102.77% | | | | | | |
| Tl 190.801† | 1156.9 | 450.68 ug/L | 7.830 | 450.68 ppb | 7.830 | 1.74% |
| QC value within limits for Tl 190.801 Recovery = 90.14% | | | | | | |
| U 409.014† | 17949.9 | 506.24 ug/L | 4.092 | 506.24 ppb | 4.092 | 0.81% |
| QC value within limits for U 409.014 Recovery = 101.25% | | | | | | |
| V 292.402† | 67499.1 | 510.16 ug/L | 1.503 | 510.16 ppb | 1.503 | 0.29% |
| QC value within limits for V 292.402 Recovery = 102.03% | | | | | | |
| Zn 213.857† | 44875.4 | 501.98 ug/L | 2.125 | 501.98 ppb | 2.125 | 0.42% |
| QC value within limits for Zn 213.857 Recovery = 100.40% | | | | | | |
| SiO2† | 142860.7 | 11401 ug/L | 128.8 | 11401 ppb | 128.8 | 1.13% |
| QC value within limits for SiO2 Recovery = 106.60% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 3/25/2010 08:43:41
 Data Type: Reprocessed on 3/25/2010 09:41:49
 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 361.383 | 711857.2 | 711857.2 | 84.759 % | | 08:46:52 |
| 1 | Sc Radial | 3681.3 | 3681.3 | 91.3 % | | 08:45:53 |
| 1 | Y 371.029 | 594108.5 | 594108.5 | 82.967 % | | 08:46:52 |
| 1 | Y RADIAL | 3991.6 | 3991.6 | 88.35 % | | 08:45:53 |
| 1 | Ag 328.068† | -20543.7 | -24491.0 | -7.8650 ug/L | -7.8650 ppb | 08:46:52 |
| 1 | Al 396.153Radial† | 443336.2 | 485867.5 | 517820 ug/L | 517820 ppb | 08:45:33 |
| 1 | As 188.979† | -164.4 | -173.1 | 8.7453 ug/L | 8.7453 ppb | 08:47:12 |
| 1 | B 249.677† | 922.3 | 1338.3 | -33.691 ug/L | -33.691 ppb | 08:46:52 |
| 1 | Ba 233.527† | -1452.7 | -1732.4 | -2.9986 ug/L | -2.9986 ppb | 08:47:12 |
| 1 | Be 313.107† | -10237.9 | -7816.1 | -3.2264 ug/L | -3.2264 ppb | 08:46:52 |
| 1 | Ca 317.933Radial† | 214725.2 | 235269.0 | 478010 ug/L | 478010 ppb | 08:45:33 |
| 1 | Cd 226.502† | 2750.0 | 3410.9 | 6.1923 ug/L | 6.1923 ppb | 08:47:12 |
| 1 | Co 228.616† | 198.6 | 273.2 | 0.7944 ug/L | 0.7944 ppb | 08:47:12 |
| 1 | Cr 267.716† | -1135.8 | -1435.0 | 21.413 ug/L | 21.413 ppb | 08:47:12 |
| 1 | Cu 324.752† | 973.8 | -5203.9 | -2.1446 ug/L | -2.1446 ppb | 08:46:52 |
| 1 | Fe 238.204 Radial† | 31672.7 | 34696.5 | 433870 ug/L | 433870 ppb | 08:45:53 |
| 1 | K 766.490 Radial† | 2599.3 | 45.0 | -348.42 ug/L | -348.42 ppb | 08:45:33 |
| 1 | Mg 279.077 IEC† | 10181.8 | 11156.0 | 486890 ug/L | 486890 ppb | 08:45:53 |
| 1 | Mn 257.610† | -22008.4 | -26418.1 | -11.736 ug/L | -11.736 ppb | 08:46:52 |
| 1 | Mo 202.031† | -395.3 | -480.6 | -2.8814 ug/L | -2.8814 ppb | 08:47:12 |
| 1 | Na 589.592 Radial† | 1176582.1 | 1289706.4 | 506490 ug/L | 506490 ppb | 08:45:33 |
| 1 | Ni 231.604† | 246.7 | 197.5 | 6.1626 ug/L | 6.1626 ppb | 08:47:12 |
| 1 | P 214.914† | 494.5 | 415.2 | 80.601 ug/L | 80.601 ppb | 08:47:12 |
| 1 | Pb 220.353† | -499.0 | -529.9 | -20.454 ug/L | -20.454 ppb | 08:47:12 |
| 1 | S 181.975 Axial† | 57.3 | 43.2 | -21.265 ug/L | -21.265 ppb | 08:47:12 |
| 1 | Sb 206.836† | 50.2 | 32.6 | -7.1174 ug/L | -7.1174 ppb | 08:47:12 |
| 1 | Se 196.026† | -1949.4 | -2283.0 | -336.68 ug/L | -336.68 ppb | 08:47:12 |
| 1 | Si 251.611† | -435.7 | -1039.5 | -38.184 ug/L | -38.184 ppb | 08:47:12 |
| 1 | Sn 189.927† | -350.7 | -416.8 | -32.309 ug/L | -32.309 ppb | 08:47:12 |
| 1 | Sr 421.552† | 1325.2 | 1382.0 | 8.1995 ug/L | 8.1995 ppb | 08:45:53 |
| 1 | Ti 334.940† | -12424.5 | -13575.2 | -5.5739 ug/L | -5.5739 ppb | 08:46:52 |
| 1 | Tl 190.801† | -86.2 | -76.7 | -30.062 ug/L | -30.062 ppb | 08:47:12 |
| 1 | U 409.014† | 426790.6 | 505566.5 | 14827 ug/L | 14827 ppb | 08:46:52 |
| 1 | V 292.402† | 870.6 | 2454.7 | -6.9500 ug/L | -6.9500 ppb | 08:47:12 |
| 1 | Zn 213.857† | 4731.4 | 4975.7 | -5.8344 ug/L | -5.8344 ppb | 08:47:12 |
| 1 | SiO2† | -529.5 | -1178.0 | -92.967 ug/L | -92.967 ppb | 08:48:09 |
| 2 | Sc 361.383 | 721124.0 | 721124.0 | 85.863 % | | 08:47:17 |
| 2 | Sc Radial | 3662.5 | 3662.5 | 90.8 % | | 08:46:19 |
| 2 | Y 371.029 | 601501.5 | 601501.5 | 84.000 % | | 08:47:17 |
| 2 | Y RADIAL | 3991.4 | 3991.4 | 88.34 % | | 08:46:19 |
| 2 | Ag 328.068† | -20684.4 | -24343.4 | -7.5856 ug/L | -7.5856 ppb | 08:47:17 |
| 2 | Al 396.153Radial† | 442847.6 | 487828.1 | 519910 ug/L | 519910 ppb | 08:45:59 |
| 2 | As 188.979† | -139.2 | -141.2 | 25.482 ug/L | 25.482 ppb | 08:47:37 |
| 2 | B 249.677† | 828.6 | 1215.2 | -36.839 ug/L | -36.839 ppb | 08:47:17 |
| 2 | Ba 233.527† | -1439.5 | -1695.0 | -2.6918 ug/L | -2.6918 ppb | 08:47:37 |
| 2 | Be 313.107† | -10342.6 | -7782.8 | -3.2116 ug/L | -3.2116 ppb | 08:47:17 |
| 2 | Ca 317.933Radial† | 214684.4 | 236434.3 | 480380 ug/L | 480380 ppb | 08:45:59 |
| 2 | Cd 226.502† | 2717.2 | 3331.0 | 5.2101 ug/L | 5.2101 ppb | 08:47:37 |
| 2 | Co 228.616† | 182.9 | 251.9 | 0.2557 ug/L | 0.2557 ppb | 08:47:37 |
| 2 | Cr 267.716† | -1167.8 | -1455.1 | 21.005 ug/L | 21.005 ppb | 08:47:37 |
| 2 | Cu 324.752† | 940.0 | -5258.0 | -2.3864 ug/L | -2.3864 ppb | 08:47:17 |
| 2 | Fe 238.204 Radial† | 31405.6 | 34580.8 | 432420 ug/L | 432420 ppb | 08:46:19 |
| 2 | K 766.490 Radial† | 2463.5 | -89.9 | -377.28 ug/L | -377.28 ppb | 08:45:59 |
| 2 | Mg 279.077 IEC† | 10063.0 | 11082.6 | 483680 ug/L | 483680 ppb | 08:46:19 |
| 2 | Mn 257.610† | -22280.9 | -26401.8 | -11.727 ug/L | -11.727 ppb | 08:47:17 |
| 2 | Mo 202.031† | -425.8 | -510.2 | -5.5667 ug/L | -5.5667 ppb | 08:47:37 |
| 2 | Na 589.592 Radial† | 1177257.6 | 1297082.2 | 509380 ug/L | 509380 ppb | 08:45:59 |
| 2 | Ni 231.604† | 237.2 | 182.6 | 5.6974 ug/L | 5.6974 ppb | 08:47:37 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 500.6 | 414.9 | 82.084 ug/L | 82.084 ppb | 08:47:37 |
| 2 | Pb 220.353† | -521.4 | -548.4 | -22.552 ug/L | -22.552 ppb | 08:47:37 |
| 2 | S 181.975 Axial† | 49.0 | 32.7 | -40.116 ug/L | -40.116 ppb | 08:47:37 |
| 2 | Sb 206.836† | 50.9 | 32.7 | -7.1244 ug/L | -7.1244 ppb | 08:47:37 |
| 2 | Se 196.026† | -1966.1 | -2272.9 | -332.09 ug/L | -332.09 ppb | 08:47:37 |
| 2 | Si 251.611† | -425.5 | -1021.0 | -37.462 ug/L | -37.462 ppb | 08:47:37 |
| 2 | Sn 189.927† | -343.4 | -403.0 | -28.748 ug/L | -28.748 ppb | 08:47:37 |
| 2 | Sr 421.552† | 1324.2 | 1388.4 | 8.2363 ug/L | 8.2363 ppb | 08:46:19 |
| 2 | Ti 334.940† | -12302.2 | -13244.4 | -4.4174 ug/L | -4.4174 ppb | 08:47:17 |
| 2 | Tl 190.801† | -82.5 | -71.0 | -27.860 ug/L | -27.860 ppb | 08:47:37 |
| 2 | U 409.014† | 431811.6 | 504943.6 | 14808 ug/L | 14808 ppb | 08:47:17 |
| 2 | V 292.402† | 881.1 | 2453.7 | -6.8812 ug/L | -6.8812 ppb | 08:47:37 |
| 2 | Zn 213.857† | 4757.6 | 4934.5 | -6.1042 ug/L | -6.1042 ppb | 08:47:37 |
| 2 | SiO2† | -476.6 | -1108.4 | -87.335 ug/L | -87.335 ppb | 08:48:14 |
| 3 | Sc 361.383 | 722835.2 | 722835.2 | 86.067 % | | 08:47:43 |
| 3 | Sc Radial | 3672.1 | 3672.1 | 91.0 % | | 08:46:45 |
| 3 | Y 371.029 | 604237.5 | 604237.5 | 84.382 % | | 08:47:43 |
| 3 | Y RADIAL | 3981.0 | 3981.0 | 88.11 % | | 08:46:45 |
| 3 | Ag 328.068† | -20560.4 | -24142.3 | -6.7567 ug/L | -6.7567 ppb | 08:47:43 |
| 3 | Al 396.153Radial† | 443426.7 | 487192.4 | 519230 ug/L | 519230 ppb | 08:46:25 |
| 3 | As 188.979† | -149.3 | -152.6 | 19.234 ug/L | 19.234 ppb | 08:48:03 |
| 3 | B 249.677† | 886.9 | 1280.6 | -34.941 ug/L | -34.941 ppb | 08:47:43 |
| 3 | Ba 233.527† | -1462.5 | -1717.7 | -2.9251 ug/L | -2.9251 ppb | 08:48:03 |
| 3 | Be 313.107† | -10370.4 | -7786.5 | -3.2130 ug/L | -3.2130 ppb | 08:47:43 |
| 3 | Ca 317.933Radial† | 214504.7 | 235620.4 | 478720 ug/L | 478720 ppb | 08:46:25 |
| 3 | Cd 226.502† | 2750.2 | 3361.9 | 5.7134 ug/L | 5.7134 ppb | 08:48:03 |
| 3 | Co 228.616† | 188.8 | 258.3 | 0.4327 ug/L | 0.4327 ppb | 08:48:03 |
| 3 | Cr 267.716† | -1144.2 | -1424.4 | 21.333 ug/L | 21.333 ppb | 08:48:03 |
| 3 | Cu 324.752† | 859.0 | -5354.7 | -2.7414 ug/L | -2.7414 ppb | 08:47:43 |
| 3 | Fe 238.204 Radial† | 31442.4 | 34531.0 | 431800 ug/L | 431800 ppb | 08:46:45 |
| 3 | K 766.490 Radial† | 2333.3 | -240.0 | -404.63 ug/L | -404.63 ppb | 08:46:25 |
| 3 | Mg 279.077 IEC† | 10110.8 | 11106.2 | 484710 ug/L | 484710 ppb | 08:46:45 |
| 3 | Mn 257.610† | -22398.3 | -26476.8 | -11.929 ug/L | -11.929 ppb | 08:47:43 |
| 3 | Mo 202.031† | -414.6 | -495.9 | -4.3775 ug/L | -4.3775 ppb | 08:48:03 |
| 3 | Na 589.592 Radial† | 1168111.1 | 1283653.3 | 504110 ug/L | 504110 ppb | 08:46:25 |
| 3 | Ni 231.604† | 246.2 | 192.5 | 6.0067 ug/L | 6.0067 ppb | 08:48:03 |
| 3 | P 214.914† | 482.8 | 392.7 | 66.538 ug/L | 66.538 ppb | 08:48:03 |
| 3 | Pb 220.353† | -481.1 | -500.2 | -15.363 ug/L | -15.363 ppb | 08:48:03 |
| 3 | S 181.975 Axial† | 59.8 | 45.2 | -18.162 ug/L | -18.162 ppb | 08:48:03 |
| 3 | Sb 206.836† | 57.2 | 39.9 | -4.0511 ug/L | -4.0511 ppb | 08:48:03 |
| 3 | Se 196.026† | -1982.7 | -2286.7 | -345.21 ug/L | -345.21 ppb | 08:48:03 |
| 3 | Si 251.611† | -403.4 | -994.2 | -36.480 ug/L | -36.480 ppb | 08:48:03 |
| 3 | Sn 189.927† | -351.9 | -411.9 | -30.979 ug/L | -30.979 ppb | 08:48:03 |
| 3 | Sr 421.552† | 1320.8 | 1380.9 | 8.1845 ug/L | 8.1845 ppb | 08:46:45 |
| 3 | Ti 334.940† | -12323.6 | -13235.3 | -4.7145 ug/L | -4.7145 ppb | 08:47:43 |
| 3 | Tl 190.801† | -75.0 | -62.1 | -24.436 ug/L | -24.436 ppb | 08:48:03 |
| 3 | U 409.014† | 433283.5 | 505463.2 | 14824 ug/L | 14824 ppb | 08:47:43 |
| 3 | V 292.402† | 812.1 | 2371.1 | -7.3602 ug/L | -7.3602 ppb | 08:48:03 |
| 3 | Zn 213.857† | 4774.0 | 4940.5 | -5.9415 ug/L | -5.9415 ppb | 08:48:03 |
| 3 | SiO2† | -461.5 | -1089.6 | -85.867 ug/L | -85.867 ppb | 08:48:19 |

Mean Data: LR1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------------|--------------------|--------------------|----------|--------|
| Sc 361.383 | 718605.5 | 85.563 % | | 0.7033 | | | 0.82% |
| Sc Radial | 3672.0 | 91.0 % | | 0.23 | | | 0.26% |
| Y 371.029 | 599949.2 | 83.783 % | | 0.7318 | | | 0.87% |
| Y RADIAL | 3988.0 | 88.27 % | | 0.134 | | | 0.15% |
| Ag 328.068† | -24325.6 | -7.4024 ug/L | | 0.57646 | -7.4024 ppb | 0.57646 | 7.79% |
| Al 396.153Radial† | 486962.6 | 518990 ug/L | | 1066.1 | 518990 ppb | 1066.1 | 0.21% |
| QC value within limits for Al 396.153Radial | | | | Recovery = 103.80% | | | |
| As 188.979† | -155.6 | 17.820 ug/L | | 8.4574 | 17.820 ppb | 8.4574 | 47.46% |
| B 249.677† | 1278.0 | -35.157 ug/L | | 1.5851 | -35.157 ppb | 1.5851 | 4.51% |
| Ba 233.527† | -1715.1 | -2.8718 ug/L | | 0.16021 | -2.8718 ppb | 0.16021 | 5.58% |
| Be 313.107† | -7795.1 | -3.2170 ug/L | | 0.00816 | -3.2170 ppb | 0.00816 | 0.25% |
| Ca 317.933Radial† | 235774.6 | 479030 ug/L | | 1214.6 | 479030 ppb | 1214.6 | 0.25% |
| QC value within limits for Ca 317.933Radial | | | | Recovery = 95.81% | | | |
| Cd 226.502† | 3367.9 | 5.7053 ug/L | | 0.49116 | 5.7053 ppb | 0.49116 | 8.61% |
| Co 228.616† | 261.1 | 0.4943 ug/L | | 0.27454 | 0.4943 ppb | 0.27454 | 55.54% |
| Cr 267.716† | -1438.1 | 21.251 ug/L | | 0.2161 | 21.251 ppb | 0.2161 | 1.02% |

| | | | | | | |
|--|-----------|--------------|---------|-------------|---------|--------|
| Cu 324.752† | -5272.2 | -2.4241 ug/L | 0.30018 | -2.4241 ppb | 0.30018 | 12.38% |
| Fe 238.204 Radial† | 34602.8 | 432700 ug/L | 1061.5 | 432700 ppb | 1061.5 | 0.25% |
| QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.54% | | | | | | |
| K 766.490 Radial† | -95.0 | -376.78 ug/L | 28.109 | -376.78 ppb | 28.109 | 7.46% |
| Mg 279.077 IEC† | 11115.0 | 485090 ug/L | 1635.1 | 485090 ppb | 1635.1 | 0.34% |
| QC value within limits for Mg 279.077 IEC Recovery = 97.02% | | | | | | |
| Mn 257.610† | -26432.3 | -11.797 ug/L | 0.1140 | -11.797 ppb | 0.1140 | 0.97% |
| Mo 202.031† | -495.5 | -4.2752 ug/L | 1.34557 | -4.2752 ppb | 1.34557 | 31.47% |
| Na 589.592 Radial† | 1290147.3 | 506660 ug/L | 2641.1 | 506660 ppb | 2641.1 | 0.52% |
| QC value within limits for Na 589.592 Radial Recovery = 101.33% | | | | | | |
| Ni 231.604† | 190.9 | 5.9556 ug/L | 0.23676 | 5.9556 ppb | 0.23676 | 3.98% |
| P 214.914† | 407.6 | 76.408 ug/L | 8.5794 | 76.408 ppb | 8.5794 | 11.23% |
| Pb 220.353† | -526.1 | -19.456 ug/L | 3.6968 | -19.456 ppb | 3.6968 | 19.00% |
| S 181.975 Axial† | 40.4 | -26.514 ug/L | 11.8808 | -26.514 ppb | 11.8808 | 44.81% |
| Sb 206.836† | 35.0 | -6.0976 ug/L | 1.77238 | -6.0976 ppb | 1.77238 | 29.07% |
| Se 196.026† | -2280.9 | -337.99 ug/L | 6.661 | -337.99 ppb | 6.661 | 1.97% |
| Si 251.611† | -1018.2 | -37.375 ug/L | 0.8554 | -37.375 ppb | 0.8554 | 2.29% |
| Sn 189.927† | -410.6 | -30.679 ug/L | 1.7993 | -30.679 ppb | 1.7993 | 5.86% |
| Sr 421.552† | 1383.8 | 8.2068 ug/L | 0.02664 | 8.2068 ppb | 0.02664 | 0.32% |
| Ti 334.940† | -13351.6 | -4.9019 ug/L | 0.60061 | -4.9019 ppb | 0.60061 | 12.25% |
| Tl 190.801† | -69.9 | -27.453 ug/L | 2.8354 | -27.453 ppb | 2.8354 | 10.33% |
| U 409.014† | 505324.4 | 14820 ug/L | 9.8 | 14820 ppb | 9.8 | 0.07% |
| QC value within limits for U 409.014 Recovery = 98.80% | | | | | | |
| V 292.402† | 2426.5 | -7.0638 ug/L | 0.25897 | -7.0638 ppb | 0.25897 | 3.67% |
| Zn 213.857† | 4950.2 | -5.9600 ug/L | 0.13581 | -5.9600 ppb | 0.13581 | 2.28% |
| SiO2† | -1125.4 | -88.723 ug/L | 3.7479 | -88.723 ppb | 3.7479 | 4.22% |

QC Failed. Continue with analysis.

Sequence No.: 12
 Sample ID: LR2
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 3/25/2010 08:50:29
 Data Type: Reprocessed on 3/25/2010 09:41:51
 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 361.383 | 812279.4 | 812279.4 | 96.717 % | | 08:54:04 |
| 1 | Sc Radial | 3955.8 | 3955.8 | 98.1 % | | 08:52:46 |
| 1 | Y 371.029 | 676098.6 | 676098.6 | 94.417 % | | 08:54:04 |
| 1 | Y RADIAL | 4424.0 | 4424.0 | 97.92 % | | 08:52:26 |
| 1 | Ag 328.068† | -6263.1 | -6729.2 | 7.3024 ug/L | 7.3024 ppb | 08:54:09 |
| 1 | Al 396.153Radial† | 367.2 | 454.1 | 7.4579 ug/L | 7.4579 ppb | 08:52:26 |
| 1 | As 188.979† | 18091.6 | 18726.6 | 10102 ug/L | 10102 ppb | 08:54:09 |
| 1 | B 249.677† | 180345.8 | 186718.6 | 5104.0 ug/L | 5104.0 ppb | 08:54:04 |
| 1 | Ba 233.527† | 1403478.1 | 1451106.2 | 13626 ug/L | 13626 ppb | 08:54:04 |
| 1 | Be 313.107† | 6974964.5 | 7216019.8 | 2952.4 ug/L | 2952.4 ppb | 08:53:57 |
| 1 | Ca 317.933Radial† | 26.3 | 9.6 | 19.505 ug/L | 19.505 ppb | 08:52:46 |
| 1 | Cd 226.502† | 684169.4 | 707562.6 | 9985.8 ug/L | 9985.8 ppb | 08:54:04 |
| 1 | Co 228.616† | 370123.3 | 382727.5 | 9958.8 ug/L | 9958.8 ppb | 08:54:04 |
| 1 | Cr 267.716† | 1830402.4 | 1892447.7 | 24653 ug/L | 24653 ppb | 08:54:04 |
| 1 | Cu 324.752† | 6126605.9 | 6328244.9 | 20520 ug/L | 20520 ppb | 08:53:57 |
| 1 | Fe 238.204 Radial† | -14.3 | -23.6 | 2.8032 ug/L | 2.8032 ppb | 08:52:46 |
| 1 | K 766.490 Radial† | 1440001.9 | 1465592.8 | 292560 ug/L | 292560 ppb | 08:52:21 |
| 1 | Mg 279.077 IEC† | -2.8 | -3.6 | -54.541 ug/L | -54.541 ppb | 08:52:46 |
| 1 | Mn 257.610† | 7138329.9 | 7380216.2 | 9683.2 ug/L | 9683.2 ppb | 08:53:57 |
| 1 | Mo 202.031† | 108110.2 | 111766.3 | 9826.1 ug/L | 9826.1 ppb | 08:54:09 |
| 1 | Na 589.592 Radial† | -250.3 | 205.7 | 80.765 ug/L | 80.765 ppb | 08:52:26 |
| 1 | Ni 231.604† | 315536.1 | 326154.6 | 10178 ug/L | 10178 ppb | 08:54:04 |
| 1 | P 214.914† | 24218.5 | 24872.5 | 13899 ug/L | 13899 ppb | 08:54:09 |
| 1 | Pb 220.353† | 159235.5 | 164700.2 | 24843 ug/L | 24843 ppb | 08:54:04 |
| 1 | S 181.975 Axial† | 29031.7 | 29992.9 | 52572 ug/L | 52572 ppb | 08:54:09 |
| 1 | Sb 206.836† | 24646.6 | 25456.7 | 11182 ug/L | 11182 ppb | 08:54:09 |
| 1 | Se 196.026† | 12628.1 | 13073.8 | 10448 ug/L | 10448 ppb | 08:54:09 |
| 1 | Si 251.611† | 1260845.0 | 1303123.9 | 48398 ug/L | 48398 ppb | 08:54:04 |
| 1 | Sn 189.927† | 45186.1 | 46717.1 | 10347 ug/L | 10347 ppb | 08:54:09 |
| 1 | Sr 421.552† | 1105470.7 | 1127198.5 | 9598.7 ug/L | 9598.7 ppb | 08:52:21 |
| 1 | Ti 334.940† | 5624582.6 | 5816614.5 | 9998.6 ug/L | 9998.6 ppb | 08:53:57 |
| 1 | Tl 190.801† | 24638.2 | 25499.7 | 9925.7 ug/L | 9925.7 ppb | 08:54:09 |
| 1 | U 409.014† | -1132.4 | 864.4 | -29.670 ug/L | -29.670 ppb | 08:54:04 |
| 1 | V 292.402† | 1281143.8 | 1326064.8 | 10342 ug/L | 10342 ppb | 08:54:04 |
| 1 | Zn 213.857† | 1174558.1 | 1213826.7 | 14327 ug/L | 14327 ppb | 08:54:04 |
| 1 | SiO2† | 1262426.2 | 1304730.9 | 103970 ug/L | 103970 ppb | 08:54:55 |
| 2 | Sc 361.383 | 814009.4 | 814009.4 | 96.923 % | | 08:54:24 |
| 2 | Sc Radial | 3913.2 | 3913.2 | 97.0 % | | 08:53:17 |
| 2 | Y 371.029 | 678170.9 | 678170.9 | 94.707 % | | 08:54:24 |
| 2 | Y RADIAL | 4253.2 | 4253.2 | 94.14 % | | 08:52:57 |
| 2 | Ag 328.068† | -6157.9 | -6606.8 | 7.8844 ug/L | 7.8844 ppb | 08:54:29 |
| 2 | Al 396.153Radial† | 372.2 | 463.4 | 20.453 ug/L | 20.453 ppb | 08:52:57 |
| 2 | As 188.979† | 18020.8 | 18613.8 | 10041 ug/L | 10041 ppb | 08:54:29 |
| 2 | B 249.677† | 180762.6 | 186752.2 | 5105.0 ug/L | 5105.0 ppb | 08:54:24 |
| 2 | Ba 233.527† | 1401802.7 | 1446293.5 | 13581 ug/L | 13581 ppb | 08:54:24 |
| 2 | Be 313.107† | 6895609.3 | 7118818.2 | 2912.6 ug/L | 2912.6 ppb | 08:54:17 |
| 2 | Ca 317.933Radial† | 33.3 | 17.1 | 34.749 ug/L | 34.749 ppb | 08:53:17 |
| 2 | Cd 226.502† | 683767.0 | 705644.1 | 9958.7 ug/L | 9958.7 ppb | 08:54:24 |
| 2 | Co 228.616† | 369980.6 | 381767.0 | 9934.0 ug/L | 9934.0 ppb | 08:54:24 |
| 2 | Cr 267.716† | 1830442.2 | 1888466.5 | 24601 ug/L | 24601 ppb | 08:54:24 |
| 2 | Cu 324.752† | 6043359.2 | 6228892.4 | 20197 ug/L | 20197 ppb | 08:54:17 |
| 2 | Fe 238.204 Radial† | -13.5 | -22.9 | 11.052 ug/L | 11.052 ppb | 08:53:17 |
| 2 | K 766.490 Radial† | 1472184.0 | 1514764.8 | 302380 ug/L | 302380 ppb | 08:52:52 |
| 2 | Mg 279.077 IEC† | -3.6 | -4.5 | -92.002 ug/L | -92.002 ppb | 08:53:17 |
| 2 | Mn 257.610† | 7053872.4 | 7277391.2 | 9548.3 ug/L | 9548.3 ppb | 08:54:17 |
| 2 | Mo 202.031† | 107630.0 | 111033.3 | 9761.6 ug/L | 9761.6 ppb | 08:54:29 |
| 2 | Na 589.592 Radial† | -249.3 | 203.9 | 80.091 ug/L | 80.091 ppb | 08:52:57 |
| 2 | Ni 231.604† | 315372.4 | 325292.4 | 10151 ug/L | 10151 ppb | 08:54:24 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 23937.2 | 24529.0 | 13716 ug/L | 13716 ppb | 08:54:29 |
| 2 | Pb 220.353† | 159055.2 | 164164.2 | 24763 ug/L | 24763 ppb | 08:54:24 |
| 2 | S 181.975 Axial† | 28822.7 | 29713.5 | 52082 ug/L | 52082 ppb | 08:54:29 |
| 2 | Sb 206.836† | 24558.9 | 25312.0 | 11119 ug/L | 11119 ppb | 08:54:29 |
| 2 | Se 196.026† | 12577.3 | 12993.6 | 10384 ug/L | 10384 ppb | 08:54:29 |
| 2 | Si 251.611† | 1261622.6 | 1301155.6 | 48326 ug/L | 48326 ppb | 08:54:24 |
| 2 | Sn 189.927† | 44942.3 | 46366.2 | 10269 ug/L | 10269 ppb | 08:54:29 |
| 2 | Sr 421.552† | 1131511.6 | 1166323.5 | 9931.9 ug/L | 9931.9 ppb | 08:52:52 |
| 2 | Ti 334.940† | 5554927.7 | 5732388.4 | 9853.7 ug/L | 9853.7 ppb | 08:54:17 |
| 2 | Tl 190.801† | 24530.7 | 25334.7 | 9860.1 ug/L | 9860.1 ppb | 08:54:29 |
| 2 | U 409.014† | -1171.5 | 826.5 | -30.670 ug/L | -30.670 ppb | 08:54:24 |
| 2 | V 292.402† | 1282675.7 | 1324830.1 | 10331 ug/L | 10331 ppb | 08:54:24 |
| 2 | Zn 213.857† | 1173982.9 | 1210652.2 | 14290 ug/L | 14290 ppb | 08:54:24 |
| 2 | SiO2† | 1266015.6 | 1305660.1 | 104050 ug/L | 104050 ppb | 08:55:01 |
| 3 | Sc 361.383 | 821266.5 | 821266.5 | 97.787 % | | 08:54:44 |
| 3 | Sc Radial | 3880.0 | 3880.0 | 96.2 % | | 08:53:47 |
| 3 | Y 371.029 | 684193.0 | 684193.0 | 95.548 % | | 08:54:44 |
| 3 | Y RADIAL | 4285.6 | 4285.6 | 94.85 % | | 08:53:27 |
| 3 | Ag 328.068† | -6093.6 | -6484.9 | 8.3627 ug/L | 8.3627 ppb | 08:54:49 |
| 3 | Al 396.153Radial† | 392.8 | 488.1 | 49.154 ug/L | 49.154 ppb | 08:53:27 |
| 3 | As 188.979† | 18125.4 | 18556.5 | 10009 ug/L | 10009 ppb | 08:54:49 |
| 3 | B 249.677† | 182320.5 | 186697.4 | 5103.7 ug/L | 5103.7 ppb | 08:54:44 |
| 3 | Ba 233.527† | 1408455.1 | 1440316.1 | 13525 ug/L | 13525 ppb | 08:54:44 |
| 3 | Be 313.107† | 6894710.6 | 7055030.9 | 2886.5 ug/L | 2886.5 ppb | 08:54:37 |
| 3 | Ca 317.933Radial† | 30.7 | 14.8 | 30.016 ug/L | 30.016 ppb | 08:53:47 |
| 3 | Cd 226.502† | 685592.0 | 701276.4 | 9897.1 ug/L | 9897.1 ppb | 08:54:44 |
| 3 | Co 228.616† | 371200.3 | 379641.1 | 9878.8 ug/L | 9878.8 ppb | 08:54:44 |
| 3 | Cr 267.716† | 1838924.4 | 1880452.4 | 24496 ug/L | 24496 ppb | 08:54:44 |
| 3 | Cu 324.752† | 6052121.7 | 6182755.1 | 20048 ug/L | 20048 ppb | 08:54:37 |
| 3 | Fe 238.204 Radial† | -13.5 | -23.1 | 7.3386 ug/L | 7.3386 ppb | 08:53:47 |
| 3 | K 766.490 Radial† | 1438587.6 | 1492816.4 | 298000 ug/L | 298000 ppb | 08:53:22 |
| 3 | Mg 279.077 IEC† | -4.5 | -5.4 | -132.03 ug/L | -132.03 ppb | 08:53:47 |
| 3 | Mn 257.610† | 7043105.3 | 7202069.3 | 9449.5 ug/L | 9449.5 ppb | 08:54:37 |
| 3 | Mo 202.031† | 108041.4 | 110472.6 | 9712.4 ug/L | 9712.4 ppb | 08:54:49 |
| 3 | Na 589.592 Radial† | -280.4 | 169.3 | 66.495 ug/L | 66.495 ppb | 08:53:27 |
| 3 | Ni 231.604† | 316613.4 | 323686.2 | 10101 ug/L | 10101 ppb | 08:54:44 |
| 3 | P 214.914† | 23953.5 | 24327.5 | 13600 ug/L | 13600 ppb | 08:54:49 |
| 3 | Pb 220.353† | 159583.1 | 163253.9 | 24625 ug/L | 24625 ppb | 08:54:44 |
| 3 | S 181.975 Axial† | 28828.9 | 29457.0 | 51632 ug/L | 51632 ppb | 08:54:49 |
| 3 | Sb 206.836† | 24681.7 | 25213.7 | 11075 ug/L | 11075 ppb | 08:54:49 |
| 3 | Se 196.026† | 12609.6 | 12912.0 | 10319 ug/L | 10319 ppb | 08:54:49 |
| 3 | Si 251.611† | 1271592.0 | 1299848.3 | 48278 ug/L | 48278 ppb | 08:54:44 |
| 3 | Sn 189.927† | 45045.3 | 46061.8 | 10202 ug/L | 10202 ppb | 08:54:49 |
| 3 | Sr 421.552† | 1101788.6 | 1145398.4 | 9753.7 ug/L | 9753.7 ppb | 08:53:22 |
| 3 | Ti 334.940† | 5553643.8 | 5680430.5 | 9764.4 ug/L | 9764.4 ppb | 08:54:37 |
| 3 | Tl 190.801† | 24547.3 | 25127.9 | 9779.3 ug/L | 9779.3 ppb | 08:54:49 |
| 3 | U 409.014† | -917.8 | 1096.6 | -22.488 ug/L | -22.488 ppb | 08:54:44 |
| 3 | V 292.402† | 1290058.0 | 1320685.2 | 10299 ug/L | 10299 ppb | 08:54:44 |
| 3 | Zn 213.857† | 1178398.8 | 1204464.7 | 14217 ug/L | 14217 ppb | 08:54:44 |
| 3 | SiO2† | 1258708.4 | 1286645.1 | 102530 ug/L | 102530 ppb | 08:55:07 |

Mean Data: LR2

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Sc 361.383 | 815851.7 | 97.142 % | 0.5678 | | | 0.58% |
| Sc Radial | 3916.3 | 97.1 % | 0.94 | | | 0.97% |
| Y 371.029 | 679487.5 | 94.891 % | 0.5872 | | | 0.62% |
| Y RADIAL | 4320.9 | 95.64 % | 2.008 | | | 2.10% |
| Ag 328.068† | -6606.9 | 7.8499 ug/L | 0.53098 | 7.8499 ppb | 0.53098 | 6.76% |
| Al 396.153Radial† | 468.5 | 25.688 ug/L | 21.3352 | 25.688 ppb | 21.3352 | 83.05% |
| As 188.979† | 18632.3 | 10051 ug/L | 47.3 | 10051 ppb | 47.3 | 0.47% |
| QC value within limits for As 188.979 Recovery = 100.51% | | | | | | |
| B 249.677† | 186722.7 | 5104.2 ug/L | 0.70 | 5104.2 ppb | 0.70 | 0.01% |
| QC value within limits for B 249.677 Recovery = 102.08% | | | | | | |
| Ba 233.527† | 1445905.3 | 13577 ug/L | 50.7 | 13577 ppb | 50.7 | 0.37% |
| QC value within limits for Ba 233.527 Recovery = 90.51% | | | | | | |
| Be 313.107† | 7129956.3 | 2917.2 ug/L | 33.18 | 2917.2 ppb | 33.18 | 1.14% |
| QC value within limits for Be 313.107 Recovery = 97.24% | | | | | | |
| Ca 317.933Radial† | 13.8 | 28.090 ug/L | 7.8020 | 28.090 ppb | 7.8020 | 27.77% |
| Cd 226.502† | 704827.7 | 9947.2 ug/L | 45.46 | 9947.2 ppb | 45.46 | 0.46% |

| | | | | | | | |
|---|-----------|--------------|---------|-------------|---------|--------|--|
| QC value within limits for Cd 226.502 Recovery = 99.47% | | | | | | | |
| Co 228.616† | 381378.6 | 9923.9 ug/L | 40.99 | 9923.9 ppb | 40.99 | 0.41% | |
| QC value within limits for Co 228.616 Recovery = 99.24% | | | | | | | |
| Cr 267.716† | 1887122.2 | 24583 ug/L | 79.6 | 24583 ppb | 79.6 | 0.32% | |
| QC value within limits for Cr 267.716 Recovery = 98.33% | | | | | | | |
| Cu 324.752† | 6246630.8 | 20255 ug/L | 241.1 | 20255 ppb | 241.1 | 1.19% | |
| QC value within limits for Cu 324.752 Recovery = 101.27% | | | | | | | |
| Fe 238.204 Radial† | -23.2 | 7.0647 ug/L | 4.13135 | 7.0647 ppb | 4.13135 | 58.48% | |
| K 766.490 Radial† | 1491058.0 | 297650 ug/L | 4917.6 | 297650 ppb | 4917.6 | 1.65% | |
| QC value within limits for K 766.490 Radial Recovery = 99.22% | | | | | | | |
| Mg 279.077 IEC† | -4.5 | -92.859 ug/L | 38.7538 | -92.859 ppb | 38.7538 | 41.73% | |
| Mn 257.610† | 7286558.9 | 9560.3 ug/L | 117.33 | 9560.3 ppb | 117.33 | 1.23% | |
| QC value within limits for Mn 257.610 Recovery = 95.60% | | | | | | | |
| Mo 202.031† | 111090.7 | 9766.7 ug/L | 57.03 | 9766.7 ppb | 57.03 | 0.58% | |
| QC value within limits for Mo 202.031 Recovery = 97.67% | | | | | | | |
| Na 589.592 Radial† | 193.0 | 75.783 ug/L | 8.0510 | 75.783 ppb | 8.0510 | 10.62% | |
| Ni 231.604† | 325044.4 | 10144 ug/L | 39.1 | 10144 ppb | 39.1 | 0.39% | |
| QC value within limits for Ni 231.604 Recovery = 101.44% | | | | | | | |
| P 214.914† | 24576.3 | 13738 ug/L | 151.0 | 13738 ppb | 151.0 | 1.10% | |
| QC value within limits for P 214.914 Recovery = 91.59% | | | | | | | |
| Pb 220.353† | 164039.5 | 24744 ug/L | 110.2 | 24744 ppb | 110.2 | 0.45% | |
| QC value within limits for Pb 220.353 Recovery = 98.98% | | | | | | | |
| S 181.975 Axial† | 29721.1 | 52095 ug/L | 469.8 | 52095 ppb | 469.8 | 0.90% | |
| QC value within limits for S 181.975 Axial Recovery = 104.19% | | | | | | | |
| Sb 206.836† | 25327.5 | 11125 ug/L | 53.9 | 11125 ppb | 53.9 | 0.48% | |
| QC value greater than the upper limit for Sb 206.836 Recovery = 111.25% | | | | | | | |
| Se 196.026† | 12993.1 | 10384 ug/L | 64.6 | 10384 ppb | 64.6 | 0.62% | |
| QC value within limits for Se 196.026 Recovery = 103.84% | | | | | | | |
| Si 251.611† | 1301376.0 | 48334 ug/L | 60.7 | 48334 ppb | 60.7 | 0.13% | |
| QC value within limits for Si 251.611 Recovery = 96.67% | | | | | | | |
| Sn 189.927† | 46381.7 | 10273 ug/L | 72.6 | 10273 ppb | 72.6 | 0.71% | |
| QC value within limits for Sn 189.927 Recovery = 102.73% | | | | | | | |
| Sr 421.552† | 1146306.8 | 9761.4 ug/L | 166.72 | 9761.4 ppb | 166.72 | 1.71% | |
| QC value within limits for Sr 421.552 Recovery = 97.61% | | | | | | | |
| Ti 334.940† | 5743144.5 | 9872.2 ug/L | 118.21 | 9872.2 ppb | 118.21 | 1.20% | |
| QC value within limits for Ti 334.940 Recovery = 98.72% | | | | | | | |
| Tl 190.801† | 25320.8 | 9855.0 ug/L | 73.32 | 9855.0 ppb | 73.32 | 0.74% | |
| QC value within limits for Tl 190.801 Recovery = 98.55% | | | | | | | |
| U 409.014† | 929.1 | -27.609 ug/L | 4.4632 | -27.609 ppb | 4.4632 | 16.17% | |
| V 292.402† | 1323860.1 | 10324 ug/L | 22.3 | 10324 ppb | 22.3 | 0.22% | |
| QC value within limits for V 292.402 Recovery = 103.24% | | | | | | | |
| Zn 213.857† | 1209647.8 | 14278 ug/L | 56.0 | 14278 ppb | 56.0 | 0.39% | |
| QC value within limits for Zn 213.857 Recovery = 95.19% | | | | | | | |
| SiO2† | 1299012.0 | 103520 ug/L | 855.2 | 103520 ppb | 855.2 | 0.83% | |
| QC value within limits for SiO2 Recovery = 96.75% | | | | | | | |
| QC Failed. Continue with analysis. | | | | | | | |

Sequence No.: 13

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 08:57:17

Data Type: Reprocessed on 3/25/2010 09:41:52

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 361.383 | 836331.0 | 836331.0 | 99.580 % | | 09:00:27 |
| 1 | Sc Radial | 4071.9 | 4071.9 | 101 % | | 08:59:10 |
| 1 | Y 371.029 | 703534.7 | 703534.7 | 98.249 % | | 09:00:27 |
| 1 | Y RADIAL | 4405.5 | 4405.5 | 97.51 % | | 08:59:10 |
| 1 | Ag 328.068† | 99414.4 | 99580.0 | 505.08 ug/L | 505.08 ppb | 09:00:32 |
| 1 | Al 396.153Radial† | 4621.1 | 4657.5 | 4939.4 ug/L | 4939.4 ppb | 08:59:10 |
| 1 | As 188.979† | 920.5 | 945.2 | 510.95 ug/L | 510.95 ppb | 09:00:52 |
| 1 | B 249.677† | 18573.3 | 18901.8 | 517.31 ug/L | 517.31 ppb | 09:00:32 |
| 1 | Ba 233.527† | 52725.7 | 52929.4 | 497.43 ug/L | 497.43 ppb | 09:00:32 |
| 1 | Be 313.107† | 1217293.2 | 1226685.7 | 499.16 ug/L | 499.16 ppb | 09:00:27 |
| 1 | Ca 317.933Radial† | 2486.5 | 2446.1 | 4969.9 ug/L | 4969.9 ppb | 08:59:30 |
| 1 | Cd 226.502† | 35189.7 | 35504.4 | 500.66 ug/L | 500.66 ppb | 09:00:32 |
| 1 | Co 228.616† | 19391.9 | 19512.5 | 507.94 ug/L | 507.94 ppb | 09:00:32 |
| 1 | Cr 267.716† | 38169.5 | 38235.4 | 498.82 ug/L | 498.82 ppb | 09:00:32 |
| 1 | Cu 324.752† | 157569.5 | 151880.7 | 492.46 ug/L | 492.46 ppb | 09:00:32 |
| 1 | Fe 238.204 Radial† | 407.6 | 394.8 | 4951.7 ug/L | 4951.7 ppb | 08:59:30 |
| 1 | K 766.490 Radial† | 27689.4 | 24627.3 | 4910.2 ug/L | 4910.2 ppb | 08:59:10 |
| 1 | Mg 279.077 IEC† | 119.6 | 117.8 | 5145.2 ug/L | 5145.2 ppb | 08:59:30 |
| 1 | Mn 257.610† | 372082.1 | 373197.6 | 489.93 ug/L | 489.93 ppb | 09:00:32 |
| 1 | Mo 202.031† | 5695.2 | 5705.0 | 502.00 ug/L | 502.00 ppb | 09:00:52 |
| 1 | Na 589.592 Radial† | 24391.1 | 24623.9 | 9670.2 ug/L | 9670.2 ppb | 08:59:10 |
| 1 | Ni 231.604† | 16261.8 | 16236.7 | 506.68 ug/L | 506.68 ppb | 09:00:32 |
| 1 | P 214.914† | 3605.4 | 3452.4 | 2385.7 ug/L | 2385.7 ppb | 09:00:52 |
| 1 | Pb 220.353† | 3222.0 | 3294.4 | 498.11 ug/L | 498.11 ppb | 09:00:52 |
| 1 | S 181.975 Axial† | 602.2 | 580.3 | 1016.3 ug/L | 1016.3 ppb | 09:00:52 |
| 1 | Sb 206.836† | 1222.6 | 1201.1 | 528.49 ug/L | 528.49 ppb | 09:00:52 |
| 1 | Se 196.026† | 601.8 | 621.3 | 513.15 ug/L | 513.15 ppb | 09:00:52 |
| 1 | Si 251.611† | 67255.1 | 67013.0 | 2488.9 ug/L | 2488.9 ppb | 09:00:32 |
| 1 | Sn 189.927† | 2283.0 | 2289.5 | 507.69 ug/L | 507.69 ppb | 09:00:52 |
| 1 | Sr 421.552† | 56836.9 | 56235.5 | 478.84 ug/L | 478.84 ppb | 08:59:10 |
| 1 | Ti 334.940† | 283842.6 | 286122.1 | 492.12 ug/L | 492.12 ppb | 09:00:32 |
| 1 | Tl 190.801† | 1260.1 | 1290.5 | 502.22 ug/L | 502.22 ppb | 09:00:52 |
| 1 | U 409.014† | 14989.6 | 17088.0 | 501.13 ug/L | 501.13 ppb | 09:00:32 |
| 1 | V 292.402† | 62583.2 | 64274.5 | 502.21 ug/L | 502.21 ppb | 09:00:32 |
| 1 | Zn 213.857† | 42536.9 | 42109.7 | 495.62 ug/L | 495.62 ppb | 09:00:32 |
| 1 | SiO2† | 67074.5 | 66803.8 | 5323.6 ug/L | 5323.6 ppb | 09:01:59 |
| 2 | Sc 361.383 | 839277.7 | 839277.7 | 99.931 % | | 09:00:58 |
| 2 | Sc Radial | 4031.5 | 4031.5 | 99.9 % | | 08:59:35 |
| 2 | Y 371.029 | 706790.4 | 706790.4 | 98.703 % | | 09:00:58 |
| 2 | Y RADIAL | 4384.6 | 4384.6 | 97.05 % | | 08:59:35 |
| 2 | Ag 328.068† | 99540.7 | 99355.8 | 503.96 ug/L | 503.96 ppb | 09:01:03 |
| 2 | Al 396.153Radial† | 4593.8 | 4676.1 | 4959.2 ug/L | 4959.2 ppb | 08:59:35 |
| 2 | As 188.979† | 921.7 | 943.2 | 509.84 ug/L | 509.84 ppb | 09:01:23 |
| 2 | B 249.677† | 18546.9 | 18809.8 | 514.78 ug/L | 514.78 ppb | 09:01:03 |
| 2 | Ba 233.527† | 52937.6 | 52955.5 | 497.67 ug/L | 497.67 ppb | 09:01:03 |
| 2 | Be 313.107† | 1217217.1 | 1222317.7 | 497.38 ug/L | 497.38 ppb | 09:00:58 |
| 2 | Ca 317.933Radial† | 2498.7 | 2482.9 | 5044.6 ug/L | 5044.6 ppb | 08:59:55 |
| 2 | Cd 226.502† | 35272.6 | 35463.3 | 500.07 ug/L | 500.07 ppb | 09:01:03 |
| 2 | Co 228.616† | 19428.8 | 19481.1 | 507.12 ug/L | 507.12 ppb | 09:01:03 |
| 2 | Cr 267.716† | 38329.1 | 38260.5 | 499.15 ug/L | 499.15 ppb | 09:01:03 |
| 2 | Cu 324.752† | 157723.5 | 151479.3 | 491.16 ug/L | 491.16 ppb | 09:01:03 |
| 2 | Fe 238.204 Radial† | 407.6 | 398.8 | 5002.1 ug/L | 5002.1 ppb | 08:59:55 |
| 2 | K 766.490 Radial† | 27525.6 | 24738.1 | 4932.3 ug/L | 4932.3 ppb | 08:59:35 |
| 2 | Mg 279.077 IEC† | 119.7 | 119.0 | 5199.2 ug/L | 5199.2 ppb | 08:59:55 |
| 2 | Mn 257.610† | 373227.8 | 373032.3 | 489.72 ug/L | 489.72 ppb | 09:01:03 |
| 2 | Mo 202.031† | 5718.0 | 5707.7 | 502.25 ug/L | 502.25 ppb | 09:01:23 |
| 2 | Na 589.592 Radial† | 24074.7 | 24549.3 | 9640.9 ug/L | 9640.9 ppb | 08:59:35 |
| 2 | Ni 231.604† | 16240.3 | 16157.8 | 504.22 ug/L | 504.22 ppb | 09:01:03 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3604.4 | 3438.7 | 2376.0 ug/L | 2376.0 ppb | 09:01:23 |
| 2 | Pb 220.353† | 3214.0 | 3275.0 | 495.18 ug/L | 495.18 ppb | 09:01:23 |
| 2 | S 181.975 Axial† | 610.1 | 586.1 | 1026.4 ug/L | 1026.4 ppb | 09:01:23 |
| 2 | Sb 206.836† | 1221.3 | 1195.5 | 526.09 ug/L | 526.09 ppb | 09:01:23 |
| 2 | Se 196.026† | 614.1 | 631.5 | 521.48 ug/L | 521.48 ppb | 09:01:23 |
| 2 | Si 251.611† | 67431.9 | 66952.8 | 2486.7 ug/L | 2486.7 ppb | 09:01:03 |
| 2 | Sn 189.927† | 2285.9 | 2284.4 | 506.55 ug/L | 506.55 ppb | 09:01:23 |
| 2 | Sr 421.552† | 56365.4 | 56327.5 | 479.62 ug/L | 479.62 ppb | 08:59:35 |
| 2 | Ti 334.940† | 284759.4 | 286038.7 | 491.98 ug/L | 491.98 ppb | 09:01:03 |
| 2 | Tl 190.801† | 1265.9 | 1291.9 | 502.76 ug/L | 502.76 ppb | 09:01:23 |
| 2 | U 409.014† | 15114.9 | 17160.4 | 503.25 ug/L | 503.25 ppb | 09:01:03 |
| 2 | V 292.402† | 62728.6 | 64199.3 | 501.63 ug/L | 501.63 ppb | 09:01:03 |
| 2 | Zn 213.857† | 42594.5 | 42017.4 | 494.53 ug/L | 494.53 ppb | 09:01:03 |
| 2 | SiO2† | 67156.0 | 66648.9 | 5311.2 ug/L | 5311.2 ppb | 09:02:04 |
| 3 | Sc 361.383 | 832252.8 | 832252.8 | 99.095 % | | 09:01:29 |
| 3 | Sc Radial | 4065.9 | 4065.9 | 101 % | | 09:00:00 |
| 3 | Y 371.029 | 702327.0 | 702327.0 | 98.080 % | | 09:01:29 |
| 3 | Y RADIAL | 4429.2 | 4429.2 | 98.03 % | | 09:00:00 |
| 3 | Ag 328.068† | 98485.3 | 99131.6 | 502.80 ug/L | 502.80 ppb | 09:01:34 |
| 3 | Al 396.153Radial† | 4606.7 | 4650.0 | 4931.3 ug/L | 4931.3 ppb | 09:00:00 |
| 3 | As 188.979† | 906.8 | 935.9 | 505.93 ug/L | 505.93 ppb | 09:01:54 |
| 3 | B 249.677† | 18277.3 | 18694.4 | 511.63 ug/L | 511.63 ppb | 09:01:34 |
| 3 | Ba 233.527† | 52088.7 | 52546.1 | 493.83 ug/L | 493.83 ppb | 09:01:34 |
| 3 | Be 313.107† | 1209095.1 | 1224402.8 | 498.22 ug/L | 498.22 ppb | 09:01:29 |
| 3 | Ca 317.933Radial† | 2491.8 | 2455.0 | 4987.9 ug/L | 4987.9 ppb | 09:00:20 |
| 3 | Cd 226.502† | 34681.5 | 35164.7 | 495.87 ug/L | 495.87 ppb | 09:01:34 |
| 3 | Co 228.616† | 19152.6 | 19366.5 | 504.15 ug/L | 504.15 ppb | 09:01:34 |
| 3 | Cr 267.716† | 37860.8 | 38111.7 | 497.20 ug/L | 497.20 ppb | 09:01:34 |
| 3 | Cu 324.752† | 155749.7 | 150819.7 | 489.02 ug/L | 489.02 ppb | 09:01:34 |
| 3 | Fe 238.204 Radial† | 404.4 | 392.2 | 4919.8 ug/L | 4919.8 ppb | 09:00:20 |
| 3 | K 766.490 Radial† | 27518.2 | 24498.0 | 4884.4 ug/L | 4884.4 ppb | 09:00:00 |
| 3 | Mg 279.077 IEC† | 120.5 | 118.8 | 5191.1 ug/L | 5191.1 ppb | 09:00:20 |
| 3 | Mn 257.610† | 367873.2 | 370781.3 | 486.76 ug/L | 486.76 ppb | 09:01:34 |
| 3 | Mo 202.031† | 5710.5 | 5748.5 | 505.83 ug/L | 505.83 ppb | 09:01:54 |
| 3 | Na 589.592 Radial† | 23956.7 | 24228.8 | 9515.0 ug/L | 9515.0 ppb | 09:00:00 |
| 3 | Ni 231.604† | 16036.2 | 16089.1 | 502.08 ug/L | 502.08 ppb | 09:01:34 |
| 3 | P 214.914† | 3564.1 | 3428.5 | 2369.2 ug/L | 2369.2 ppb | 09:01:54 |
| 3 | Pb 220.353† | 3221.2 | 3309.4 | 500.38 ug/L | 500.38 ppb | 09:01:54 |
| 3 | S 181.975 Axial† | 595.6 | 576.6 | 1009.8 ug/L | 1009.8 ppb | 09:01:54 |
| 3 | Sb 206.836† | 1209.7 | 1194.1 | 525.59 ug/L | 525.59 ppb | 09:01:54 |
| 3 | Se 196.026† | 608.9 | 631.4 | 521.19 ug/L | 521.19 ppb | 09:01:54 |
| 3 | Si 251.611† | 66356.3 | 66437.0 | 2467.4 ug/L | 2467.4 ppb | 09:01:34 |
| 3 | Sn 189.927† | 2270.2 | 2287.9 | 507.32 ug/L | 507.32 ppb | 09:01:54 |
| 3 | Sr 421.552† | 56465.8 | 55950.6 | 476.41 ug/L | 476.41 ppb | 09:00:00 |
| 3 | Ti 334.940† | 280862.1 | 284511.1 | 489.35 ug/L | 489.35 ppb | 09:01:34 |
| 3 | Tl 190.801† | 1254.5 | 1291.1 | 502.42 ug/L | 502.42 ppb | 09:01:54 |
| 3 | U 409.014† | 14961.8 | 17133.6 | 502.48 ug/L | 502.48 ppb | 09:01:34 |
| 3 | V 292.402† | 62013.6 | 64007.6 | 500.22 ug/L | 500.22 ppb | 09:01:34 |
| 3 | Zn 213.857† | 42074.0 | 41851.9 | 492.60 ug/L | 492.60 ppb | 09:01:34 |
| 3 | SiO2† | 66952.8 | 67011.0 | 5340.1 ug/L | 5340.1 ppb | 09:02:09 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 835953.9 | 99.535 % | 0.4200 | | | 0.42% |
| Sc Radial | 4056.4 | 101 % | 0.5 | | | 0.54% |
| Y 371.029 | 704217.4 | 98.344 % | 0.3224 | | | 0.33% |
| Y RADIAL | 4406.4 | 97.53 % | 0.494 | | | 0.51% |
| Ag 328.068† | 99355.8 | 503.95 ug/L | 1.140 | 503.95 ppb | 1.140 | 0.23% |
| QC value within limits for Ag 328.068 Recovery = 100.79% | | | | | | |
| Al 396.153Radial† | 4661.2 | 4943.3 ug/L | 14.38 | 4943.3 ppb | 14.38 | 0.29% |
| QC value within limits for Al 396.153Radial Recovery = 98.87% | | | | | | |
| As 188.979† | 941.4 | 508.91 ug/L | 2.639 | 508.91 ppb | 2.639 | 0.52% |
| QC value within limits for As 188.979 Recovery = 101.78% | | | | | | |
| B 249.677† | 18802.0 | 514.57 ug/L | 2.847 | 514.57 ppb | 2.847 | 0.55% |
| QC value within limits for B 249.677 Recovery = 102.91% | | | | | | |
| Ba 233.527† | 52810.3 | 496.31 ug/L | 2.152 | 496.31 ppb | 2.152 | 0.43% |
| QC value within limits for Ba 233.527 Recovery = 99.26% | | | | | | |
| Be 313.107† | 1224468.7 | 498.25 ug/L | 0.887 | 498.25 ppb | 0.887 | 0.18% |
| QC value within limits for Be 313.107 Recovery = 99.65% | | | | | | |

| | | | | | | |
|--|----------|-------------|-------|------------|-------|-------|
| Ca 317.933Radial† | 2461.3 | 5000.8 ug/L | 39.02 | 5000.8 ppb | 39.02 | 0.78% |
| QC value within limits for Ca 317.933Radial Recovery = 100.02% | | | | | | |
| Cd 226.502† | 35377.5 | 498.86 ug/L | 2.613 | 498.86 ppb | 2.613 | 0.52% |
| QC value within limits for Cd 226.502 Recovery = 99.77% | | | | | | |
| Co 228.616† | 19453.4 | 506.41 ug/L | 1.993 | 506.41 ppb | 1.993 | 0.39% |
| QC value within limits for Co 228.616 Recovery = 101.28% | | | | | | |
| Cr 267.716† | 38202.5 | 498.39 ug/L | 1.043 | 498.39 ppb | 1.043 | 0.21% |
| QC value within limits for Cr 267.716 Recovery = 99.68% | | | | | | |
| Cu 324.752† | 151393.2 | 490.88 ug/L | 1.739 | 490.88 ppb | 1.739 | 0.35% |
| QC value within limits for Cu 324.752 Recovery = 98.18% | | | | | | |
| Fe 238.204 Radial† | 395.3 | 4957.9 ug/L | 41.53 | 4957.9 ppb | 41.53 | 0.84% |
| QC value within limits for Fe 238.204 Radial Recovery = 99.16% | | | | | | |
| K 766.490 Radial† | 24621.1 | 4909.0 ug/L | 23.95 | 4909.0 ppb | 23.95 | 0.49% |
| QC value within limits for K 766.490 Radial Recovery = 98.18% | | | | | | |
| Mg 279.077 IEC† | 118.5 | 5178.5 ug/L | 29.10 | 5178.5 ppb | 29.10 | 0.56% |
| QC value within limits for Mg 279.077 IEC Recovery = 103.57% | | | | | | |
| Mn 257.610† | 372337.1 | 488.80 ug/L | 1.775 | 488.80 ppb | 1.775 | 0.36% |
| QC value within limits for Mn 257.610 Recovery = 97.76% | | | | | | |
| Mo 202.031† | 5720.4 | 503.36 ug/L | 2.142 | 503.36 ppb | 2.142 | 0.43% |
| QC value within limits for Mo 202.031 Recovery = 100.67% | | | | | | |
| Na 589.592 Radial† | 24467.3 | 9608.7 ug/L | 82.45 | 9608.7 ppb | 82.45 | 0.86% |
| QC value within limits for Na 589.592 Radial Recovery = 96.09% | | | | | | |
| Ni 231.604† | 16161.2 | 504.33 ug/L | 2.305 | 504.33 ppb | 2.305 | 0.46% |
| QC value within limits for Ni 231.604 Recovery = 100.87% | | | | | | |
| P 214.914† | 3439.8 | 2377.0 ug/L | 8.28 | 2377.0 ppb | 8.28 | 0.35% |
| QC value within limits for P 214.914 Recovery = 95.08% | | | | | | |
| Pb 220.353† | 3293.0 | 497.89 ug/L | 2.604 | 497.89 ppb | 2.604 | 0.52% |
| QC value within limits for Pb 220.353 Recovery = 99.58% | | | | | | |
| S 181.975 Axial† | 581.0 | 1017.5 ug/L | 8.38 | 1017.5 ppb | 8.38 | 0.82% |
| QC value within limits for S 181.975 Axial Recovery = 101.75% | | | | | | |
| Sb 206.836† | 1196.9 | 526.72 ug/L | 1.550 | 526.72 ppb | 1.550 | 0.29% |
| QC value within limits for Sb 206.836 Recovery = 105.34% | | | | | | |
| Se 196.026† | 628.1 | 518.61 ug/L | 4.727 | 518.61 ppb | 4.727 | 0.91% |
| QC value within limits for Se 196.026 Recovery = 103.72% | | | | | | |
| Si 251.611† | 66801.0 | 2481.0 ug/L | 11.82 | 2481.0 ppb | 11.82 | 0.48% |
| QC value within limits for Si 251.611 Recovery = 99.24% | | | | | | |
| Sn 189.927† | 2287.3 | 507.19 ug/L | 0.580 | 507.19 ppb | 0.580 | 0.11% |
| QC value within limits for Sn 189.927 Recovery = 101.44% | | | | | | |
| Sr 421.552† | 56171.2 | 478.29 ug/L | 1.673 | 478.29 ppb | 1.673 | 0.35% |
| QC value within limits for Sr 421.552 Recovery = 95.66% | | | | | | |
| Ti 334.940† | 285557.3 | 491.15 ug/L | 1.563 | 491.15 ppb | 1.563 | 0.32% |
| QC value within limits for Ti 334.940 Recovery = 98.23% | | | | | | |
| Tl 190.801† | 1291.1 | 502.47 ug/L | 0.273 | 502.47 ppb | 0.273 | 0.05% |
| QC value within limits for Tl 190.801 Recovery = 100.49% | | | | | | |
| U 409.014† | 17127.4 | 502.29 ug/L | 1.076 | 502.29 ppb | 1.076 | 0.21% |
| QC value within limits for U 409.014 Recovery = 100.46% | | | | | | |
| V 292.402† | 64160.5 | 501.35 ug/L | 1.025 | 501.35 ppb | 1.025 | 0.20% |
| QC value within limits for V 292.402 Recovery = 100.27% | | | | | | |
| Zn 213.857† | 41993.0 | 494.25 ug/L | 1.532 | 494.25 ppb | 1.532 | 0.31% |
| QC value within limits for Zn 213.857 Recovery = 98.85% | | | | | | |
| SiO2† | 66821.2 | 5325.0 ug/L | 14.46 | 5325.0 ppb | 14.46 | 0.27% |
| QC value within limits for SiO2 Recovery = 99.58% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 14

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 09:04:20

Data Type: Reprocessed on 3/25/2010 09:41:53

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 361.383 | 842439.2 | 842439.2 | 100.31 % | | 09:07:29 |
| 1 | Sc Radial | 4139.7 | 4139.7 | 103 % | | 09:06:12 |
| 1 | Y 371.029 | 717387.2 | 717387.2 | 100.18 % | | 09:07:29 |
| 1 | Y RADIAL | 4507.2 | 4507.2 | 99.76 % | | 09:06:12 |
| 1 | Ag 328.068† | 265.3 | 11.1 | 0.0489 ug/L | 0.0489 ppb | 09:07:34 |
| 1 | Al 396.153Radial† | -71.3 | 10.2 | 10.789 ug/L | 10.789 ppb | 09:06:32 |
| 1 | As 188.979† | -9.1 | 11.7 | 6.2734 ug/L | 6.2734 ppb | 09:07:54 |
| 1 | B 249.677† | 393.9 | 642.8 | 17.675 ug/L | 17.675 ppb | 09:07:54 |
| 1 | Ba 233.527† | 16.1 | -2.5 | -0.0241 ug/L | -0.0241 ppb | 09:07:54 |
| 1 | Be 313.107† | -4212.9 | 62.8 | 0.0256 ug/L | 0.0256 ppb | 09:07:34 |
| 1 | Ca 317.933Radial† | 20.8 | 3.1 | 6.3583 ug/L | 6.3583 ppb | 09:06:32 |
| 1 | Cd 226.502† | -149.0 | 17.9 | 0.2544 ug/L | 0.2544 ppb | 09:07:54 |
| 1 | Co 228.616† | -42.6 | -3.5 | -0.0896 ug/L | -0.0896 ppb | 09:07:54 |
| 1 | Cr 267.716† | 134.2 | 38.8 | 0.5032 ug/L | 0.5032 ppb | 09:07:54 |
| 1 | Cu 324.752† | 6481.6 | 109.0 | 0.3530 ug/L | 0.3530 ppb | 09:07:34 |
| 1 | Fe 238.204 Radial† | 6.8 | -2.4 | -29.670 ug/L | -29.670 ppb | 09:06:32 |
| 1 | K 766.490 Radial† | 3232.7 | 346.8 | 69.217 ug/L | 69.217 ppb | 09:06:12 |
| 1 | Mg 279.077 IEC† | 2.6 | 1.8 | 79.581 ug/L | 79.581 ppb | 09:06:32 |
| 1 | Mn 257.610† | 461.8 | 8.0 | 0.0043 ug/L | 0.0043 ppb | 09:07:54 |
| 1 | Mo 202.031† | 26.3 | 12.0 | 1.0533 ug/L | 1.0533 ppb | 09:07:54 |
| 1 | Na 589.592 Radial† | -444.6 | 27.6 | 10.853 ug/L | 10.853 ppb | 09:06:12 |
| 1 | Ni 231.604† | 89.7 | -4.2 | -0.1312 ug/L | -0.1312 ppb | 09:07:54 |
| 1 | P 214.914† | 174.9 | 6.1 | 4.3938 ug/L | 4.3938 ppb | 09:07:54 |
| 1 | Pb 220.353† | -50.6 | 8.3 | 1.2660 ug/L | 1.2660 ppb | 09:07:54 |
| 1 | S 181.975 Axial† | 26.0 | 1.6 | 2.7730 ug/L | 2.7730 ppb | 09:07:54 |
| 1 | Sb 206.836† | 36.8 | 10.0 | 4.3630 ug/L | 4.3630 ppb | 09:07:54 |
| 1 | Se 196.026† | -16.8 | 0.2 | 0.0771 ug/L | 0.0771 ppb | 09:07:54 |
| 1 | Si 251.611† | 567.4 | 40.2 | 1.4837 ug/L | 1.4837 ppb | 09:07:54 |
| 1 | Sn 189.927† | 24.3 | 21.2 | 4.6907 ug/L | 4.6907 ppb | 09:07:54 |
| 1 | Sr 421.552† | 48.6 | -22.6 | -0.1928 ug/L | -0.1928 ppb | 09:06:12 |
| 1 | Ti 334.940† | -1061.9 | 24.7 | 0.0376 ug/L | 0.0376 ppb | 09:07:34 |
| 1 | Tl 190.801† | -23.2 | 2.0 | 0.7560 ug/L | 0.7560 ppb | 09:07:54 |
| 1 | U 409.014† | -2114.3 | -72.6 | -2.1340 ug/L | -2.1340 ppb | 09:07:29 |
| 1 | V 292.402† | -1411.5 | 20.3 | 0.1732 ug/L | 0.1732 ppb | 09:07:34 |
| 1 | Zn 213.857† | 640.7 | 32.3 | 0.3891 ug/L | 0.3891 ppb | 09:07:54 |
| 1 | SiO2† | 604.2 | 49.0 | 3.8880 ug/L | 3.8880 ppb | 09:09:00 |
| 2 | Sc 361.383 | 840798.0 | 840798.0 | 100.11 % | | 09:07:59 |
| 2 | Sc Radial | 4133.7 | 4133.7 | 102 % | | 09:06:37 |
| 2 | Y 371.029 | 716874.3 | 716874.3 | 100.11 % | | 09:07:59 |
| 2 | Y RADIAL | 4509.6 | 4509.6 | 99.81 % | | 09:06:37 |
| 2 | Ag 328.068† | 242.1 | -11.6 | -0.0616 ug/L | -0.0616 ppb | 09:08:04 |
| 2 | Al 396.153Radial† | -74.7 | 6.8 | 7.1934 ug/L | 7.1934 ppb | 09:06:57 |
| 2 | As 188.979† | -8.9 | 12.0 | 6.4216 ug/L | 6.4216 ppb | 09:08:24 |
| 2 | B 249.677† | 359.0 | 608.8 | 16.736 ug/L | 16.736 ppb | 09:08:24 |
| 2 | Ba 233.527† | 36.1 | 17.6 | 0.1662 ug/L | 0.1662 ppb | 09:08:24 |
| 2 | Be 313.107† | -3886.6 | 380.5 | 0.1549 ug/L | 0.1549 ppb | 09:08:04 |
| 2 | Ca 317.933Radial† | 21.0 | 3.3 | 6.7320 ug/L | 6.7320 ppb | 09:06:57 |
| 2 | Cd 226.502† | -149.9 | 16.7 | 0.2373 ug/L | 0.2373 ppb | 09:08:24 |
| 2 | Co 228.616† | -41.6 | -2.6 | -0.0658 ug/L | -0.0658 ppb | 09:08:24 |
| 2 | Cr 267.716† | 127.7 | 32.6 | 0.4226 ug/L | 0.4226 ppb | 09:08:24 |
| 2 | Cu 324.752† | 7561.2 | 1200.0 | 3.8892 ug/L | 3.8892 ppb | 09:08:04 |
| 2 | Fe 238.204 Radial† | 7.8 | -1.4 | -17.408 ug/L | -17.408 ppb | 09:06:57 |
| 2 | K 766.490 Radial† | 3137.9 | 258.8 | 51.665 ug/L | 51.665 ppb | 09:06:37 |
| 2 | Mg 279.077 IEC† | 0.2 | -0.5 | -22.131 ug/L | -22.131 ppb | 09:06:57 |
| 2 | Mn 257.610† | 455.9 | 2.9 | 0.0030 ug/L | 0.0030 ppb | 09:08:24 |
| 2 | Mo 202.031† | 23.4 | 9.2 | 0.8034 ug/L | 0.8034 ppb | 09:08:24 |
| 2 | Na 589.592 Radial† | -460.3 | 11.7 | 4.5957 ug/L | 4.5957 ppb | 09:06:37 |
| 2 | Ni 231.604† | 83.2 | -10.5 | -0.3270 ug/L | -0.3270 ppb | 09:08:24 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 178.2 | 9.7 | 6.2800 ug/L | 6.2800 ppb | 09:08:24 |
| 2 | Pb 220.353† | -54.6 | 4.2 | 0.6429 ug/L | 0.6429 ppb | 09:08:24 |
| 2 | S 181.975 Axial† | 32.0 | 7.6 | 13.271 ug/L | 13.271 ppb | 09:08:24 |
| 2 | Sb 206.836† | 44.0 | 17.3 | 7.4230 ug/L | 7.4230 ppb | 09:08:24 |
| 2 | Se 196.026† | -16.0 | 1.0 | 0.7162 ug/L | 0.7162 ppb | 09:08:24 |
| 2 | Si 251.611† | 582.3 | 56.2 | 2.0819 ug/L | 2.0819 ppb | 09:08:24 |
| 2 | Sn 189.927† | 17.5 | 14.4 | 3.1977 ug/L | 3.1977 ppb | 09:08:24 |
| 2 | Sr 421.552† | 33.0 | -37.8 | -0.3221 ug/L | -0.3221 ppb | 09:06:37 |
| 2 | Ti 334.940† | -973.8 | 110.6 | 0.1922 ug/L | 0.1922 ppb | 09:08:04 |
| 2 | Tl 190.801† | -25.1 | -0.0 | -0.0175 ug/L | -0.0175 ppb | 09:08:24 |
| 2 | U 409.014† | -1978.0 | 59.4 | 1.7484 ug/L | 1.7484 ppb | 09:07:59 |
| 2 | V 292.402† | -1312.7 | 116.3 | 0.9129 ug/L | 0.9129 ppb | 09:08:04 |
| 2 | Zn 213.857† | 652.8 | 45.7 | 0.5420 ug/L | 0.5420 ppb | 09:08:24 |
| 2 | SiO2† | 600.9 | 46.8 | 3.7196 ug/L | 3.7196 ppb | 09:09:05 |
| 3 | Sc 361.383 | 845201.4 | 845201.4 | 100.64 % | | 09:08:29 |
| 3 | Sc Radial | 4198.2 | 4198.2 | 104 % | | 09:07:02 |
| 3 | Y 371.029 | 720627.3 | 720627.3 | 100.64 % | | 09:08:29 |
| 3 | Y RADIAL | 4568.3 | 4568.3 | 101.1 % | | 09:07:02 |
| 3 | Ag 328.068† | 293.1 | 37.9 | 0.1890 ug/L | 0.1890 ppb | 09:08:34 |
| 3 | Al 396.153Radial† | -74.3 | 8.2 | 8.7407 ug/L | 8.7407 ppb | 09:07:22 |
| 3 | As 188.979† | -20.8 | 0.2 | 0.0975 ug/L | 0.0975 ppb | 09:08:54 |
| 3 | B 249.677† | 357.1 | 605.0 | 16.631 ug/L | 16.631 ppb | 09:08:54 |
| 3 | Ba 233.527† | 36.3 | 17.5 | 0.1641 ug/L | 0.1641 ppb | 09:08:54 |
| 3 | Be 313.107† | -4263.0 | 26.7 | 0.0110 ug/L | 0.0110 ppb | 09:08:34 |
| 3 | Ca 317.933Radial† | 18.3 | 0.4 | 0.7437 ug/L | 0.7437 ppb | 09:07:22 |
| 3 | Cd 226.502† | -140.2 | 27.1 | 0.3827 ug/L | 0.3827 ppb | 09:08:54 |
| 3 | Co 228.616† | -37.1 | 2.1 | 0.0545 ug/L | 0.0545 ppb | 09:08:54 |
| 3 | Cr 267.716† | 148.9 | 52.9 | 0.6884 ug/L | 0.6884 ppb | 09:08:54 |
| 3 | Cu 324.752† | 6504.7 | 110.8 | 0.3582 ug/L | 0.3582 ppb | 09:08:34 |
| 3 | Fe 238.204 Radial† | 9.4 | 0.0 | 0.2978 ug/L | 0.2978 ppb | 09:07:22 |
| 3 | K 766.490 Radial† | 3183.9 | 256.0 | 51.114 ug/L | 51.114 ppb | 09:07:02 |
| 3 | Mg 279.077 IEC† | 1.9 | 1.2 | 50.903 ug/L | 50.903 ppb | 09:07:22 |
| 3 | Mn 257.610† | 451.2 | -4.1 | -0.0074 ug/L | -0.0074 ppb | 09:08:54 |
| 3 | Mo 202.031† | 16.0 | 1.7 | 0.1499 ug/L | 0.1499 ppb | 09:08:54 |
| 3 | Na 589.592 Radial† | -533.5 | -51.7 | -20.312 ug/L | -20.312 ppb | 09:07:02 |
| 3 | Ni 231.604† | 89.9 | -4.3 | -0.1338 ug/L | -0.1338 ppb | 09:08:54 |
| 3 | P 214.914† | 155.0 | -14.2 | -10.252 ug/L | -10.252 ppb | 09:08:54 |
| 3 | Pb 220.353† | -63.8 | -4.6 | -0.6955 ug/L | -0.6955 ppb | 09:08:54 |
| 3 | S 181.975 Axial† | 39.4 | 14.7 | 25.843 ug/L | 25.843 ppb | 09:08:54 |
| 3 | Sb 206.836† | 26.0 | -0.8 | -0.3144 ug/L | -0.3144 ppb | 09:08:54 |
| 3 | Se 196.026† | -18.7 | -1.7 | -1.3187 ug/L | -1.3187 ppb | 09:08:54 |
| 3 | Si 251.611† | 563.8 | 34.8 | 1.2944 ug/L | 1.2944 ppb | 09:08:54 |
| 3 | Sn 189.927† | 15.5 | 12.3 | 2.7346 ug/L | 2.7346 ppb | 09:08:54 |
| 3 | Sr 421.552† | 16.3 | -54.4 | -0.4632 ug/L | -0.4632 ppb | 09:07:02 |
| 3 | Ti 334.940† | -1060.3 | 29.7 | 0.0458 ug/L | 0.0458 ppb | 09:08:34 |
| 3 | Tl 190.801† | -17.4 | 7.8 | 3.0052 ug/L | 3.0052 ppb | 09:08:54 |
| 3 | U 409.014† | -1974.0 | 73.7 | 2.1665 ug/L | 2.1665 ppb | 09:08:29 |
| 3 | V 292.402† | -1446.3 | -9.6 | -0.0670 ug/L | -0.0670 ppb | 09:08:34 |
| 3 | Zn 213.857† | 637.9 | 27.5 | 0.3266 ug/L | 0.3266 ppb | 09:08:54 |
| 3 | SiO2† | 553.7 | -3.2 | -0.2595 ug/L | -0.2595 ppb | 09:09:10 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|---|--------------------------|-------------|--------|----------|-------------|----------|---------|
| Sc 361.383 | 842812.8 | 100.35 % | | 0.265 | | | 0.26% |
| Sc Radial | 4157.2 | 103 % | | 0.9 | | | 0.86% |
| Y 371.029 | 718296.3 | 100.31 % | | 0.284 | | | 0.28% |
| Y RADIAL | 4528.4 | 100.2 % | | 0.77 | | | 0.76% |
| Ag 328.068† | 12.5 | 0.0588 ug/L | | 0.12558 | 0.0588 ppb | 0.12558 | 213.69% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 8.4 | 8.9076 ug/L | | 1.80346 | 8.9076 ppb | 1.80346 | 20.25% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | 8.0 | 4.2642 ug/L | | 3.60921 | 4.2642 ppb | 3.60921 | 84.64% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | 618.9 | 17.014 ug/L | | 0.5749 | 17.014 ppb | 0.5749 | 3.38% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 10.9 | 0.1021 ug/L | | 0.10925 | 0.1021 ppb | 0.10925 | 107.02% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | 156.6 | 0.0638 ug/L | | 0.07923 | 0.0638 ppb | 0.07923 | 124.16% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |

| | | | | | | |
|--|-------|--------------|----------|-------------|----------|---------|
| Ca 317.933Radial† | 2.3 | 4.6113 ug/L | 3.35469 | 4.6113 ppb | 3.35469 | 72.75% |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | 20.6 | 0.2915 ug/L | 0.07945 | 0.2915 ppb | 0.07945 | 27.26% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -1.3 | -0.0336 ug/L | 0.07721 | -0.0336 ppb | 0.07721 | 229.55% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 41.4 | 0.5381 ug/L | 0.13629 | 0.5381 ppb | 0.13629 | 25.33% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 473.3 | 1.5335 ug/L | 2.04011 | 1.5335 ppb | 2.04011 | 133.04% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | -1.2 | -15.594 ug/L | 15.0663 | -15.594 ppb | 15.0663 | 96.62% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | 287.2 | 57.332 ug/L | 10.2963 | 57.332 ppb | 10.2963 | 17.96% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 0.8 | 36.118 ug/L | 52.4434 | 36.118 ppb | 52.4434 | 145.20% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 2.3 | 0.0000 ug/L | 0.00640 | 0.0000 ppb | 0.00640 | >999.9% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | 7.6 | 0.6689 ug/L | 0.46648 | 0.6689 ppb | 0.46648 | 69.74% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | -4.1 | -1.6210 ug/L | 16.48610 | -1.6210 ppb | 16.48610 | >999.9% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -6.3 | -0.1973 ug/L | 0.11229 | -0.1973 ppb | 0.11229 | 56.91% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 0.6 | 0.1404 ug/L | 9.04979 | 0.1404 ppb | 9.04979 | >999.9% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 2.6 | 0.4045 ug/L | 1.00224 | 0.4045 ppb | 1.00224 | 247.80% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 8.0 | 13.962 ug/L | 11.5504 | 13.962 ppb | 11.5504 | 82.73% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 8.8 | 3.8239 ug/L | 3.89674 | 3.8239 ppb | 3.89674 | 101.91% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -0.2 | -0.1752 ug/L | 1.04063 | -0.1752 ppb | 1.04063 | 594.11% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 43.7 | 1.6200 ug/L | 0.41107 | 1.6200 ppb | 0.41107 | 25.38% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 16.0 | 3.5410 ug/L | 1.02226 | 3.5410 ppb | 1.02226 | 28.87% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -38.3 | -0.3260 ug/L | 0.13526 | -0.3260 ppb | 0.13526 | 41.49% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 55.0 | 0.0919 ug/L | 0.08695 | 0.0919 ppb | 0.08695 | 94.64% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 3.2 | 1.2479 ug/L | 1.57021 | 1.2479 ppb | 1.57021 | 125.83% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 20.2 | 0.5936 ug/L | 2.37144 | 0.5936 ppb | 2.37144 | 399.49% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 42.3 | 0.3397 ug/L | 0.51073 | 0.3397 ppb | 0.51073 | 150.35% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 35.2 | 0.4192 ug/L | 0.11082 | 0.4192 ppb | 0.11082 | 26.43% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 30.9 | 2.4494 ug/L | 2.34745 | 2.4494 ppb | 2.34745 | 95.84% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 15
 Sample ID: LR1
 Analyst: HSC
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 36
 Date Collected: 3/25/2010 09:10:32
 Data Type: Reprocessed on 3/25/2010 09:41:54
 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 361.383 | 813728.4 | 813728.4 | 96.889 % | | 09:13:42 |
| 1 | Sc Radial | 3974.1 | 3974.1 | 98.5 % | | 09:12:45 |
| 1 | Y 371.029 | 690514.6 | 690514.6 | 96.431 % | | 09:13:42 |
| 1 | Y RADIAL | 4373.9 | 4373.9 | 96.81 % | | 09:12:25 |
| 1 | Ag 328.068† | -23584.8 | -24595.5 | -3.5614 ug/L | -3.5614 ppb | 09:13:42 |
| 1 | Al 396.153Radial† | -98.7 | -20.5 | -20.710 ug/L | -20.710 ppb | 09:12:45 |
| 1 | As 188.979† | -164.7 | -149.1 | 11.211 ug/L | 11.211 ppb | 09:14:02 |
| 1 | B 249.677† | 1547.9 | 1847.8 | -12.425 ug/L | -12.425 ppb | 09:13:42 |
| 1 | Ba 233.527† | -1607.6 | -1677.8 | -3.7855 ug/L | -3.7855 ppb | 09:13:42 |
| 1 | Be 313.107† | -4108.4 | 22.4 | 0.0085 ug/L | 0.0085 ppb | 09:13:42 |
| 1 | Ca 317.933Radial† | 16.5 | -0.4 | -0.8592 ug/L | -0.8592 ppb | 09:12:45 |
| 1 | Cd 226.502† | 2586.0 | 2835.4 | -0.1742 ug/L | -0.1742 ppb | 09:13:42 |
| 1 | Co 228.616† | 601.5 | 659.7 | 11.494 ug/L | 11.494 ppb | 09:14:02 |
| 1 | Cr 267.716† | -482.6 | -593.1 | 33.533 ug/L | 33.533 ppb | 09:14:02 |
| 1 | Cu 324.752† | -1562.7 | -7965.6 | -5.2748 ug/L | -5.2748 ppb | 09:13:42 |
| 1 | Fe 238.204 Radial† | 30654.5 | 31106.2 | 388970 ug/L | 388970 ppb | 09:12:25 |
| 1 | K 766.490 Radial† | 2803.3 | 42.2 | 8.4761 ug/L | 8.4761 ppb | 09:12:25 |
| 1 | Mg 279.077 IEC† | 9.9 | 9.3 | 1.0150 ug/L | 1.0150 ppb | 09:12:45 |
| 1 | Mn 257.610† | -33860.3 | -35399.9 | -8.0459 ug/L | -8.0459 ppb | 09:13:42 |
| 1 | Mo 202.031† | -250.5 | -272.7 | 6.2177 ug/L | 6.2177 ppb | 09:13:42 |
| 1 | Na 589.592 Radial† | -503.2 | -49.9 | -19.602 ug/L | -19.602 ppb | 09:12:25 |
| 1 | Ni 231.604† | 146.6 | 57.7 | 1.7914 ug/L | 1.7914 ppb | 09:14:02 |
| 1 | P 214.914† | 616.4 | 467.9 | 28.141 ug/L | 28.141 ppb | 09:14:02 |
| 1 | Pb 220.353† | 148.1 | 211.6 | -23.491 ug/L | -23.491 ppb | 09:14:02 |
| 1 | S 181.975 Axial† | 41.2 | 18.1 | 31.766 ug/L | 31.766 ppb | 09:14:02 |
| 1 | Sb 206.836† | 23.4 | -2.5 | -5.7881 ug/L | -5.7881 ppb | 09:14:02 |
| 1 | Se 196.026† | -1715.7 | -1753.9 | -246.43 ug/L | -246.43 ppb | 09:14:02 |
| 1 | Si 251.611† | -538.1 | -1080.9 | -39.949 ug/L | -39.949 ppb | 09:13:42 |
| 1 | Sn 189.927† | -14.8 | -18.4 | -26.397 ug/L | -26.397 ppb | 09:14:02 |
| 1 | Sr 421.552† | 88.3 | 19.6 | 0.1667 ug/L | 0.1667 ppb | 09:12:25 |
| 1 | Ti 334.940† | -1191.6 | -146.5 | -0.3100 ug/L | -0.3100 ppb | 09:13:42 |
| 1 | Tl 190.801† | -26.6 | -2.4 | -1.3006 ug/L | -1.3006 ppb | 09:14:02 |
| 1 | U 409.014† | 72.3 | 2109.8 | 17.752 ug/L | 17.752 ppb | 09:13:42 |
| 1 | V 292.402† | 4784.9 | 6366.0 | -7.7848 ug/L | -7.7848 ppb | 09:13:42 |
| 1 | Zn 213.857† | 3659.8 | 3170.9 | -20.517 ug/L | -20.517 ppb | 09:14:02 |
| 1 | SiO2† | -326.5 | -890.3 | -70.478 ug/L | -70.478 ppb | 09:14:59 |
| 2 | Sc 361.383 | 809884.7 | 809884.7 | 96.431 % | | 09:14:08 |
| 2 | Sc Radial | 3952.7 | 3952.7 | 98.0 % | | 09:13:10 |
| 2 | Y 371.029 | 687829.0 | 687829.0 | 96.055 % | | 09:14:08 |
| 2 | Y RADIAL | 4460.6 | 4460.6 | 98.73 % | | 09:12:50 |
| 2 | Ag 328.068† | -23346.6 | -24464.0 | 0.5895 ug/L | 0.5895 ppb | 09:14:08 |
| 2 | Al 396.153Radial† | -93.6 | -15.9 | -15.751 ug/L | -15.751 ppb | 09:13:10 |
| 2 | As 188.979† | -162.6 | -147.8 | 14.585 ug/L | 14.585 ppb | 09:14:28 |
| 2 | B 249.677† | 1533.5 | 1840.4 | -14.457 ug/L | -14.457 ppb | 09:14:08 |
| 2 | Ba 233.527† | -1680.7 | -1761.4 | -4.2260 ug/L | -4.2260 ppb | 09:14:08 |
| 2 | Be 313.107† | -4207.6 | -100.6 | -0.0412 ug/L | -0.0412 ppb | 09:14:08 |
| 2 | Ca 317.933Radial† | 14.0 | -2.9 | -5.8781 ug/L | -5.8781 ppb | 09:13:10 |
| 2 | Cd 226.502† | 2626.9 | 2890.5 | -0.5609 ug/L | -0.5609 ppb | 09:14:08 |
| 2 | Co 228.616† | 596.5 | 657.4 | 11.269 ug/L | 11.269 ppb | 09:14:28 |
| 2 | Cr 267.716† | -471.0 | -583.4 | 34.854 ug/L | 34.854 ppb | 09:14:28 |
| 2 | Cu 324.752† | -1599.8 | -8011.8 | -4.8279 ug/L | -4.8279 ppb | 09:14:08 |
| 2 | Fe 238.204 Radial† | 31372.7 | 32007.5 | 400240 ug/L | 400240 ppb | 09:12:50 |
| 2 | K 766.490 Radial† | 2722.0 | -25.4 | -5.0208 ug/L | -5.0208 ppb | 09:12:50 |
| 2 | Mg 279.077 IEC† | 8.6 | 8.0 | -68.435 ug/L | -68.435 ppb | 09:13:10 |
| 2 | Mn 257.610† | -33595.8 | -35291.5 | -6.7881 ug/L | -6.7881 ppb | 09:14:08 |
| 2 | Mo 202.031† | -256.6 | -280.3 | 6.4294 ug/L | 6.4294 ppb | 09:14:08 |
| 2 | Na 589.592 Radial† | -478.5 | -27.4 | -10.763 ug/L | -10.763 ppb | 09:12:50 |
| 2 | Ni 231.604† | 188.7 | 102.1 | 3.1776 ug/L | 3.1776 ppb | 09:14:28 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 621.2 | 476.0 | 24.895 ug/L | 24.895 ppb | 09:14:28 |
| 2 | Pb 220.353† | 147.2 | 211.5 | -25.121 ug/L | -25.121 ppb | 09:14:28 |
| 2 | S 181.975 Axial† | 38.8 | 15.9 | 27.864 ug/L | 27.864 ppb | 09:14:28 |
| 2 | Sb 206.836† | 12.9 | -13.2 | -10.489 ug/L | -10.489 ppb | 09:14:28 |
| 2 | Se 196.026† | -1734.0 | -1781.3 | -234.90 ug/L | -234.90 ppb | 09:14:28 |
| 2 | Si 251.611† | -460.5 | -1003.0 | -37.041 ug/L | -37.041 ppb | 09:14:08 |
| 2 | Sn 189.927† | -11.8 | -15.3 | -26.367 ug/L | -26.367 ppb | 09:14:28 |
| 2 | Sr 421.552† | 72.4 | 3.9 | 0.0329 ug/L | 0.0329 ppb | 09:12:50 |
| 2 | Ti 334.940† | -1124.2 | -82.4 | -0.1955 ug/L | -0.1955 ppb | 09:14:08 |
| 2 | Tl 190.801† | -34.0 | -10.2 | -4.3425 ug/L | -4.3425 ppb | 09:14:28 |
| 2 | U 409.014† | 57.1 | 2094.4 | 16.016 ug/L | 16.016 ppb | 09:14:08 |
| 2 | V 292.402† | 4828.9 | 6435.2 | -8.9048 ug/L | -8.9048 ppb | 09:14:08 |
| 2 | Zn 213.857† | 3700.4 | 3230.9 | -21.499 ug/L | -21.499 ppb | 09:14:28 |
| 2 | SiO2† | -470.1 | -1040.9 | -82.490 ug/L | -82.490 ppb | 09:15:05 |
| 3 | Sc 361.383 | 816661.1 | 816661.1 | 97.238 % | | 09:14:34 |
| 3 | Sc Radial | 3919.6 | 3919.6 | 97.2 % | | 09:13:35 |
| 3 | Y 371.029 | 692092.9 | 692092.9 | 96.651 % | | 09:14:34 |
| 3 | Y RADIAL | 4441.5 | 4441.5 | 98.31 % | | 09:13:15 |
| 3 | Ag 328.068† | -23494.3 | -24414.9 | 1.0701 ug/L | 1.0701 ppb | 09:14:34 |
| 3 | Al 396.153Radial† | -92.1 | -15.1 | -14.809 ug/L | -14.809 ppb | 09:13:35 |
| 3 | As 188.979† | -168.2 | -152.1 | 12.438 ug/L | 12.438 ppb | 09:14:54 |
| 3 | B 249.677† | 1608.2 | 1904.0 | -12.834 ug/L | -12.834 ppb | 09:14:34 |
| 3 | Ba 233.527† | -1781.5 | -1850.7 | -5.0383 ug/L | -5.0383 ppb | 09:14:34 |
| 3 | Be 313.107† | -4252.8 | -110.9 | -0.0454 ug/L | -0.0454 ppb | 09:14:34 |
| 3 | Ca 317.933Radial† | 14.0 | -2.8 | -5.6540 ug/L | -5.6540 ppb | 09:13:35 |
| 3 | Cd 226.502† | 2614.1 | 2854.8 | -1.1429 ug/L | -1.1429 ppb | 09:14:34 |
| 3 | Co 228.616† | 620.9 | 677.4 | 11.773 ug/L | 11.773 ppb | 09:14:54 |
| 3 | Cr 267.716† | -463.0 | -571.1 | 35.094 ug/L | 35.094 ppb | 09:14:54 |
| 3 | Cu 324.752† | -1532.5 | -7928.8 | -4.5202 ug/L | -4.5202 ppb | 09:14:34 |
| 3 | Fe 238.204 Radial† | 31168.2 | 32067.9 | 401000 ug/L | 401000 ppb | 09:13:15 |
| 3 | K 766.490 Radial† | 2898.0 | 179.3 | 35.793 ug/L | 35.793 ppb | 09:13:15 |
| 3 | Mg 279.077 IEC† | 7.4 | 7.0 | -115.75 ug/L | -115.75 ppb | 09:13:35 |
| 3 | Mn 257.610† | -33692.0 | -35101.4 | -6.4621 ug/L | -6.4621 ppb | 09:14:34 |
| 3 | Mo 202.031† | -278.6 | -300.7 | 4.6958 ug/L | 4.6958 ppb | 09:14:34 |
| 3 | Na 589.592 Radial† | -159.5 | 296.7 | 116.52 ug/L | 116.52 ppb | 09:13:15 |
| 3 | Ni 231.604† | 169.4 | 80.6 | 2.5050 ug/L | 2.5050 ppb | 09:14:54 |
| 3 | P 214.914† | 619.9 | 469.3 | 19.373 ug/L | 19.373 ppb | 09:14:54 |
| 3 | Pb 220.353† | 162.3 | 225.7 | -23.086 ug/L | -23.086 ppb | 09:14:54 |
| 3 | S 181.975 Axial† | 38.8 | 15.5 | 27.244 ug/L | 27.244 ppb | 09:14:54 |
| 3 | Sb 206.836† | 20.6 | -5.5 | -7.2775 ug/L | -7.2775 ppb | 09:14:54 |
| 3 | Se 196.026† | -1734.2 | -1766.5 | -220.89 ug/L | -220.89 ppb | 09:14:54 |
| 3 | Si 251.611† | -429.5 | -967.2 | -35.685 ug/L | -35.685 ppb | 09:14:34 |
| 3 | Sn 189.927† | -19.1 | -22.7 | -28.059 ug/L | -28.059 ppb | 09:14:54 |
| 3 | Sr 421.552† | 106.8 | 39.8 | 0.3393 ug/L | 0.3393 ppb | 09:13:15 |
| 3 | Ti 334.940† | -1143.4 | -92.5 | -0.2103 ug/L | -0.2103 ppb | 09:14:34 |
| 3 | Tl 190.801† | -20.4 | 4.1 | 1.1802 ug/L | 1.1802 ppb | 09:14:54 |
| 3 | U 409.014† | 150.6 | 2190.0 | 18.742 ug/L | 18.742 ppb | 09:14:34 |
| 3 | V 292.402† | 4931.2 | 6498.8 | -8.5449 ug/L | -8.5449 ppb | 09:14:34 |
| 3 | Zn 213.857† | 3664.4 | 3162.0 | -22.426 ug/L | -22.426 ppb | 09:14:54 |
| 3 | SiO2† | -414.8 | -980.0 | -77.575 ug/L | -77.575 ppb | 09:15:10 |

Mean Data: LRI

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 813424.7 | 96.853 % | 0.4046 | | | 0.42% |
| Sc Radial | 3948.8 | 97.9 % | 0.68 | | | 0.70% |
| Y 371.029 | 690145.5 | 96.379 % | 0.3010 | | | 0.31% |
| Y RADIAL | 4425.3 | 97.95 % | 1.008 | | | 1.03% |
| Ag 328.068† | -24491.5 | -0.6339 ug/L | 2.54665 | -0.6339 ppb | 2.54665 | 401.72% |
| Al 396.153Radial† | -17.2 | -17.090 ug/L | 3.1704 | -17.090 ppb | 3.1704 | 18.55% |
| As 188.979† | -149.7 | 12.745 ug/L | 1.7073 | 12.745 ppb | 1.7073 | 13.40% |
| B 249.677† | 1864.1 | -13.239 ug/L | 1.0750 | -13.239 ppb | 1.0750 | 8.12% |
| Ba 233.527† | -1763.3 | -4.3499 ug/L | 0.63551 | -4.3499 ppb | 0.63551 | 14.61% |
| Be 313.107† | -63.0 | -0.0260 ug/L | 0.02999 | -0.0260 ppb | 0.02999 | 115.31% |
| Ca 317.933Radial† | -2.0 | -4.1304 ug/L | 2.83518 | -4.1304 ppb | 2.83518 | 68.64% |
| Cd 226.502† | 2860.2 | -0.6260 ug/L | 0.48761 | -0.6260 ppb | 0.48761 | 77.89% |
| Co 228.616† | 664.9 | 11.512 ug/L | 0.2527 | 11.512 ppb | 0.2527 | 2.19% |
| Cr 267.716† | -582.5 | 34.494 ug/L | 0.8407 | 34.494 ppb | 0.8407 | 2.44% |
| Cu 324.752† | -7968.7 | -4.8743 ug/L | 0.37944 | -4.8743 ppb | 0.37944 | 7.78% |
| Fe 238.204 Radial† | 31727.2 | 396740 ug/L | 6735.9 | 396740 ppb | 6735.9 | 1.70% |

| | | | | | | |
|--------------------|----------|--------------|---------|-------------|---------|---------|
| K 766.490 Radial† | 65.3 | 13.083 ug/L | 20.7933 | 13.083 ppb | 20.7933 | 158.94% |
| Mg 279.077 IEC† | 8.1 | -61.056 ug/L | 58.7305 | -61.056 ppb | 58.7305 | 96.19% |
| Mn 257.610† | -35264.2 | -7.0987 ug/L | 0.83632 | -7.0987 ppb | 0.83632 | 11.78% |
| Mo 202.031† | -284.6 | 5.7809 ug/L | 0.94573 | 5.7809 ppb | 0.94573 | 16.36% |
| Na 589.592 Radial† | 73.1 | 28.719 ug/L | 76.1669 | 28.719 ppb | 76.1669 | 265.22% |
| Ni 231.604† | 80.1 | 2.4913 ug/L | 0.69320 | 2.4913 ppb | 0.69320 | 27.82% |
| P 214.914† | 471.1 | 24.136 ug/L | 4.4332 | 24.136 ppb | 4.4332 | 18.37% |
| Pb 220.353† | 216.3 | -23.899 ug/L | 1.0771 | -23.899 ppb | 1.0771 | 4.51% |
| S 181.975 Axial† | 16.5 | 28.958 ug/L | 2.4514 | 28.958 ppb | 2.4514 | 8.47% |
| Sb 206.836† | -7.1 | -7.8514 ug/L | 2.40232 | -7.8514 ppb | 2.40232 | 30.60% |
| Se 196.026† | -1767.2 | -234.07 ug/L | 12.787 | -234.07 ppb | 12.787 | 5.46% |
| Si 251.611† | -1017.0 | -37.559 ug/L | 2.1785 | -37.559 ppb | 2.1785 | 5.80% |
| Sn 189.927† | -18.8 | -26.941 ug/L | 0.9686 | -26.941 ppb | 0.9686 | 3.60% |
| Sr 421.552† | 21.1 | 0.1796 ug/L | 0.15360 | 0.1796 ppb | 0.15360 | 85.52% |
| Ti 334.940† | -107.1 | -0.2386 ug/L | 0.06226 | -0.2386 ppb | 0.06226 | 26.09% |
| Tl 190.801† | -2.8 | -1.4877 ug/L | 2.76609 | -1.4877 ppb | 2.76609 | 185.94% |
| U 409.014† | 2131.4 | 17.504 ug/L | 1.3797 | 17.504 ppb | 1.3797 | 7.88% |
| V 292.402† | 6433.3 | -8.4115 ug/L | 0.57180 | -8.4115 ppb | 0.57180 | 6.80% |
| Zn 213.857† | 3187.9 | -21.481 ug/L | 0.9549 | -21.481 ppb | 0.9549 | 4.45% |
| Sio2† | -970.4 | -76.848 ug/L | 6.0387 | -76.848 ppb | 6.0387 | 7.86% |

Sequence No.: 16

Sample ID: LR2

Analyst: HSC

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 3/25/2010 09:17:21

Data Type: Reprocessed on 3/25/2010 09:41:55

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 361.383 | 811391.4 | 811391.4 | 96.611 % | | 09:20:31 |
| 1 | Sc Radial | 4042.9 | 4042.9 | 100 % | | 09:19:34 |
| 1 | Y 371.029 | 701031.9 | 701031.9 | 97.899 % | | 09:20:31 |
| 1 | Y RADIAL | 4470.9 | 4470.9 | 98.96 % | | 09:19:14 |
| 1 | Ag 328.068† | 193.6 | -53.0 | -0.2548 ug/L | -0.2548 ppb | 09:20:31 |
| 1 | Al 396.153Radial† | -68.7 | 11.1 | 11.784 ug/L | 11.784 ppb | 09:19:34 |
| 1 | As 188.979† | -19.1 | 1.1 | 0.5980 ug/L | 0.5980 ppb | 09:20:51 |
| 1 | B 249.677† | 137.6 | 392.6 | 10.787 ug/L | 10.787 ppb | 09:20:51 |
| 1 | Ba 233.527† | 29.9 | 12.4 | 0.1163 ug/L | 0.1163 ppb | 09:20:51 |
| 1 | Be 313.107† | -4163.9 | -47.3 | -0.0195 ug/L | -0.0195 ppb | 09:20:31 |
| 1 | Ca 317.933Radial† | 18.4 | 1.2 | 2.4138 ug/L | 2.4138 ppb | 09:19:34 |
| 1 | Cd 226.502† | -169.5 | -9.0 | -0.1321 ug/L | -0.1321 ppb | 09:20:51 |
| 1 | Co 228.616† | -42.3 | -4.8 | -0.1262 ug/L | -0.1262 ppb | 09:20:51 |
| 1 | Cr 267.716† | 125.0 | 34.5 | 0.4533 ug/L | 0.4533 ppb | 09:20:51 |
| 1 | Cu 324.752† | 6375.6 | 246.5 | 0.8035 ug/L | 0.8035 ppb | 09:20:31 |
| 1 | Fe 238.204 Radial† | 11.9 | 2.9 | 36.360 ug/L | 36.360 ppb | 09:19:34 |
| 1 | K 766.490 Radial† | 2853.9 | 44.2 | 8.8444 ug/L | 8.8444 ppb | 09:19:14 |
| 1 | Mg 279.077 IEC† | 6.0 | 5.3 | 232.75 ug/L | 232.75 ppb | 09:19:34 |
| 1 | Mn 257.610† | 429.8 | -7.5 | -0.0158 ug/L | -0.0158 ppb | 09:20:51 |
| 1 | Mo 202.031† | 13.3 | -0.4 | -0.0361 ug/L | -0.0361 ppb | 09:20:51 |
| 1 | Na 589.592 Radial† | -556.2 | -94.0 | -36.924 ug/L | -36.924 ppb | 09:19:14 |
| 1 | Ni 231.604† | 86.1 | -4.5 | -0.1399 ug/L | -0.1399 ppb | 09:20:51 |
| 1 | P 214.914† | 181.5 | 19.7 | 13.996 ug/L | 13.996 ppb | 09:20:51 |
| 1 | Pb 220.353† | -64.7 | -8.2 | -1.2392 ug/L | -1.2392 ppb | 09:20:51 |
| 1 | S 181.975 Axial† | 31.8 | 8.6 | 14.985 ug/L | 14.985 ppb | 09:20:51 |
| 1 | Sb 206.836† | 11517.4 | 11894.8 | 5054.0 ug/L | 5054.0 ppb | 09:20:31 |
| 1 | Se 196.026† | -27.1 | -11.1 | -8.7678 ug/L | -8.7678 ppb | 09:20:51 |
| 1 | Si 251.611† | 833.6 | 337.4 | 12.564 ug/L | 12.564 ppb | 09:20:51 |
| 1 | Sn 189.927† | 14.9 | 12.3 | 2.7207 ug/L | 2.7207 ppb | 09:20:51 |
| 1 | Sr 421.552† | 41.0 | -29.2 | -0.2483 ug/L | -0.2483 ppb | 09:19:14 |
| 1 | Ti 334.940† | -1113.0 | -68.7 | -0.1353 ug/L | -0.1353 ppb | 09:20:31 |
| 1 | Tl 190.801† | -26.5 | -2.3 | -0.8937 ug/L | -0.8937 ppb | 09:20:51 |
| 1 | U 409.014† | -2100.2 | -138.7 | -4.0864 ug/L | -4.0864 ppb | 09:20:31 |
| 1 | V 292.402† | -1446.1 | -69.3 | -0.5432 ug/L | -0.5432 ppb | 09:20:31 |
| 1 | Zn 213.857† | 641.1 | 57.2 | 0.6736 ug/L | 0.6736 ppb | 09:20:51 |
| 1 | SiO2† | 823.2 | 298.7 | 23.866 ug/L | 23.866 ppb | 09:21:47 |
| 2 | Sc 361.383 | 815073.0 | 815073.0 | 97.049 % | | 09:20:56 |
| 2 | Sc Radial | 4042.2 | 4042.2 | 100 % | | 09:19:59 |
| 2 | Y 371.029 | 704053.1 | 704053.1 | 98.321 % | | 09:20:56 |
| 2 | Y RADIAL | 4456.6 | 4456.6 | 98.64 % | | 09:19:39 |
| 2 | Ag 328.068† | 220.1 | -26.6 | -0.1403 ug/L | -0.1403 ppb | 09:20:56 |
| 2 | Al 396.153Radial† | -83.7 | -3.8 | -4.0712 ug/L | -4.0712 ppb | 09:19:59 |
| 2 | As 188.979† | -21.4 | -1.2 | -0.6435 ug/L | -0.6435 ppb | 09:21:16 |
| 2 | B 249.677† | 110.6 | 364.1 | 10.013 ug/L | 10.013 ppb | 09:21:16 |
| 2 | Ba 233.527† | 13.5 | -4.6 | -0.0438 ug/L | -0.0438 ppb | 09:21:16 |
| 2 | Be 313.107† | -4229.8 | -95.7 | -0.0390 ug/L | -0.0390 ppb | 09:20:56 |
| 2 | Ca 317.933Radial† | 19.1 | 1.9 | 3.7770 ug/L | 3.7770 ppb | 09:19:59 |
| 2 | Cd 226.502† | -157.8 | 3.8 | 0.0554 ug/L | 0.0554 ppb | 09:21:16 |
| 2 | Co 228.616† | -45.6 | -8.0 | -0.2091 ug/L | -0.2091 ppb | 09:21:16 |
| 2 | Cr 267.716† | 133.2 | 42.3 | 0.5484 ug/L | 0.5484 ppb | 09:21:16 |
| 2 | Cu 324.752† | 6462.6 | 306.4 | 0.9935 ug/L | 0.9935 ppb | 09:20:56 |
| 2 | Fe 238.204 Radial† | 6.8 | -2.2 | -27.949 ug/L | -27.949 ppb | 09:19:59 |
| 2 | K 766.490 Radial† | 3052.8 | 243.2 | 48.556 ug/L | 48.556 ppb | 09:19:39 |
| 2 | Mg 279.077 IEC† | 4.1 | 3.4 | 148.97 ug/L | 148.97 ppb | 09:19:59 |
| 2 | Mn 257.610† | 466.2 | 28.0 | 0.0278 ug/L | 0.0278 ppb | 09:21:16 |
| 2 | Mo 202.031† | 11.1 | -2.8 | -0.2473 ug/L | -0.2473 ppb | 09:21:16 |
| 2 | Na 589.592 Radial† | -524.0 | -62.0 | -24.351 ug/L | -24.351 ppb | 09:19:39 |
| 2 | Ni 231.604† | 82.8 | -8.3 | -0.2585 ug/L | -0.2585 ppb | 09:21:16 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 184.5 | 21.9 | 15.605 ug/L | 15.605 ppb | 09:21:16 |
| 2 | Pb 220.353† | -63.7 | -6.9 | -1.0310 ug/L | -1.0310 ppb | 09:21:16 |
| 2 | S 181.975 Axial† | 29.4 | 5.9 | 10.429 ug/L | 10.429 ppb | 09:21:16 |
| 2 | Sb 206.836† | 11668.3 | 11996.4 | 5097.2 ug/L | 5097.2 ppb | 09:20:56 |
| 2 | Se 196.026† | -16.3 | 0.1 | 0.0273 ug/L | 0.0273 ppb | 09:21:16 |
| 2 | Si 251.611† | 827.2 | 326.9 | 12.175 ug/L | 12.175 ppb | 09:21:16 |
| 2 | Sn 189.927† | 14.0 | 11.3 | 2.5079 ug/L | 2.5079 ppb | 09:21:16 |
| 2 | Sr 421.552† | 40.1 | -30.0 | -0.2553 ug/L | -0.2553 ppb | 09:19:39 |
| 2 | Ti 334.940† | -1086.0 | -35.7 | -0.0719 ug/L | -0.0719 ppb | 09:20:56 |
| 2 | Tl 190.801† | -18.4 | 6.1 | 2.3461 ug/L | 2.3461 ppb | 09:21:16 |
| 2 | U 409.014† | -2073.1 | -101.0 | -2.9701 ug/L | -2.9701 ppb | 09:20:56 |
| 2 | V 292.402† | -1382.9 | 2.6 | 0.0174 ug/L | 0.0174 ppb | 09:20:56 |
| 2 | Zn 213.857† | 652.5 | 65.9 | 0.7877 ug/L | 0.7877 ppb | 09:21:16 |
| 2 | SiO2† | 847.3 | 319.7 | 25.552 ug/L | 25.552 ppb | 09:21:52 |
| 3 | Sc 361.383 | 823437.0 | 823437.0 | 98.045 % | | 09:21:22 |
| 3 | Sc Radial | 4027.1 | 4027.1 | 99.8 % | | 09:20:24 |
| 3 | Y 371.029 | 712465.2 | 712465.2 | 99.496 % | | 09:21:22 |
| 3 | Y RADIAL | 4568.9 | 4568.9 | 101.1 % | | 09:20:04 |
| 3 | Ag 328.068† | 204.4 | -44.9 | -0.2307 ug/L | -0.2307 ppb | 09:21:22 |
| 3 | Al 396.153Radial† | -77.7 | 1.8 | 1.8277 ug/L | 1.8277 ppb | 09:20:24 |
| 3 | As 188.979† | -15.6 | 4.9 | 2.6364 ug/L | 2.6364 ppb | 09:21:42 |
| 3 | B 249.677† | 114.3 | 366.8 | 10.085 ug/L | 10.085 ppb | 09:21:42 |
| 3 | Ba 233.527† | 8.0 | -10.4 | -0.0985 ug/L | -0.0985 ppb | 09:21:42 |
| 3 | Be 313.107† | -4309.6 | -132.9 | -0.0541 ug/L | -0.0541 ppb | 09:21:22 |
| 3 | Ca 317.933Radial† | 19.4 | 2.3 | 4.5815 ug/L | 4.5815 ppb | 09:20:24 |
| 3 | Cd 226.502† | -161.2 | 2.0 | 0.0296 ug/L | 0.0296 ppb | 09:21:42 |
| 3 | Co 228.616† | -47.7 | -9.7 | -0.2493 ug/L | -0.2493 ppb | 09:21:42 |
| 3 | Cr 267.716† | 120.8 | 28.3 | 0.3670 ug/L | 0.3670 ppb | 09:21:42 |
| 3 | Cu 324.752† | 6485.3 | 261.8 | 0.8493 ug/L | 0.8493 ppb | 09:21:22 |
| 3 | Fe 238.204 Radial† | 7.7 | -1.3 | -16.028 ug/L | -16.028 ppb | 09:20:24 |
| 3 | K 766.490 Radial† | 2906.2 | 107.7 | 21.521 ug/L | 21.521 ppb | 09:20:04 |
| 3 | Mg 279.077 IEC† | 1.8 | 1.1 | 50.012 ug/L | 50.012 ppb | 09:20:24 |
| 3 | Mn 257.610† | 436.0 | -7.7 | -0.0138 ug/L | -0.0138 ppb | 09:21:42 |
| 3 | Mo 202.031† | 27.2 | 13.5 | 1.1860 ug/L | 1.1860 ppb | 09:21:42 |
| 3 | Na 589.592 Radial† | -552.3 | -92.4 | -36.271 ug/L | -36.271 ppb | 09:20:04 |
| 3 | Ni 231.604† | 82.8 | -9.2 | -0.2869 ug/L | -0.2869 ppb | 09:21:42 |
| 3 | P 214.914† | 174.0 | 9.2 | 6.4926 ug/L | 6.4926 ppb | 09:21:42 |
| 3 | Pb 220.353† | -48.7 | 9.2 | 1.3875 ug/L | 1.3875 ppb | 09:21:42 |
| 3 | S 181.975 Axial† | 28.3 | 4.4 | 7.7817 ug/L | 7.7817 ppb | 09:21:42 |
| 3 | Sb 206.836† | 11787.3 | 11995.7 | 5096.9 ug/L | 5096.9 ppb | 09:21:22 |
| 3 | Se 196.026† | -27.0 | -10.6 | -8.4655 ug/L | -8.4655 ppb | 09:21:42 |
| 3 | Si 251.611† | 824.1 | 315.1 | 11.716 ug/L | 11.716 ppb | 09:21:42 |
| 3 | Sn 189.927† | 15.6 | 12.8 | 2.8341 ug/L | 2.8341 ppb | 09:21:42 |
| 3 | Sr 421.552† | 39.8 | -30.2 | -0.2568 ug/L | -0.2568 ppb | 09:20:04 |
| 3 | Ti 334.940† | -1097.7 | -36.2 | -0.0650 ug/L | -0.0650 ppb | 09:21:22 |
| 3 | Tl 190.801† | -13.8 | 11.0 | 4.2456 ug/L | 4.2456 ppb | 09:21:42 |
| 3 | U 409.014† | -2070.1 | -76.2 | -2.2423 ug/L | -2.2423 ppb | 09:21:22 |
| 3 | V 292.402† | -1430.8 | -31.8 | -0.2298 ug/L | -0.2298 ppb | 09:21:22 |
| 3 | Zn 213.857† | 658.3 | 65.0 | 0.7751 ug/L | 0.7751 ppb | 09:21:42 |
| 3 | SiO2† | 842.6 | 306.0 | 24.416 ug/L | 24.416 ppb | 09:21:57 |

Mean Data: LR2

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 816633.8 | 97.235 % | | 0.7350 | | | 0.76% |
| Sc Radial | 4037.4 | 100 % | | 0.2 | | | 0.22% |
| Y 371.029 | 705850.1 | 98.572 % | | 0.8274 | | | 0.84% |
| Y RADIAL | 4498.8 | 99.57 % | | 1.352 | | | 1.36% |
| Ag 328.068† | -41.5 | -0.2086 ug/L | | 0.06039 | -0.2086 ppb | 0.06039 | 28.95% |
| Al 396.153Radial† | 3.0 | 3.1801 ug/L | | 8.01356 | 3.1801 ppb | 8.01356 | 251.99% |
| As 188.979† | 1.6 | 0.8636 ug/L | | 1.65602 | 0.8636 ppb | 1.65602 | 191.75% |
| B 249.677† | 374.5 | 10.295 ug/L | | 0.4276 | 10.295 ppb | 0.4276 | 4.15% |
| Ba 233.527† | -0.9 | -0.0087 ug/L | | 0.11162 | -0.0087 ppb | 0.11162 | >999.9% |
| Be 313.107† | -92.0 | -0.0375 ug/L | | 0.01735 | -0.0375 ppb | 0.01735 | 46.24% |
| Ca 317.933Radial† | 1.8 | 3.5908 ug/L | | 1.09580 | 3.5908 ppb | 1.09580 | 30.52% |
| Cd 226.502† | -1.1 | -0.0157 ug/L | | 0.10162 | -0.0157 ppb | 0.10162 | 647.20% |
| Co 228.616† | -7.5 | -0.1949 ug/L | | 0.06278 | -0.1949 ppb | 0.06278 | 32.22% |
| Cr 267.716† | 35.0 | 0.4562 ug/L | | 0.09075 | 0.4562 ppb | 0.09075 | 19.89% |
| Cu 324.752† | 271.6 | 0.8821 ug/L | | 0.09919 | 0.8821 ppb | 0.09919 | 11.24% |
| Fe 238.204 Radial† | -0.2 | -2.5393 ug/L | | 34.21080 | -2.5393 ppb | 34.21080 | >999.9% |

| | | | | | | |
|--------------------|---------|--------------|---------|-------------|---------|---------|
| K 766.490 Radial† | 131.7 | 26.307 ug/L | 20.2838 | 26.307 ppb | 20.2838 | 77.10% |
| Mg 279.077 IEC† | 3.3 | 143.91 ug/L | 91.472 | 143.91 ppb | 91.472 | 63.56% |
| Mn 257.610† | 4.2 | -0.0006 ug/L | 0.02462 | -0.0006 ppb | 0.02462 | >999.9% |
| Mo 202.031† | 3.4 | 0.3009 ug/L | 0.77380 | 0.3009 ppb | 0.77380 | 257.19% |
| Na 589.592 Radial† | -82.8 | -32.516 ug/L | 7.0780 | -32.516 ppb | 7.0780 | 21.77% |
| Ni 231.604† | -7.3 | -0.2285 ug/L | 0.07799 | -0.2285 ppb | 0.07799 | 34.14% |
| P 214.914† | 16.9 | 12.031 ug/L | 4.8637 | 12.031 ppb | 4.8637 | 40.43% |
| Pb 220.353† | -2.0 | -0.2942 ug/L | 1.46014 | -0.2942 ppb | 1.46014 | 496.23% |
| S 181.975 Axial† | 6.3 | 11.065 ug/L | 3.6437 | 11.065 ppb | 3.6437 | 32.93% |
| Sb 206.836† | 11962.3 | 5082.7 ug/L | 24.85 | 5082.7 ppb | 24.85 | 0.49% |
| Se 196.026† | -7.2 | -5.7354 ug/L | 4.99290 | -5.7354 ppb | 4.99290 | 87.05% |
| Si 251.611† | 326.5 | 12.152 ug/L | 0.4241 | 12.152 ppb | 0.4241 | 3.49% |
| Sn 189.927† | 12.1 | 2.6876 ug/L | 0.16557 | 2.6876 ppb | 0.16557 | 6.16% |
| Sr 421.552† | -29.8 | -0.2535 ug/L | 0.00452 | -0.2535 ppb | 0.00452 | 1.78% |
| Ti 334.940† | -46.9 | -0.0907 ug/L | 0.03875 | -0.0907 ppb | 0.03875 | 42.71% |
| Tl 190.801† | 4.9 | 1.8993 ug/L | 2.59864 | 1.8993 ppb | 2.59864 | 136.82% |
| U 409.014† | -105.3 | -3.0996 ug/L | 0.92887 | -3.0996 ppb | 0.92887 | 29.97% |
| V 292.402† | -32.9 | -0.2519 ug/L | 0.28100 | -0.2519 ppb | 0.28100 | 111.57% |
| Zn 213.857† | 62.7 | 0.7455 ug/L | 0.06254 | 0.7455 ppb | 0.06254 | 8.39% |
| SiO2† | 308.2 | 24.612 ug/L | 0.8597 | 24.612 ppb | 0.8597 | 3.49% |

Sequence No.: 17

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 09:24:09

Data Type: Reprocessed on 3/25/2010 09:41:56

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 361.383 | 842149.8 | 842149.8 | 100.27 % | | 09:27:18 |
| 1 | Sc Radial | 3876.8 | 3876.8 | 96.1 % | | 09:26:21 |
| 1 | Y 371.029 | 710504.1 | 710504.1 | 99.222 % | | 09:27:18 |
| 1 | Y RADIAL | 4232.1 | 4232.1 | 93.67 % | | 09:26:01 |
| 1 | Ag 328.068† | 100187.7 | 99661.3 | 505.58 ug/L | 505.58 ppb | 09:27:23 |
| 1 | Al 396.153Radial† | 4697.6 | 4967.5 | 5270.1 ug/L | 5270.1 ppb | 09:26:01 |
| 1 | As 188.979† | 900.7 | 919.1 | 497.00 ug/L | 497.00 ppb | 09:27:44 |
| 1 | B 249.677† | 18105.5 | 18306.3 | 500.90 ug/L | 500.90 ppb | 09:27:23 |
| 1 | Ba 233.527† | 53146.0 | 52982.7 | 497.94 ug/L | 497.94 ppb | 09:27:23 |
| 1 | Be 313.107† | 1222307.3 | 1223239.8 | 497.76 ug/L | 497.76 ppb | 09:27:18 |
| 1 | Ca 317.933Radial† | 2504.9 | 2589.1 | 5260.4 ug/L | 5260.4 ppb | 09:26:21 |
| 1 | Cd 226.502† | 35258.6 | 35328.9 | 498.15 ug/L | 498.15 ppb | 09:27:23 |
| 1 | Co 228.616† | 19489.5 | 19475.3 | 506.95 ug/L | 506.95 ppb | 09:27:23 |
| 1 | Cr 267.716† | 38474.4 | 38274.6 | 499.36 ug/L | 499.36 ppb | 09:27:23 |
| 1 | Cu 324.752† | 158871.6 | 152086.0 | 493.14 ug/L | 493.14 ppb | 09:27:23 |
| 1 | Fe 238.204 Radial† | 410.8 | 418.5 | 5247.9 ug/L | 5247.9 ppb | 09:26:21 |
| 1 | K 766.490 Radial† | 27431.6 | 25739.1 | 5131.7 ug/L | 5131.7 ppb | 09:26:01 |
| 1 | Mg 279.077 IEC† | 119.1 | 123.3 | 5384.3 ug/L | 5384.3 ppb | 09:26:21 |
| 1 | Mn 257.610† | 378439.0 | 376955.5 | 494.88 ug/L | 494.88 ppb | 09:27:18 |
| 1 | Mo 202.031† | 5674.8 | 5645.1 | 496.77 ug/L | 496.77 ppb | 09:27:44 |
| 1 | Na 589.592 Radial† | 25199.4 | 26680.7 | 10478 ug/L | 10478 ppb | 09:26:01 |
| 1 | Ni 231.604† | 16322.6 | 16184.5 | 505.06 ug/L | 505.06 ppb | 09:27:23 |
| 1 | P 214.914† | 3543.1 | 3365.2 | 2322.7 ug/L | 2322.7 ppb | 09:27:44 |
| 1 | Pb 220.353† | 3184.3 | 3234.5 | 489.09 ug/L | 489.09 ppb | 09:27:44 |
| 1 | S 181.975 Axial† | 585.9 | 559.9 | 980.40 ug/L | 980.40 ppb | 09:27:44 |
| 1 | Sb 206.836† | 1222.5 | 1192.5 | 524.54 ug/L | 524.54 ppb | 09:27:44 |
| 1 | Se 196.026† | 595.4 | 610.7 | 505.73 ug/L | 505.73 ppb | 09:27:44 |
| 1 | Si 251.611† | 67602.9 | 66893.2 | 2484.5 ug/L | 2484.5 ppb | 09:27:23 |
| 1 | Sn 189.927† | 2248.3 | 2239.1 | 496.55 ug/L | 496.55 ppb | 09:27:44 |
| 1 | Sr 421.552† | 58335.2 | 60627.4 | 516.24 ug/L | 516.24 ppb | 09:26:01 |
| 1 | Ti 334.940† | 286177.7 | 286481.4 | 492.76 ug/L | 492.76 ppb | 09:27:23 |
| 1 | Tl 190.801† | 1240.4 | 1262.1 | 491.28 ug/L | 491.28 ppb | 09:27:44 |
| 1 | U 409.014† | 15255.0 | 17248.6 | 505.82 ug/L | 505.82 ppb | 09:27:23 |
| 1 | V 292.402† | 63159.2 | 64414.7 | 503.19 ug/L | 503.19 ppb | 09:27:23 |
| 1 | Zn 213.857† | 42617.1 | 41894.5 | 493.03 ug/L | 493.03 ppb | 09:27:23 |
| 1 | SiO2† | 66609.2 | 65874.4 | 5249.5 ug/L | 5249.5 ppb | 09:28:51 |
| 2 | Sc 361.383 | 835022.8 | 835022.8 | 99.425 % | | 09:27:49 |
| 2 | Sc Radial | 4017.5 | 4017.5 | 99.6 % | | 09:26:46 |
| 2 | Y 371.029 | 703671.4 | 703671.4 | 98.268 % | | 09:27:49 |
| 2 | Y RADIAL | 4350.9 | 4350.9 | 96.30 % | | 09:26:26 |
| 2 | Ag 328.068† | 100137.4 | 100463.6 | 509.59 ug/L | 509.59 ppb | 09:27:55 |
| 2 | Al 396.153Radial† | 4582.3 | 4680.5 | 4963.9 ug/L | 4963.9 ppb | 09:26:26 |
| 2 | As 188.979† | 914.4 | 940.6 | 508.51 ug/L | 508.51 ppb | 09:28:15 |
| 2 | B 249.677† | 18082.5 | 18437.3 | 504.52 ug/L | 504.52 ppb | 09:27:55 |
| 2 | Ba 233.527† | 52876.3 | 53163.8 | 499.64 ug/L | 499.64 ppb | 09:27:55 |
| 2 | Be 313.107† | 1209832.9 | 1221097.3 | 496.90 ug/L | 496.90 ppb | 09:27:49 |
| 2 | Ca 317.933Radial† | 2507.6 | 2500.6 | 5080.5 ug/L | 5080.5 ppb | 09:26:46 |
| 2 | Cd 226.502† | 35210.9 | 35581.1 | 501.73 ug/L | 501.73 ppb | 09:27:55 |
| 2 | Co 228.616† | 19388.8 | 19539.9 | 508.64 ug/L | 508.64 ppb | 09:27:55 |
| 2 | Cr 267.716† | 38295.9 | 38422.6 | 501.27 ug/L | 501.27 ppb | 09:27:55 |
| 2 | Cu 324.752† | 158733.4 | 153299.3 | 497.07 ug/L | 497.07 ppb | 09:27:55 |
| 2 | Fe 238.204 Radial† | 412.8 | 405.5 | 5085.6 ug/L | 5085.6 ppb | 09:26:46 |
| 2 | K 766.490 Radial† | 26720.2 | 24025.3 | 4789.9 ug/L | 4789.9 ppb | 09:26:26 |
| 2 | Mg 279.077 IEC† | 119.7 | 119.5 | 5221.0 ug/L | 5221.0 ppb | 09:26:46 |
| 2 | Mn 257.610† | 375906.2 | 377629.3 | 495.76 ug/L | 495.76 ppb | 09:27:49 |
| 2 | Mo 202.031† | 5692.9 | 5711.6 | 502.60 ug/L | 502.60 ppb | 09:28:15 |
| 2 | Na 589.592 Radial† | 24588.2 | 25148.8 | 9876.3 ug/L | 9876.3 ppb | 09:26:26 |
| 2 | Ni 231.604† | 16277.8 | 16278.4 | 507.99 ug/L | 507.99 ppb | 09:27:55 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3604.7 | 3457.3 | 2388.2 ug/L | 2388.2 ppb | 09:28:15 |
| 2 | Pb 220.353† | 3242.2 | 3319.7 | 501.91 ug/L | 501.91 ppb | 09:28:15 |
| 2 | S 181.975 Axial† | 591.5 | 570.6 | 999.20 ug/L | 999.20 ppb | 09:28:15 |
| 2 | Sb 206.836† | 1216.4 | 1196.8 | 526.64 ug/L | 526.64 ppb | 09:28:15 |
| 2 | Se 196.026† | 604.0 | 624.4 | 516.10 ug/L | 516.10 ppb | 09:28:15 |
| 2 | Si 251.611† | 67573.9 | 67439.5 | 2504.8 ug/L | 2504.8 ppb | 09:27:55 |
| 2 | Sn 189.927† | 2270.4 | 2280.5 | 505.69 ug/L | 505.69 ppb | 09:28:15 |
| 2 | Sr 421.552† | 56763.9 | 56924.1 | 484.70 ug/L | 484.70 ppb | 09:26:26 |
| 2 | Ti 334.940† | 285671.3 | 288407.9 | 496.06 ug/L | 496.06 ppb | 09:27:55 |
| 2 | Tl 190.801† | 1243.7 | 1276.0 | 496.67 ug/L | 496.67 ppb | 09:28:15 |
| 2 | U 409.014† | 15228.0 | 17351.3 | 508.85 ug/L | 508.85 ppb | 09:27:55 |
| 2 | V 292.402† | 62972.0 | 64763.9 | 505.98 ug/L | 505.98 ppb | 09:27:55 |
| 2 | Zn 213.857† | 42568.7 | 42208.6 | 496.76 ug/L | 496.76 ppb | 09:27:55 |
| 2 | SiO2† | 66967.8 | 66802.0 | 5323.5 ug/L | 5323.5 ppb | 09:28:56 |
| 3 | Sc 361.383 | 839934.4 | 839934.4 | 100.01 % | | 09:28:20 |
| 3 | Sc Radial | 4001.2 | 4001.2 | 99.2 % | | 09:27:11 |
| 3 | Y 371.029 | 707199.1 | 707199.1 | 98.761 % | | 09:28:20 |
| 3 | Y RADIAL | 4478.9 | 4478.9 | 99.13 % | | 09:26:51 |
| 3 | Ag 328.068† | 100983.2 | 100720.3 | 510.89 ug/L | 510.89 ppb | 09:28:26 |
| 3 | Al 396.153Radial† | 4678.4 | 4796.2 | 5087.6 ug/L | 5087.6 ppb | 09:26:51 |
| 3 | As 188.979† | 888.1 | 908.9 | 491.55 ug/L | 491.55 ppb | 09:28:46 |
| 3 | B 249.677† | 18219.0 | 18467.4 | 505.34 ug/L | 505.34 ppb | 09:28:26 |
| 3 | Ba 233.527† | 53217.4 | 53193.9 | 499.92 ug/L | 499.92 ppb | 09:28:26 |
| 3 | Be 313.107† | 1218964.4 | 1223112.3 | 497.71 ug/L | 497.71 ppb | 09:28:20 |
| 3 | Ca 317.933Radial† | 2492.7 | 2495.9 | 5071.1 ug/L | 5071.1 ppb | 09:27:11 |
| 3 | Cd 226.502† | 35336.1 | 35499.2 | 500.57 ug/L | 500.57 ppb | 09:28:26 |
| 3 | Co 228.616† | 19513.6 | 19550.6 | 508.91 ug/L | 508.91 ppb | 09:28:26 |
| 3 | Cr 267.716† | 38557.3 | 38458.7 | 501.74 ug/L | 501.74 ppb | 09:28:26 |
| 3 | Cu 324.752† | 160106.4 | 153738.5 | 498.49 ug/L | 498.49 ppb | 09:28:26 |
| 3 | Fe 238.204 Radial† | 411.7 | 406.0 | 5092.6 ug/L | 5092.6 ppb | 09:27:11 |
| 3 | K 766.490 Radial† | 27573.3 | 24995.2 | 4983.4 ug/L | 4983.4 ppb | 09:26:51 |
| 3 | Mg 279.077 IEC† | 116.7 | 117.0 | 5109.1 ug/L | 5109.1 ppb | 09:27:11 |
| 3 | Mn 257.610† | 378470.2 | 377982.1 | 496.22 ug/L | 496.22 ppb | 09:28:20 |
| 3 | Mo 202.031† | 5643.4 | 5628.6 | 495.30 ug/L | 495.30 ppb | 09:28:46 |
| 3 | Na 589.592 Radial† | 25249.8 | 25916.8 | 10178 ug/L | 10178 ppb | 09:26:51 |
| 3 | Ni 231.604† | 16381.6 | 16286.5 | 508.24 ug/L | 508.24 ppb | 09:28:26 |
| 3 | P 214.914† | 3538.4 | 3369.8 | 2325.0 ug/L | 2325.0 ppb | 09:28:46 |
| 3 | Pb 220.353† | 3178.8 | 3237.4 | 489.50 ug/L | 489.50 ppb | 09:28:46 |
| 3 | S 181.975 Axial† | 588.8 | 564.4 | 988.27 ug/L | 988.27 ppb | 09:28:46 |
| 3 | Sb 206.836† | 1201.5 | 1174.8 | 517.00 ug/L | 517.00 ppb | 09:28:46 |
| 3 | Se 196.026† | 590.7 | 607.6 | 502.69 ug/L | 502.69 ppb | 09:28:46 |
| 3 | Si 251.611† | 67953.2 | 67421.4 | 2504.2 ug/L | 2504.2 ppb | 09:28:26 |
| 3 | Sn 189.927† | 2247.8 | 2244.5 | 497.73 ug/L | 497.73 ppb | 09:28:46 |
| 3 | Sr 421.552† | 58410.3 | 58817.1 | 500.82 ug/L | 500.82 ppb | 09:26:51 |
| 3 | Ti 334.940† | 287466.5 | 288522.7 | 496.26 ug/L | 496.26 ppb | 09:28:26 |
| 3 | Tl 190.801† | 1237.3 | 1262.3 | 491.37 ug/L | 491.37 ppb | 09:28:46 |
| 3 | U 409.014† | 15273.1 | 17306.9 | 507.55 ug/L | 507.55 ppb | 09:28:26 |
| 3 | V 292.402† | 63372.3 | 64793.8 | 506.10 ug/L | 506.10 ppb | 09:28:26 |
| 3 | Zn 213.857† | 42806.5 | 42196.1 | 496.61 ug/L | 496.61 ppb | 09:28:26 |
| 3 | SiO2† | 66239.9 | 65680.3 | 5234.1 ug/L | 5234.1 ppb | 09:29:01 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 839035.7 | 99.902 % | 0.4343 | | | 0.43% |
| Sc Radial | 3965.2 | 98.3 % | 1.91 | | | 1.94% |
| Y 371.029 | 707124.9 | 98.750 % | 0.4772 | | | 0.48% |
| Y RADIAL | 4354.0 | 96.37 % | 2.732 | | | 2.83% |
| Ag 328.068† | 100281.7 | 508.69 ug/L | 2.765 | 508.69 ppb | 2.765 | 0.54% |
| QC value within limits for Ag 328.068 Recovery = 101.74% | | | | | | |
| Al 396.153Radial† | 4814.7 | 5107.2 ug/L | 154.03 | 5107.2 ppb | 154.03 | 3.02% |
| QC value within limits for Al 396.153Radial Recovery = 102.14% | | | | | | |
| As 188.979† | 922.8 | 499.02 ug/L | 8.657 | 499.02 ppb | 8.657 | 1.73% |
| QC value within limits for As 188.979 Recovery = 99.80% | | | | | | |
| B 249.677† | 18403.7 | 503.59 ug/L | 2.366 | 503.59 ppb | 2.366 | 0.47% |
| QC value within limits for B 249.677 Recovery = 100.72% | | | | | | |
| Ba 233.527† | 53113.5 | 499.16 ug/L | 1.072 | 499.16 ppb | 1.072 | 0.21% |
| QC value within limits for Ba 233.527 Recovery = 99.83% | | | | | | |
| Be 313.107† | 1222483.2 | 497.46 ug/L | 0.486 | 497.46 ppb | 0.486 | 0.10% |
| QC value within limits for Be 313.107 Recovery = 99.49% | | | | | | |

| | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|
| Ca 317.933Radial† | 2528.5 | 5137.3 ug/L | 106.70 | 5137.3 ppb | 106.70 | 2.08% |
| QC value within limits for Ca 317.933Radial Recovery = 102.75% | | | | | | |
| Cd 226.502† | 35469.8 | 500.15 ug/L | 1.825 | 500.15 ppb | 1.825 | 0.36% |
| QC value within limits for Cd 226.502 Recovery = 100.03% | | | | | | |
| Co 228.616† | 19521.9 | 508.17 ug/L | 1.060 | 508.17 ppb | 1.060 | 0.21% |
| QC value within limits for Co 228.616 Recovery = 101.63% | | | | | | |
| Cr 267.716† | 38385.3 | 500.79 ug/L | 1.262 | 500.79 ppb | 1.262 | 0.25% |
| QC value within limits for Cr 267.716 Recovery = 100.16% | | | | | | |
| Cu 324.752† | 153041.3 | 496.23 ug/L | 2.770 | 496.23 ppb | 2.770 | 0.56% |
| QC value within limits for Cu 324.752 Recovery = 99.25% | | | | | | |
| Fe 238.204 Radial† | 410.0 | 5142.1 ug/L | 91.75 | 5142.1 ppb | 91.75 | 1.78% |
| QC value within limits for Fe 238.204 Radial Recovery = 102.84% | | | | | | |
| K 766.490 Radial† | 24919.9 | 4968.3 ug/L | 171.42 | 4968.3 ppb | 171.42 | 3.45% |
| QC value within limits for K 766.490 Radial Recovery = 99.37% | | | | | | |
| Mg 279.077 IEC† | 119.9 | 5238.1 ug/L | 138.37 | 5238.1 ppb | 138.37 | 2.64% |
| QC value within limits for Mg 279.077 IEC Recovery = 104.76% | | | | | | |
| Mn 257.610† | 377522.3 | 495.62 ug/L | 0.682 | 495.62 ppb | 0.682 | 0.14% |
| QC value within limits for Mn 257.610 Recovery = 99.12% | | | | | | |
| Mo 202.031† | 5661.8 | 498.23 ug/L | 3.860 | 498.23 ppb | 3.860 | 0.77% |
| QC value within limits for Mo 202.031 Recovery = 99.65% | | | | | | |
| Na 589.592 Radial† | 25915.5 | 10177 ug/L | 300.8 | 10177 ppb | 300.8 | 2.96% |
| QC value within limits for Na 589.592 Radial Recovery = 101.77% | | | | | | |
| Ni 231.604† | 16249.8 | 507.09 ug/L | 1.769 | 507.09 ppb | 1.769 | 0.35% |
| QC value within limits for Ni 231.604 Recovery = 101.42% | | | | | | |
| P 214.914† | 3397.5 | 2345.3 ug/L | 37.18 | 2345.3 ppb | 37.18 | 1.59% |
| QC value within limits for P 214.914 Recovery = 93.81% | | | | | | |
| Pb 220.353† | 3263.9 | 493.50 ug/L | 7.288 | 493.50 ppb | 7.288 | 1.48% |
| QC value within limits for Pb 220.353 Recovery = 98.70% | | | | | | |
| S 181.975 Axial† | 564.9 | 989.29 ug/L | 9.441 | 989.29 ppb | 9.441 | 0.95% |
| QC value within limits for S 181.975 Axial Recovery = 98.93% | | | | | | |
| Sb 206.836† | 1188.0 | 522.73 ug/L | 5.071 | 522.73 ppb | 5.071 | 0.97% |
| QC value within limits for Sb 206.836 Recovery = 104.55% | | | | | | |
| Se 196.026† | 614.2 | 508.17 ug/L | 7.029 | 508.17 ppb | 7.029 | 1.38% |
| QC value within limits for Se 196.026 Recovery = 101.63% | | | | | | |
| Si 251.611† | 67251.4 | 2497.9 ug/L | 11.54 | 2497.9 ppb | 11.54 | 0.46% |
| QC value within limits for Si 251.611 Recovery = 99.91% | | | | | | |
| Sn 189.927† | 2254.7 | 499.99 ug/L | 4.971 | 499.99 ppb | 4.971 | 0.99% |
| QC value within limits for Sn 189.927 Recovery = 100.00% | | | | | | |
| Sr 421.552† | 58789.5 | 500.59 ug/L | 15.769 | 500.59 ppb | 15.769 | 3.15% |
| QC value within limits for Sr 421.552 Recovery = 100.12% | | | | | | |
| Ti 334.940† | 287804.0 | 495.03 ug/L | 1.968 | 495.03 ppb | 1.968 | 0.40% |
| QC value within limits for Ti 334.940 Recovery = 99.01% | | | | | | |
| Tl 190.801† | 1266.8 | 493.11 ug/L | 3.086 | 493.11 ppb | 3.086 | 0.63% |
| QC value within limits for Tl 190.801 Recovery = 98.62% | | | | | | |
| U 409.014† | 17302.2 | 507.41 ug/L | 1.522 | 507.41 ppb | 1.522 | 0.30% |
| QC value within limits for U 409.014 Recovery = 101.48% | | | | | | |
| V 292.402† | 64657.5 | 505.09 ug/L | 1.651 | 505.09 ppb | 1.651 | 0.33% |
| QC value within limits for V 292.402 Recovery = 101.02% | | | | | | |
| Zn 213.857† | 42099.7 | 495.47 ug/L | 2.112 | 495.47 ppb | 2.112 | 0.43% |
| QC value within limits for Zn 213.857 Recovery = 99.09% | | | | | | |
| SiO2† | 66118.9 | 5269.0 ug/L | 47.79 | 5269.0 ppb | 47.79 | 0.91% |
| QC value within limits for SiO2 Recovery = 98.53% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 18

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 09:31:11

Data Type: Reprocessed on 3/25/2010 09:41:58

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 361.383 | 848278.8 | 848278.8 | 101.00 % | | 09:34:21 |
| 1 | Sc Radial | 4125.2 | 4125.2 | 102 % | | 09:33:04 |
| 1 | Y 371.029 | 723772.8 | 723772.8 | 101.08 % | | 09:34:21 |
| 1 | Y RADIAL | 4481.7 | 4481.7 | 99.20 % | | 09:33:04 |
| 1 | Ag 328.068† | 240.1 | -15.7 | -0.0889 ug/L | -0.0889 ppb | 09:34:26 |
| 1 | Al 396.153Radial† | -80.5 | 0.9 | 0.9744 ug/L | 0.9744 ppb | 09:33:24 |
| 1 | As 188.979† | -26.1 | -5.0 | -2.6869 ug/L | -2.6869 ppb | 09:34:46 |
| 1 | B 249.677† | 100.6 | 349.8 | 9.6178 ug/L | 9.6178 ppb | 09:34:46 |
| 1 | Ba 233.527† | 19.9 | 1.2 | 0.0107 ug/L | 0.0107 ppb | 09:34:46 |
| 1 | Be 313.107† | -4209.2 | 95.3 | 0.0389 ug/L | 0.0389 ppb | 09:34:26 |
| 1 | Ca 317.933Radial† | 17.2 | -0.4 | -0.8031 ug/L | -0.8031 ppb | 09:33:24 |
| 1 | Cd 226.502† | -156.7 | 11.2 | 0.1614 ug/L | 0.1614 ppb | 09:34:46 |
| 1 | Co 228.616† | -49.0 | -9.6 | -0.2495 ug/L | -0.2495 ppb | 09:34:46 |
| 1 | Cr 267.716† | 129.6 | 33.3 | 0.4299 ug/L | 0.4299 ppb | 09:34:46 |
| 1 | Cu 324.752† | 6452.3 | 35.5 | 0.1104 ug/L | 0.1104 ppb | 09:34:26 |
| 1 | Fe 238.204 Radial† | 8.1 | -1.1 | -13.391 ug/L | -13.391 ppb | 09:33:24 |
| 1 | K 766.490 Radial† | 2783.5 | -81.4 | -16.247 ug/L | -16.247 ppb | 09:33:04 |
| 1 | Mg 279.077 IEC† | 2.1 | 1.4 | 61.000 ug/L | 61.000 ppb | 09:33:24 |
| 1 | Mn 257.610† | 481.5 | 24.3 | 0.0281 ug/L | 0.0281 ppb | 09:34:46 |
| 1 | Mo 202.031† | 13.2 | -1.2 | -0.1024 ug/L | -0.1024 ppb | 09:34:46 |
| 1 | Na 589.592 Radial† | -509.3 | -37.1 | -14.570 ug/L | -14.570 ppb | 09:33:04 |
| 1 | Ni 231.604† | 106.6 | 11.9 | 0.3729 ug/L | 0.3729 ppb | 09:34:46 |
| 1 | P 214.914† | 178.2 | 8.2 | 5.9153 ug/L | 5.9153 ppb | 09:34:46 |
| 1 | Pb 220.353† | -49.3 | 10.0 | 1.5158 ug/L | 1.5158 ppb | 09:34:46 |
| 1 | S 181.975 Axial† | 32.2 | 7.5 | 13.097 ug/L | 13.097 ppb | 09:34:46 |
| 1 | Sb 206.836† | 37.0 | 10.0 | 4.2859 ug/L | 4.2859 ppb | 09:34:46 |
| 1 | Se 196.026† | -19.7 | -2.6 | -2.0829 ug/L | -2.0829 ppb | 09:34:46 |
| 1 | Si 251.611† | 534.3 | 3.6 | 0.1350 ug/L | 0.1350 ppb | 09:34:46 |
| 1 | Sn 189.927† | 13.5 | 10.3 | 2.2854 ug/L | 2.2854 ppb | 09:34:46 |
| 1 | Sr 421.552† | 33.4 | -37.4 | -0.3181 ug/L | -0.3181 ppb | 09:33:04 |
| 1 | Ti 334.940† | -1032.5 | 61.1 | 0.0967 ug/L | 0.0967 ppb | 09:34:26 |
| 1 | Tl 190.801† | -15.2 | 10.0 | 3.8863 ug/L | 3.8863 ppb | 09:34:46 |
| 1 | U 409.014† | -1810.2 | 243.0 | 7.1498 ug/L | 7.1498 ppb | 09:34:21 |
| 1 | V 292.402† | -1436.0 | 5.8 | 0.0599 ug/L | 0.0599 ppb | 09:34:26 |
| 1 | Zn 213.857† | 618.9 | 6.3 | 0.0743 ug/L | 0.0743 ppb | 09:34:46 |
| 1 | SiO2† | 545.9 | -12.9 | -1.0272 ug/L | -1.0272 ppb | 09:35:52 |
| 2 | Sc 361.383 | 832068.6 | 832068.6 | 99.073 % | | 09:34:51 |
| 2 | Sc Radial | 4161.2 | 4161.2 | 103 % | | 09:33:29 |
| 2 | Y 371.029 | 709818.4 | 709818.4 | 99.126 % | | 09:34:51 |
| 2 | Y RADIAL | 4535.5 | 4535.5 | 100.4 % | | 09:33:29 |
| 2 | Ag 328.068† | 228.6 | -22.7 | -0.1121 ug/L | -0.1121 ppb | 09:34:56 |
| 2 | Al 396.153Radial† | -80.3 | 1.8 | 1.9358 ug/L | 1.9358 ppb | 09:33:49 |
| 2 | As 188.979† | -16.5 | 4.2 | 2.2203 ug/L | 2.2203 ppb | 09:35:16 |
| 2 | B 249.677† | 76.2 | 327.0 | 8.9898 ug/L | 8.9898 ppb | 09:35:16 |
| 2 | Ba 233.527† | 22.7 | 4.5 | 0.0428 ug/L | 0.0428 ppb | 09:35:16 |
| 2 | Be 313.107† | -4269.0 | -46.2 | -0.0192 ug/L | -0.0192 ppb | 09:34:56 |
| 2 | Ca 317.933Radial† | 17.6 | -0.1 | -0.2945 ug/L | -0.2945 ppb | 09:33:49 |
| 2 | Cd 226.502† | -170.3 | -5.5 | -0.0778 ug/L | -0.0778 ppb | 09:35:16 |
| 2 | Co 228.616† | -28.6 | 10.1 | 0.2635 ug/L | 0.2635 ppb | 09:35:16 |
| 2 | Cr 267.716† | 117.9 | 24.0 | 0.3141 ug/L | 0.3141 ppb | 09:35:16 |
| 2 | Cu 324.752† | 6494.4 | 202.4 | 0.6573 ug/L | 0.6573 ppb | 09:34:56 |
| 2 | Fe 238.204 Radial† | 8.7 | -0.5 | -6.7950 ug/L | -6.7950 ppb | 09:33:49 |
| 2 | K 766.490 Radial† | 2824.4 | -65.3 | -13.026 ug/L | -13.026 ppb | 09:33:29 |
| 2 | Mg 279.077 IEC† | -2.1 | -2.7 | -118.02 ug/L | -118.02 ppb | 09:33:49 |
| 2 | Mn 257.610† | 450.9 | 2.7 | 0.0077 ug/L | 0.0077 ppb | 09:35:16 |
| 2 | Mo 202.031† | 19.7 | 5.7 | 0.4995 ug/L | 0.4995 ppb | 09:35:16 |
| 2 | Na 589.592 Radial† | -599.4 | -120.1 | -47.177 ug/L | -47.177 ppb | 09:33:29 |
| 2 | Ni 231.604† | 87.0 | -5.8 | -0.1806 ug/L | -0.1806 ppb | 09:35:16 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 181.4 | 14.9 | 10.579 ug/L | 10.579 ppb | 09:35:16 |
| 2 | Pb 220.353† | -58.3 | 0.0 | 0.0038 ug/L | 0.0038 ppb | 09:35:16 |
| 2 | S 181.975 Axial† | 26.5 | 2.4 | 4.1680 ug/L | 4.1680 ppb | 09:35:16 |
| 2 | Sb 206.836† | 30.6 | 4.3 | 1.8575 ug/L | 1.8575 ppb | 09:35:16 |
| 2 | Se 196.026† | -13.8 | 3.1 | 2.4276 ug/L | 2.4276 ppb | 09:35:16 |
| 2 | Si 251.611† | 549.6 | 29.3 | 1.0849 ug/L | 1.0849 ppb | 09:35:16 |
| 2 | Sn 189.927† | 10.6 | 7.6 | 1.6930 ug/L | 1.6930 ppb | 09:35:16 |
| 2 | Sr 421.552† | 6.7 | -63.6 | -0.5414 ug/L | -0.5414 ppb | 09:33:29 |
| 2 | Ti 334.940† | -1186.9 | -114.7 | -0.1867 ug/L | -0.1867 ppb | 09:34:56 |
| 2 | Tl 190.801† | -18.6 | 6.3 | 2.4233 ug/L | 2.4233 ppb | 09:35:16 |
| 2 | U 409.014† | -2097.9 | -82.4 | -2.4231 ug/L | -2.4231 ppb | 09:34:51 |
| 2 | V 292.402† | -1337.7 | 77.3 | 0.5975 ug/L | 0.5975 ppb | 09:34:56 |
| 2 | Zn 213.857† | 614.8 | 14.1 | 0.1686 ug/L | 0.1686 ppb | 09:35:16 |
| 2 | SiO2† | 568.2 | 20.1 | 1.5953 ug/L | 1.5953 ppb | 09:35:57 |
| 3 | Sc 361.383 | 842673.4 | 842673.4 | 100.34 % | | 09:35:21 |
| 3 | Sc Radial | 4163.8 | 4163.8 | 103 % | | 09:33:54 |
| 3 | Y 371.029 | 718038.8 | 718038.8 | 100.27 % | | 09:35:21 |
| 3 | Y RADIAL | 4507.2 | 4507.2 | 99.76 % | | 09:33:54 |
| 3 | Ag 328.068† | 297.0 | 42.6 | 0.2047 ug/L | 0.2047 ppb | 09:35:26 |
| 3 | Al 396.153Radial† | -73.0 | 8.9 | 9.4651 ug/L | 9.4651 ppb | 09:34:14 |
| 3 | As 188.979† | -19.1 | 1.8 | 0.9626 ug/L | 0.9626 ppb | 09:35:46 |
| 3 | B 249.677† | 90.9 | 340.7 | 9.3707 ug/L | 9.3707 ppb | 09:35:46 |
| 3 | Ba 233.527† | 30.1 | 11.5 | 0.1071 ug/L | 0.1071 ppb | 09:35:46 |
| 3 | Be 313.107† | -4139.1 | 137.5 | 0.0565 ug/L | 0.0565 ppb | 09:35:26 |
| 3 | Ca 317.933Radial† | 25.1 | 7.2 | 14.531 ug/L | 14.531 ppb | 09:34:14 |
| 3 | Cd 226.502† | -153.2 | 13.7 | 0.1966 ug/L | 0.1966 ppb | 09:35:46 |
| 3 | Co 228.616† | -36.7 | 2.3 | 0.0605 ug/L | 0.0605 ppb | 09:35:46 |
| 3 | Cr 267.716† | 114.0 | 18.7 | 0.2399 ug/L | 0.2399 ppb | 09:35:46 |
| 3 | Cu 324.752† | 6509.3 | 134.8 | 0.4351 ug/L | 0.4351 ppb | 09:35:26 |
| 3 | Fe 238.204 Radial† | 6.9 | -2.3 | -28.904 ug/L | -28.904 ppb | 09:34:14 |
| 3 | K 766.490 Radial† | 2842.3 | -49.6 | -9.8947 ug/L | -9.8947 ppb | 09:33:54 |
| 3 | Mg 279.077 IEC† | 2.2 | 1.5 | 64.176 ug/L | 64.176 ppb | 09:34:14 |
| 3 | Mn 257.610† | 442.5 | -11.4 | -0.0205 ug/L | -0.0205 ppb | 09:35:46 |
| 3 | Mo 202.031† | 13.6 | -0.6 | -0.0566 ug/L | -0.0566 ppb | 09:35:46 |
| 3 | Na 589.592 Radial† | -580.7 | -101.7 | -39.954 ug/L | -39.954 ppb | 09:33:54 |
| 3 | Ni 231.604† | 86.9 | -7.0 | -0.2193 ug/L | -0.2193 ppb | 09:35:46 |
| 3 | P 214.914† | 174.7 | 5.9 | 4.2229 ug/L | 4.2229 ppb | 09:35:46 |
| 3 | Pb 220.353† | -45.4 | 13.5 | 2.0466 ug/L | 2.0466 ppb | 09:35:46 |
| 3 | S 181.975 Axial† | 26.0 | 1.5 | 2.6231 ug/L | 2.6231 ppb | 09:35:46 |
| 3 | Sb 206.836† | 40.6 | 13.9 | 5.9065 ug/L | 5.9065 ppb | 09:35:46 |
| 3 | Se 196.026† | -21.2 | -4.2 | -3.4053 ug/L | -3.4053 ppb | 09:35:46 |
| 3 | Si 251.611† | 524.4 | -2.8 | -0.1030 ug/L | -0.1030 ppb | 09:35:46 |
| 3 | Sn 189.927† | 7.7 | 4.6 | 1.0298 ug/L | 1.0298 ppb | 09:35:46 |
| 3 | Sr 421.552† | 31.5 | -39.5 | -0.3369 ug/L | -0.3369 ppb | 09:33:54 |
| 3 | Ti 334.940† | -904.1 | 182.2 | 0.3098 ug/L | 0.3098 ppb | 09:35:26 |
| 3 | Tl 190.801† | -26.8 | -1.7 | -0.6489 ug/L | -0.6489 ppb | 09:35:46 |
| 3 | U 409.014† | -2012.1 | 29.8 | 0.8801 ug/L | 0.8801 ppb | 09:35:21 |
| 3 | V 292.402† | -1432.4 | -0.1 | 0.0054 ug/L | 0.0054 ppb | 09:35:26 |
| 3 | Zn 213.857† | 615.7 | 7.2 | 0.0911 ug/L | 0.0911 ppb | 09:35:46 |
| 3 | SiO2† | 579.7 | 24.4 | 1.9536 ug/L | 1.9536 ppb | 09:36:02 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 841006.9 | 100.14 % | 0.980 | | | 0.98% |
| Sc Radial | 4150.1 | 103 % | 0.5 | | | 0.52% |
| Y 371.029 | 717210.0 | 100.16 % | 0.980 | | | 0.98% |
| Y RADIAL | 4508.1 | 99.78 % | 0.596 | | | 0.60% |
| Ag 328.068† | 1.4 | 0.0012 ug/L | 0.17660 | 0.0012 ppb | 0.17660 | >999.9% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 3.9 | 4.1251 ug/L | 4.64950 | 4.1251 ppb | 4.64950 | 112.71% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | |
| As 188.979† | 0.3 | 0.1653 ug/L | 2.54893 | 0.1653 ppb | 2.54893 | >999.9% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | 339.2 | 9.3261 ug/L | 0.31636 | 9.3261 ppb | 0.31636 | 3.39% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 5.7 | 0.0535 ug/L | 0.04906 | 0.0535 ppb | 0.04906 | 91.63% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | 62.2 | 0.0254 ug/L | 0.03963 | 0.0254 ppb | 0.03963 | 155.93% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |

| | | | | | | |
|--|-------|--------------|-----------|-------------|-----------|---------|
| Ca 317.933Radial† | 2.2 | 4.4779 ug/L | 8.71015 | 4.4779 ppb | 8.71015 | 194.52% |
| QC value within limits for Ca 317.933Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | 6.5 | 0.0934 ug/L | 0.14930 | 0.0934 ppb | 0.14930 | 159.79% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | 0.9 | 0.0248 ug/L | 0.25834 | 0.0248 ppb | 0.25834 | >999.9% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 25.4 | 0.3279 ug/L | 0.09577 | 0.3279 ppb | 0.09577 | 29.20% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 124.2 | 0.4009 ug/L | 0.27505 | 0.4009 ppb | 0.27505 | 68.60% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | -1.3 | -16.363 ug/L | 11.3500 | -16.363 ppb | 11.3500 | 69.36% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -65.5 | -13.056 ug/L | 3.1764 | -13.056 ppb | 3.1764 | 24.33% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 0.1 | 2.3848 ug/L | 104.28697 | 2.3848 ppb | 104.28697 | >999.9% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 5.2 | 0.0051 ug/L | 0.02439 | 0.0051 ppb | 0.02439 | 479.23% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | 1.3 | 0.1135 ug/L | 0.33504 | 0.1135 ppb | 0.33504 | 295.20% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | -86.3 | -33.900 ug/L | 17.1255 | -33.900 ppb | 17.1255 | 50.52% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -0.3 | -0.0090 ug/L | 0.33128 | -0.0090 ppb | 0.33128 | >999.9% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 9.7 | 6.9058 ug/L | 3.29189 | 6.9058 ppb | 3.29189 | 47.67% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 7.9 | 1.1887 ug/L | 1.05994 | 1.1887 ppb | 1.05994 | 89.17% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 3.8 | 6.6295 ug/L | 5.65438 | 6.6295 ppb | 5.65438 | 85.29% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 9.4 | 4.0166 ug/L | 2.03790 | 4.0166 ppb | 2.03790 | 50.74% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -1.2 | -1.0202 ug/L | 3.05824 | -1.0202 ppb | 3.05824 | 299.77% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 10.0 | 0.3723 ug/L | 0.62850 | 0.3723 ppb | 0.62850 | 168.82% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 7.5 | 1.6694 ug/L | 0.62814 | 1.6694 ppb | 0.62814 | 37.63% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -46.8 | -0.3988 ug/L | 0.12388 | -0.3988 ppb | 0.12388 | 31.06% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 42.9 | 0.0732 ug/L | 0.24910 | 0.0732 ppb | 0.24910 | 340.08% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 4.9 | 1.8869 ug/L | 2.31468 | 1.8869 ppb | 2.31468 | 122.67% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 63.5 | 1.8689 ug/L | 4.86248 | 1.8689 ppb | 4.86248 | 260.17% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 27.7 | 0.2210 ug/L | 0.32723 | 0.2210 ppb | 0.32723 | 148.10% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 9.2 | 0.1113 ug/L | 0.05033 | 0.1113 ppb | 0.05033 | 45.22% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 10.6 | 0.8405 ug/L | 1.62741 | 0.8405 ppb | 1.62741 | 193.61% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 4
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/25/2010 10:14:45
 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 | 4136.6 | 4136.6 | 103 % | | 10:16:37 |
| 1 | Y RADIAL | 4464.2 | 4464.2 | 98.81 % | | 10:16:37 |
| 1 | Al 396.153Radial† | 4619.7 | 4584.5 | 4862.0 ug/L | 4862.0 ppb | 10:16:37 |
| 1 | Ca 317.933Radial† | 2500.1 | 2420.8 | 4918.4 ug/L | 4918.4 ppb | 10:16:57 |
| 1 | Fe 238.204 Radial† | 405.4 | 386.4 | 4846.3 ug/L | 4846.3 ppb | 10:16:57 |
| 1 | K 766.490 Radial† | 27144.4 | 23666.6 | 4718.5 ug/L | 4718.5 ppb | 10:16:37 |
| 1 | Mg 279.077 IEC† | 121.8 | 118.1 | 5159.8 ug/L | 5159.8 ppb | 10:16:57 |
| 1 | Na 589.592 Radial† | 24583.4 | 24433.4 | 9595.4 ug/L | 9595.4 ppb | 10:16:37 |
| 1 | Sr 421.552† | 57229.5 | 55737.4 | 474.60 ug/L | 474.60 ppb | 10:16:37 |
| 1 | Sc 361.383 | 850739.0 | 850739.0 | 101.30 % | | 10:17:54 |
| 1 | Y 371.029 | 717689.5 | 717689.5 | 100.23 % | | 10:17:54 |
| 1 | Ag 328.068† | 100375.4 | 98837.9 | 501.30 ug/L | 501.30 ppb | 10:18:00 |
| 1 | As 188.979† | 910.1 | 919.2 | 496.98 ug/L | 496.98 ppb | 10:18:20 |
| 1 | B 249.677† | 17771.6 | 17794.4 | 486.90 ug/L | 486.90 ppb | 10:18:00 |
| 1 | Ba 233.527† | 53106.8 | 52408.9 | 492.54 ug/L | 492.54 ppb | 10:18:00 |
| 1 | Be 313.107† | 1229321.6 | 1217857.5 | 495.56 ug/L | 495.56 ppb | 10:17:54 |
| 1 | Cd 226.502† | 35341.3 | 35055.6 | 494.33 ug/L | 494.33 ppb | 10:18:00 |
| 1 | Co 228.616† | 19507.9 | 19297.2 | 502.33 ug/L | 502.33 ppb | 10:18:00 |
| 1 | Cr 267.716† | 38591.8 | 38003.1 | 495.78 ug/L | 495.78 ppb | 10:18:00 |
| 1 | Cu 324.752† | 158722.6 | 150339.3 | 487.46 ug/L | 487.46 ppb | 10:18:00 |
| 1 | Mn 257.610† | 374711.9 | 369465.7 | 485.02 ug/L | 485.02 ppb | 10:18:00 |
| 1 | Mo 202.031† | 5708.8 | 5621.6 | 494.67 ug/L | 494.67 ppb | 10:18:20 |
| 1 | Ni 231.604† | 16408.3 | 16104.8 | 502.57 ug/L | 502.57 ppb | 10:18:00 |
| 1 | P 214.914† | 3607.1 | 3392.8 | 2343.8 ug/L | 2343.8 ppb | 10:18:20 |
| 1 | Pb 220.353† | 3234.8 | 3252.3 | 491.73 ug/L | 491.73 ppb | 10:18:20 |
| 1 | S 181.975 Axial† | 596.5 | 564.5 | 988.61 ug/L | 988.61 ppb | 10:18:20 |
| 1 | Sb 206.836† | 1208.4 | 1166.3 | 513.37 ug/L | 513.37 ppb | 10:18:20 |
| 1 | Se 196.026† | 611.4 | 620.5 | 512.19 ug/L | 512.19 ppb | 10:18:20 |
| 1 | Si 251.611† | 67576.5 | 66186.5 | 2458.2 ug/L | 2458.2 ppb | 10:18:00 |
| 1 | Sn 189.927† | 2275.6 | 2243.4 | 497.46 ug/L | 497.46 ppb | 10:18:20 |
| 1 | Ti 334.940† | 286494.5 | 283912.6 | 488.31 ug/L | 488.31 ppb | 10:18:00 |
| 1 | Tl 190.801† | 1254.5 | 1263.6 | 491.79 ug/L | 491.79 ppb | 10:18:20 |
| 1 | U 409.014† | 15214.4 | 17054.9 | 500.17 ug/L | 500.17 ppb | 10:18:00 |
| 1 | V 292.402† | 63223.8 | 63842.5 | 498.80 ug/L | 498.80 ppb | 10:18:00 |
| 1 | Zn 213.857† | 42793.2 | 41639.3 | 490.08 ug/L | 490.08 ppb | 10:18:00 |
| 1 | SiO2† | 68236.1 | 66809.8 | 5324.3 ug/L | 5324.3 ppb | 10:19:27 |
| 2 | Sc Radial | 4223.9 | 4223.9 | 105 % | | 10:17:02 |
| 2 | Y RADIAL | 4554.5 | 4554.5 | 100.8 % | | 10:17:02 |
| 2 | Al 396.153Radial† | 4673.5 | 4542.9 | 4817.4 ug/L | 4817.4 ppb | 10:17:02 |
| 2 | Ca 317.933Radial† | 2502.8 | 2373.0 | 4821.4 ug/L | 4821.4 ppb | 10:17:22 |
| 2 | Fe 238.204 Radial† | 413.7 | 386.1 | 4842.9 ug/L | 4842.9 ppb | 10:17:22 |
| 2 | K 766.490 Radial† | 27285.8 | 23255.0 | 4636.4 ug/L | 4636.4 ppb | 10:17:02 |
| 2 | Mg 279.077 IEC† | 117.9 | 111.9 | 4887.7 ug/L | 4887.7 ppb | 10:17:22 |
| 2 | Na 589.592 Radial† | 24639.1 | 23991.5 | 9421.8 ug/L | 9421.8 ppb | 10:17:02 |
| 2 | Sr 421.552† | 57601.5 | 54939.9 | 467.81 ug/L | 467.81 ppb | 10:17:02 |
| 2 | Sc 361.383 | 846623.9 | 846623.9 | 100.81 % | | 10:18:25 |
| 2 | Y 371.029 | 713264.6 | 713264.6 | 99.608 % | | 10:18:25 |
| 2 | Ag 328.068† | 99089.8 | 98044.2 | 497.29 ug/L | 497.29 ppb | 10:18:30 |
| 2 | As 188.979† | 911.3 | 924.8 | 499.91 ug/L | 499.91 ppb | 10:18:50 |
| 2 | B 249.677† | 17483.8 | 17594.2 | 481.41 ug/L | 481.41 ppb | 10:18:30 |
| 2 | Ba 233.527† | 52588.9 | 52150.0 | 490.10 ug/L | 490.10 ppb | 10:18:30 |
| 2 | Be 313.107† | 1219751.5 | 1214262.7 | 494.09 ug/L | 494.09 ppb | 10:18:25 |
| 2 | Cd 226.502† | 35026.1 | 34912.5 | 492.31 ug/L | 492.31 ppb | 10:18:30 |
| 2 | Co 228.616† | 19301.9 | 19186.5 | 499.47 ug/L | 499.47 ppb | 10:18:30 |
| 2 | Cr 267.716† | 38021.9 | 37622.9 | 490.83 ug/L | 490.83 ppb | 10:18:30 |
| 2 | Cu 324.752† | 156762.0 | 149156.0 | 483.63 ug/L | 483.63 ppb | 10:18:30 |
| 2 | Mn 257.610† | 370891.2 | 367473.6 | 482.42 ug/L | 482.42 ppb | 10:18:30 |
| 2 | Mo 202.031† | 5744.6 | 5684.5 | 500.20 ug/L | 500.20 ppb | 10:18:50 |
| 2 | Ni 231.604† | 16227.6 | 16004.2 | 499.43 ug/L | 499.43 ppb | 10:18:30 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3622.9 | 3425.8 | 2368.3 ug/L | 2368.3 ppb | 10:18:50 |
| 2 | Pb 220.353† | 3255.0 | 3287.8 | 497.09 ug/L | 497.09 ppb | 10:18:50 |
| 2 | S 181.975 Axial† | 597.2 | 568.0 | 994.73 ug/L | 994.73 ppb | 10:18:50 |
| 2 | Sb 206.836† | 1210.0 | 1173.7 | 516.68 ug/L | 516.68 ppb | 10:18:50 |
| 2 | Se 196.026† | 602.2 | 614.3 | 507.26 ug/L | 507.26 ppb | 10:18:50 |
| 2 | Si 251.611† | 66865.9 | 65805.9 | 2444.0 ug/L | 2444.0 ppb | 10:18:30 |
| 2 | Sn 189.927† | 2277.0 | 2255.7 | 500.18 ug/L | 500.18 ppb | 10:18:50 |
| 2 | Ti 334.940† | 282951.7 | 281772.9 | 484.65 ug/L | 484.65 ppb | 10:18:30 |
| 2 | Tl 190.801† | 1260.3 | 1275.3 | 496.30 ug/L | 496.30 ppb | 10:18:50 |
| 2 | U 409.014† | 14860.7 | 16777.1 | 492.01 ug/L | 492.01 ppb | 10:18:30 |
| 2 | V 292.402† | 62453.2 | 63381.4 | 495.30 ug/L | 495.30 ppb | 10:18:30 |
| 2 | Zn 213.857† | 42416.3 | 41470.8 | 488.11 ug/L | 488.11 ppb | 10:18:30 |
| 2 | SiO2† | 67761.6 | 66666.5 | 5312.7 ug/L | 5312.7 ppb | 10:19:32 |
| 3 | Sc Radial | 4159.2 | 4159.2 | 103 % | | 10:17:27 |
| 3 | Y RADIAL | 4472.8 | 4472.8 | 99.00 % | | 10:17:27 |
| 3 | Al 396.153Radial† | 4662.4 | 4601.5 | 4880.0 ug/L | 4880.0 ppb | 10:17:27 |
| 3 | Ca 317.933Radial† | 2517.7 | 2424.6 | 4926.2 ug/L | 4926.2 ppb | 10:17:47 |
| 3 | Fe 238.204 Radial† | 410.2 | 388.8 | 4877.1 ug/L | 4877.1 ppb | 10:17:47 |
| 3 | K 766.490 Radial† | 27098.7 | 23478.8 | 4681.0 ug/L | 4681.0 ppb | 10:17:27 |
| 3 | Mg 279.077 IEC† | 120.0 | 115.7 | 5053.7 ug/L | 5053.7 ppb | 10:17:47 |
| 3 | Na 589.592 Radial† | 24561.9 | 24282.6 | 9536.1 ug/L | 9536.1 ppb | 10:17:27 |
| 3 | Sr 421.552† | 57510.1 | 55706.9 | 474.34 ug/L | 474.34 ppb | 10:17:27 |
| 3 | Sc 361.383 | 847964.8 | 847964.8 | 100.97 % | | 10:18:56 |
| 3 | Y 371.029 | 713785.6 | 713785.6 | 99.680 % | | 10:18:56 |
| 3 | Ag 328.068† | 99561.6 | 98356.1 | 498.87 ug/L | 498.87 ppb | 10:19:01 |
| 3 | As 188.979† | 896.3 | 908.5 | 491.21 ug/L | 491.21 ppb | 10:19:21 |
| 3 | B 249.677† | 17630.8 | 17712.4 | 484.65 ug/L | 484.65 ppb | 10:19:01 |
| 3 | Ba 233.527† | 52703.6 | 52181.1 | 490.40 ug/L | 490.40 ppb | 10:19:01 |
| 3 | Be 313.107† | 1222926.2 | 1215493.7 | 494.60 ug/L | 494.60 ppb | 10:18:56 |
| 3 | Cd 226.502† | 35064.2 | 34895.2 | 492.07 ug/L | 492.07 ppb | 10:19:01 |
| 3 | Co 228.616† | 19365.0 | 19218.7 | 500.29 ug/L | 500.29 ppb | 10:19:01 |
| 3 | Cr 267.716† | 38190.0 | 37729.8 | 492.22 ug/L | 492.22 ppb | 10:19:01 |
| 3 | Cu 324.752† | 157737.8 | 149876.5 | 485.96 ug/L | 485.96 ppb | 10:19:01 |
| 3 | Mn 257.610† | 372102.0 | 368091.0 | 483.23 ug/L | 483.23 ppb | 10:19:01 |
| 3 | Mo 202.031† | 5708.3 | 5639.5 | 496.25 ug/L | 496.25 ppb | 10:19:21 |
| 3 | Ni 231.604† | 16212.7 | 15964.0 | 498.18 ug/L | 498.18 ppb | 10:19:01 |
| 3 | P 214.914† | 3576.7 | 3374.3 | 2330.8 ug/L | 2330.8 ppb | 10:19:21 |
| 3 | Pb 220.353† | 3225.3 | 3253.3 | 491.89 ug/L | 491.89 ppb | 10:19:21 |
| 3 | S 181.975 Axial† | 583.7 | 553.7 | 969.63 ug/L | 969.63 ppb | 10:19:21 |
| 3 | Sb 206.836† | 1198.7 | 1160.6 | 511.01 ug/L | 511.01 ppb | 10:19:21 |
| 3 | Se 196.026† | 604.5 | 615.7 | 508.45 ug/L | 508.45 ppb | 10:19:21 |
| 3 | Si 251.611† | 67124.8 | 65957.4 | 2449.7 ug/L | 2449.7 ppb | 10:19:01 |
| 3 | Sn 189.927† | 2266.4 | 2241.6 | 497.07 ug/L | 497.07 ppb | 10:19:21 |
| 3 | Ti 334.940† | 284395.4 | 282759.0 | 486.34 ug/L | 486.34 ppb | 10:19:01 |
| 3 | Tl 190.801† | 1253.7 | 1266.8 | 493.02 ug/L | 493.02 ppb | 10:19:21 |
| 3 | U 409.014† | 15190.0 | 17079.9 | 500.91 ug/L | 500.91 ppb | 10:19:01 |
| 3 | V 292.402† | 62672.9 | 63501.0 | 496.18 ug/L | 496.18 ppb | 10:19:01 |
| 3 | Zn 213.857† | 42413.8 | 41401.7 | 487.29 ug/L | 487.29 ppb | 10:19:01 |
| 3 | SiO2† | 67910.7 | 66707.9 | 5316.1 ug/L | 5316.1 ppb | 10:19:37 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 848442.6 | 101.02 % | 0.250 | | | 0.25% |
| Sc Radial | 4173.2 | 103 % | 1.1 | | | 1.09% |
| Y 371.029 | 714913.3 | 99.838 % | 0.3377 | | | 0.34% |
| Y RADIAL | 4497.2 | 99.54 % | 1.103 | | | 1.11% |
| Ag 328.068† | 98412.7 | 499.15 ug/L | 2.020 | 499.15 ppb | 2.020 | 0.40% |
| QC value within limits for Ag 328.068 Recovery = 99.83% | | | | | | |
| Al 396.153Radial† | 4576.3 | 4853.1 ug/L | 32.26 | 4853.1 ppb | 32.26 | 0.66% |
| QC value within limits for Al 396.153Radial Recovery = 97.06% | | | | | | |
| As 188.979† | 917.5 | 496.03 ug/L | 4.424 | 496.03 ppb | 4.424 | 0.89% |
| QC value within limits for As 188.979 Recovery = 99.21% | | | | | | |
| B 249.677† | 17700.3 | 484.32 ug/L | 2.761 | 484.32 ppb | 2.761 | 0.57% |
| QC value within limits for B 249.677 Recovery = 96.86% | | | | | | |
| Ba 233.527† | 52246.7 | 491.01 ug/L | 1.329 | 491.01 ppb | 1.329 | 0.27% |
| QC value within limits for Ba 233.527 Recovery = 98.20% | | | | | | |
| Be 313.107† | 1215871.3 | 494.75 ug/L | 0.746 | 494.75 ppb | 0.746 | 0.15% |
| QC value within limits for Be 313.107 Recovery = 98.95% | | | | | | |
| Ca 317.933Radial† | 2406.1 | 4888.7 ug/L | 58.37 | 4888.7 ppb | 58.37 | 1.19% |

| | | | | | | | |
|--|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 97.77% | | | | | | | |
| Cd 226.502† | 34954.4 | 492.90 ug/L | 1.244 | 492.90 ppb | 1.244 | 0.25% | |
| QC value within limits for Cd 226.502 Recovery = 98.58% | | | | | | | |
| Co 228.616† | 19234.1 | 500.70 ug/L | 1.472 | 500.70 ppb | 1.472 | 0.29% | |
| QC value within limits for Co 228.616 Recovery = 100.14% | | | | | | | |
| Cr 267.716† | 37785.3 | 492.94 ug/L | 2.554 | 492.94 ppb | 2.554 | 0.52% | |
| QC value within limits for Cr 267.716 Recovery = 98.59% | | | | | | | |
| Cu 324.752† | 149790.6 | 485.68 ug/L | 1.931 | 485.68 ppb | 1.931 | 0.40% | |
| QC value within limits for Cu 324.752 Recovery = 97.14% | | | | | | | |
| Fe 238.204 Radial† | 387.1 | 4855.4 ug/L | 18.86 | 4855.4 ppb | 18.86 | 0.39% | |
| QC value within limits for Fe 238.204 Radial Recovery = 97.11% | | | | | | | |
| K 766.490 Radial† | 23466.8 | 4678.6 ug/L | 41.10 | 4678.6 ppb | 41.10 | 0.88% | |
| QC value within limits for K 766.490 Radial Recovery = 93.57% | | | | | | | |
| Mg 279.077 IEC† | 115.2 | 5033.8 ug/L | 137.18 | 5033.8 ppb | 137.18 | 2.73% | |
| QC value within limits for Mg 279.077 IEC Recovery = 100.68% | | | | | | | |
| Mn 257.610† | 368343.5 | 483.56 ug/L | 1.332 | 483.56 ppb | 1.332 | 0.28% | |
| QC value within limits for Mn 257.610 Recovery = 96.71% | | | | | | | |
| Mo 202.031† | 5648.6 | 497.04 ug/L | 2.849 | 497.04 ppb | 2.849 | 0.57% | |
| QC value within limits for Mo 202.031 Recovery = 99.41% | | | | | | | |
| Na 589.592 Radial† | 24235.8 | 9517.8 ug/L | 88.23 | 9517.8 ppb | 88.23 | 0.93% | |
| QC value within limits for Na 589.592 Radial Recovery = 95.18% | | | | | | | |
| Ni 231.604† | 16024.3 | 500.06 ug/L | 2.263 | 500.06 ppb | 2.263 | 0.45% | |
| QC value within limits for Ni 231.604 Recovery = 100.01% | | | | | | | |
| P 214.914† | 3397.6 | 2347.6 ug/L | 19.03 | 2347.6 ppb | 19.03 | 0.81% | |
| QC value within limits for P 214.914 Recovery = 93.91% | | | | | | | |
| Pb 220.353† | 3264.4 | 493.57 ug/L | 3.050 | 493.57 ppb | 3.050 | 0.62% | |
| QC value within limits for Pb 220.353 Recovery = 98.71% | | | | | | | |
| S 181.975 Axial† | 562.1 | 984.32 ug/L | 13.089 | 984.32 ppb | 13.089 | 1.33% | |
| QC value within limits for S 181.975 Axial Recovery = 98.43% | | | | | | | |
| Sb 206.836† | 1166.9 | 513.69 ug/L | 2.851 | 513.69 ppb | 2.851 | 0.56% | |
| QC value within limits for Sb 206.836 Recovery = 102.74% | | | | | | | |
| Se 196.026† | 616.8 | 509.30 ug/L | 2.573 | 509.30 ppb | 2.573 | 0.51% | |
| QC value within limits for Se 196.026 Recovery = 101.86% | | | | | | | |
| Si 251.611† | 65983.3 | 2450.7 ug/L | 7.17 | 2450.7 ppb | 7.17 | 0.29% | |
| QC value within limits for Si 251.611 Recovery = 98.03% | | | | | | | |
| Sn 189.927† | 2246.9 | 498.23 ug/L | 1.692 | 498.23 ppb | 1.692 | 0.34% | |
| QC value within limits for Sn 189.927 Recovery = 99.65% | | | | | | | |
| Sr 421.552† | 55461.4 | 472.25 ug/L | 3.848 | 472.25 ppb | 3.848 | 0.81% | |
| QC value within limits for Sr 421.552 Recovery = 94.45% | | | | | | | |
| Ti 334.940† | 282814.8 | 486.43 ug/L | 1.835 | 486.43 ppb | 1.835 | 0.38% | |
| QC value within limits for Ti 334.940 Recovery = 97.29% | | | | | | | |
| Tl 190.801† | 1268.5 | 493.70 ug/L | 2.332 | 493.70 ppb | 2.332 | 0.47% | |
| QC value within limits for Tl 190.801 Recovery = 98.74% | | | | | | | |
| U 409.014† | 16970.7 | 497.70 ug/L | 4.941 | 497.70 ppb | 4.941 | 0.99% | |
| QC value within limits for U 409.014 Recovery = 99.54% | | | | | | | |
| V 292.402† | 63575.0 | 496.76 ug/L | 1.816 | 496.76 ppb | 1.816 | 0.37% | |
| QC value within limits for V 292.402 Recovery = 99.35% | | | | | | | |
| Zn 213.857† | 41503.9 | 488.49 ug/L | 1.438 | 488.49 ppb | 1.438 | 0.29% | |
| QC value within limits for Zn 213.857 Recovery = 97.70% | | | | | | | |
| SiO2† | 66728.1 | 5317.7 ug/L | 5.96 | 5317.7 ppb | 5.96 | 0.11% | |
| QC value within limits for SiO2 Recovery = 99.44% | | | | | | | |

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 10:21:46

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 | 4061.4 | 4061.4 | 101 % | | 10:23:59 |
| 1 | Y RADIAL | 4484.6 | 4484.6 | 99.26 % | | 10:23:39 |
| 1 | Al 396.153Radial† | -67.2 | 12.9 | 13.767 ug/L | 13.767 ppb | 10:23:59 |
| 1 | Ca 317.933Radial† | 19.8 | 2.5 | 5.0751 ug/L | 5.0751 ppb | 10:23:59 |
| 1 | Fe 238.204 Radial† | 6.2 | -2.8 | -35.479 ug/L | -35.479 ppb | 10:23:59 |
| 1 | K 766.490 Radial† | 2929.1 | 106.0 | 21.175 ug/L | 21.175 ppb | 10:23:39 |
| 1 | Mg 279.077 IEC† | 1.5 | 0.8 | 35.686 ug/L | 35.686 ppb | 10:23:59 |
| 1 | Na 589.592 Radial† | -583.5 | -118.7 | -46.602 ug/L | -46.602 ppb | 10:23:39 |
| 1 | Sr 421.552† | 41.2 | -29.2 | -0.2484 ug/L | -0.2484 ppb | 10:23:39 |
| 1 | Sc 361.383 | 839397.5 | 839397.5 | 99.945 % | | 10:24:56 |
| 1 | Y 371.029 | 714711.2 | 714711.2 | 99.810 % | | 10:24:56 |
| 1 | Ag 328.068† | 282.1 | 28.8 | 0.1354 ug/L | 0.1354 ppb | 10:25:01 |
| 1 | As 188.979† | -20.8 | -0.0 | -0.0084 ug/L | -0.0084 ppb | 10:25:21 |
| 1 | B 249.677† | -115.9 | 134.2 | 3.6934 ug/L | 3.6934 ppb | 10:25:21 |
| 1 | Ba 233.527† | 8.1 | -10.4 | -0.0992 ug/L | -0.0992 ppb | 10:25:21 |
| 1 | Be 313.107† | -4206.0 | 54.5 | 0.0221 ug/L | 0.0221 ppb | 10:25:01 |
| 1 | Cd 226.502† | -167.5 | -1.2 | -0.0130 ug/L | -0.0130 ppb | 10:25:21 |
| 1 | Co 228.616† | -33.1 | 5.8 | 0.1502 ug/L | 0.1502 ppb | 10:25:21 |
| 1 | Cr 267.716† | 129.1 | 34.2 | 0.4421 ug/L | 0.4421 ppb | 10:25:21 |
| 1 | Cu 324.752† | 6398.0 | 48.8 | 0.1574 ug/L | 0.1574 ppb | 10:25:01 |
| 1 | Mn 257.610† | 417.1 | -35.1 | -0.0510 ug/L | -0.0510 ppb | 10:25:21 |
| 1 | Mo 202.031† | 13.1 | -1.1 | -0.0972 ug/L | -0.0972 ppb | 10:25:21 |
| 1 | Ni 231.604† | 99.6 | 6.1 | 0.1895 ug/L | 0.1895 ppb | 10:25:21 |
| 1 | P 214.914† | 172.9 | 4.8 | 3.4642 ug/L | 3.4642 ppb | 10:25:21 |
| 1 | Pb 220.353† | -47.6 | 11.2 | 1.6939 ug/L | 1.6939 ppb | 10:25:21 |
| 1 | S 181.975 Axial† | 29.1 | 4.7 | 8.2967 ug/L | 8.2967 ppb | 10:25:21 |
| 1 | Sb 206.836† | 32.0 | 5.4 | 2.3278 ug/L | 2.3278 ppb | 10:25:21 |
| 1 | Se 196.026† | -16.3 | 0.7 | 0.4352 ug/L | 0.4352 ppb | 10:25:21 |
| 1 | Si 251.611† | 561.7 | 36.5 | 1.3608 ug/L | 1.3608 ppb | 10:25:21 |
| 1 | Sn 189.927† | 10.6 | 7.6 | 1.6752 ug/L | 1.6752 ppb | 10:25:21 |
| 1 | Ti 334.940† | -1077.4 | 5.4 | 0.0077 ug/L | 0.0077 ppb | 10:25:01 |
| 1 | Tl 190.801† | -20.5 | 4.6 | 1.7654 ug/L | 1.7654 ppb | 10:25:21 |
| 1 | U 409.014† | -2102.7 | -68.7 | -2.0182 ug/L | -2.0182 ppb | 10:24:56 |
| 1 | V 292.402† | -1447.3 | -20.6 | -0.1581 ug/L | -0.1581 ppb | 10:25:01 |
| 1 | Zn 213.857† | 687.5 | 81.4 | 0.9713 ug/L | 0.9713 ppb | 10:25:21 |
| 1 | SiO2† | 634.7 | 81.7 | 6.5266 ug/L | 6.5266 ppb | 10:26:27 |
| 2 | Sc Radial | 4087.7 | 4087.7 | 101 % | | 10:24:24 |
| 2 | Y RADIAL | 4528.3 | 4528.3 | 100.2 % | | 10:24:04 |
| 2 | Al 396.153Radial† | -81.3 | -0.5 | -0.6047 ug/L | -0.6047 ppb | 10:24:24 |
| 2 | Ca 317.933Radial† | 23.8 | 6.3 | 12.830 ug/L | 12.830 ppb | 10:24:24 |
| 2 | Fe 238.204 Radial† | 6.9 | -2.2 | -27.087 ug/L | -27.087 ppb | 10:24:24 |
| 2 | K 766.490 Radial† | 2888.8 | 47.5 | 9.4818 ug/L | 9.4818 ppb | 10:24:04 |
| 2 | Mg 279.077 IEC† | -0.4 | -1.1 | -47.683 ug/L | -47.683 ppb | 10:24:24 |
| 2 | Na 589.592 Radial† | -528.8 | -60.9 | -23.928 ug/L | -23.928 ppb | 10:24:04 |
| 2 | Sr 421.552† | 7.0 | -63.1 | -0.5378 ug/L | -0.5378 ppb | 10:24:04 |
| 2 | Sc 361.383 | 846621.1 | 846621.1 | 100.81 % | | 10:25:26 |
| 2 | Y 371.029 | 721085.2 | 721085.2 | 100.70 % | | 10:25:26 |
| 2 | Ag 328.068† | 259.6 | 4.1 | 0.0124 ug/L | 0.0124 ppb | 10:25:31 |
| 2 | As 188.979† | -17.8 | 3.2 | 1.7130 ug/L | 1.7130 ppb | 10:25:51 |
| 2 | B 249.677† | -96.9 | 154.1 | 4.2387 ug/L | 4.2387 ppb | 10:25:51 |
| 2 | Ba 233.527† | 16.8 | -1.9 | -0.0175 ug/L | -0.0175 ppb | 10:25:51 |
| 2 | Be 313.107† | -4317.8 | -20.6 | -0.0087 ug/L | -0.0087 ppb | 10:25:31 |
| 2 | Cd 226.502† | -185.3 | -17.5 | -0.2430 ug/L | -0.2430 ppb | 10:25:51 |
| 2 | Co 228.616† | -36.5 | 2.7 | 0.0730 ug/L | 0.0730 ppb | 10:25:51 |
| 2 | Cr 267.716† | 111.6 | 15.8 | 0.2026 ug/L | 0.2026 ppb | 10:25:51 |
| 2 | Cu 324.752† | 6440.9 | 36.7 | 0.1168 ug/L | 0.1168 ppb | 10:25:31 |
| 2 | Mn 257.610† | 438.9 | -17.1 | -0.0231 ug/L | -0.0231 ppb | 10:25:51 |
| 2 | Mo 202.031† | 21.3 | 7.0 | 0.6104 ug/L | 0.6104 ppb | 10:25:51 |
| 2 | Ni 231.604† | 102.9 | 8.4 | 0.2635 ug/L | 0.2635 ppb | 10:25:51 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 171.9 | 2.3 | 1.6655 ug/L | 1.6655 ppb | 10:25:51 |
| 2 | Pb 220.353† | -62.7 | -3.4 | -0.5007 ug/L | -0.5007 ppb | 10:25:51 |
| 2 | S 181.975 Axial† | 29.9 | 5.3 | 9.2173 ug/L | 9.2173 ppb | 10:25:51 |
| 2 | Sb 206.836† | 31.1 | 4.2 | 1.8143 ug/L | 1.8143 ppb | 10:25:51 |
| 2 | Se 196.026† | -25.2 | -8.1 | -6.5155 ug/L | -6.5155 ppb | 10:25:51 |
| 2 | Si 251.611† | 546.6 | 16.8 | 0.6184 ug/L | 0.6184 ppb | 10:25:51 |
| 2 | Sn 189.927† | 10.9 | 7.7 | 1.7154 ug/L | 1.7154 ppb | 10:25:51 |
| 2 | Ti 334.940† | -1174.5 | -81.8 | -0.1359 ug/L | -0.1359 ppb | 10:25:31 |
| 2 | Tl 190.801† | -18.7 | 6.5 | 2.5070 ug/L | 2.5070 ppb | 10:25:51 |
| 2 | U 409.014† | -2001.1 | 50.1 | 1.4771 ug/L | 1.4771 ppb | 10:25:26 |
| 2 | V 292.402† | -1396.9 | 41.8 | 0.3365 ug/L | 0.3365 ppb | 10:25:31 |
| 2 | Zn 213.857† | 685.1 | 73.2 | 0.8713 ug/L | 0.8713 ppb | 10:25:51 |
| 2 | SiO2† | 564.5 | 6.6 | 0.5096 ug/L | 0.5096 ppb | 10:26:32 |
| 3 | Sc Radial | 4076.9 | 4076.9 | 101 % | | 10:24:49 |
| 3 | Y RADIAL | 4576.6 | 4576.6 | 101.3 % | | 10:24:29 |
| 3 | Al 396.153Radial† | -83.0 | -2.5 | -2.6610 ug/L | -2.6610 ppb | 10:24:49 |
| 3 | Ca 317.933Radial† | 21.5 | 4.1 | 8.2519 ug/L | 8.2519 ppb | 10:24:49 |
| 3 | Fe 238.204 Radial† | 8.4 | -0.7 | -8.8487 ug/L | -8.8487 ppb | 10:24:49 |
| 3 | K 766.490 Radial† | 2932.7 | 98.5 | 19.674 ug/L | 19.674 ppb | 10:24:29 |
| 3 | Mg 279.077 IEC† | 1.0 | 0.3 | 13.528 ug/L | 13.528 ppb | 10:24:49 |
| 3 | Na 589.592 Radial† | -537.5 | -70.9 | -27.860 ug/L | -27.860 ppb | 10:24:29 |
| 3 | Sr 421.552† | 64.5 | -6.2 | -0.0529 ug/L | -0.0529 ppb | 10:24:29 |
| 3 | Sc 361.383 | 852757.7 | 852757.7 | 101.54 % | | 10:25:56 |
| 3 | Y 371.029 | 726356.1 | 726356.1 | 101.44 % | | 10:25:56 |
| 3 | Ag 328.068† | 243.1 | -14.0 | -0.0718 ug/L | -0.0718 ppb | 10:26:01 |
| 3 | As 188.979† | -21.0 | 0.2 | 0.0824 ug/L | 0.0824 ppb | 10:26:21 |
| 3 | B 249.677† | -139.4 | 112.8 | 3.1029 ug/L | 3.1029 ppb | 10:26:21 |
| 3 | Ba 233.527† | 23.2 | 4.3 | 0.0412 ug/L | 0.0412 ppb | 10:26:21 |
| 3 | Be 313.107† | -4284.0 | 43.5 | 0.0177 ug/L | 0.0177 ppb | 10:26:01 |
| 3 | Cd 226.502† | -170.5 | -1.6 | -0.0209 ug/L | -0.0209 ppb | 10:26:21 |
| 3 | Co 228.616† | -33.7 | 5.7 | 0.1495 ug/L | 0.1495 ppb | 10:26:21 |
| 3 | Cr 267.716† | 115.7 | 19.0 | 0.2467 ug/L | 0.2467 ppb | 10:26:21 |
| 3 | Cu 324.752† | 6502.2 | 51.0 | 0.1648 ug/L | 0.1648 ppb | 10:26:01 |
| 3 | Mn 257.610† | 490.7 | 30.8 | 0.0390 ug/L | 0.0390 ppb | 10:26:21 |
| 3 | Mo 202.031† | 14.5 | 0.1 | 0.0050 ug/L | 0.0050 ppb | 10:26:21 |
| 3 | Ni 231.604† | 102.2 | 7.1 | 0.2205 ug/L | 0.2205 ppb | 10:26:21 |
| 3 | P 214.914† | 184.1 | 13.1 | 9.3869 ug/L | 9.3869 ppb | 10:26:21 |
| 3 | Pb 220.353† | -40.4 | 19.1 | 2.8729 ug/L | 2.8729 ppb | 10:26:21 |
| 3 | S 181.975 Axial† | 27.7 | 2.9 | 5.0771 ug/L | 5.0771 ppb | 10:26:21 |
| 3 | Sb 206.836† | 27.3 | 0.2 | 0.1066 ug/L | 0.1066 ppb | 10:26:21 |
| 3 | Se 196.026† | -22.3 | -5.0 | -4.0187 ug/L | -4.0187 ppb | 10:26:21 |
| 3 | Si 251.611† | 555.3 | 21.4 | 0.7976 ug/L | 0.7976 ppb | 10:26:21 |
| 3 | Sn 189.927† | 8.0 | 4.8 | 1.0704 ug/L | 1.0704 ppb | 10:26:21 |
| 3 | Ti 334.940† | -1083.5 | 16.2 | 0.0276 ug/L | 0.0276 ppb | 10:26:01 |
| 3 | Tl 190.801† | -21.8 | 3.6 | 1.4039 ug/L | 1.4039 ppb | 10:26:21 |
| 3 | U 409.014† | -2052.4 | 13.8 | 0.4072 ug/L | 0.4072 ppb | 10:25:56 |
| 3 | V 292.402† | -1389.0 | 59.5 | 0.4612 ug/L | 0.4612 ppb | 10:26:01 |
| 3 | Zn 213.857† | 717.0 | 99.7 | 1.1846 ug/L | 1.1846 ppb | 10:26:21 |
| 3 | SiO2† | 586.5 | 24.3 | 1.9377 ug/L | 1.9377 ppb | 10:26:37 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|-------------|--------|----------|---------|
| Sc 361.383 | 846258.8 | 100.76 % | | 0.796 | | | | 0.79% |
| Sc Radial | 4075.3 | 101 % | | 0.3 | | | | 0.32% |
| Y 371.029 | 720717.5 | 100.65 % | | 0.814 | | | | 0.81% |
| Y RADIAL | 4529.8 | 100.3 % | | 1.02 | | | | 1.02% |
| Ag 328.068† | 6.3 | 0.0253 ug/L | | 0.10419 | 0.0253 ppb | | 0.10419 | 411.05% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | | |
| Al 396.153Radial† | 3.3 | 3.5003 ug/L | | 8.95013 | 3.5003 ppb | | 8.95013 | 255.69% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | | |
| As 188.979† | 1.1 | 0.5957 ug/L | | 0.96868 | 0.5957 ppb | | 0.96868 | 162.62% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | | |
| B 249.677† | 133.7 | 3.6783 ug/L | | 0.56804 | 3.6783 ppb | | 0.56804 | 15.44% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | | |
| Ba 233.527† | -2.7 | -0.0252 ug/L | | 0.07051 | -0.0252 ppb | | 0.07051 | 280.14% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | | |
| Be 313.107† | 25.8 | 0.0104 ug/L | | 0.01667 | 0.0104 ppb | | 0.01667 | 160.51% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | | |
| Ca 317.933Radial† | 4.3 | 8.7189 ug/L | | 3.89845 | 8.7189 ppb | | 3.89845 | 44.71% |

| | | | | | |
|------------------------|----------------|----------------------------------|---------------------------|-------------|------------------|
| QC value within limits | for Ca 317.933 | Radial | Recovery = Not calculated | | |
| Cd 226.502† | -6.7 | -0.0923 ug/L | 0.13058 | -0.0923 ppb | 0.13058 141.47% |
| QC value within limits | for Cd 226.502 | Recovery = Not calculated | | | |
| Co 228.616† | 4.7 | 0.1242 ug/L | 0.04435 | 0.1242 ppb | 0.04435 35.69% |
| QC value within limits | for Co 228.616 | Recovery = Not calculated | | | |
| Cr 267.716† | 23.0 | 0.2971 ug/L | 0.12749 | 0.2971 ppb | 0.12749 42.91% |
| QC value within limits | for Cr 267.716 | Recovery = Not calculated | | | |
| Cu 324.752† | 45.5 | 0.1463 ug/L | 0.02586 | 0.1463 ppb | 0.02586 17.68% |
| QC value within limits | for Cu 324.752 | Recovery = Not calculated | | | |
| Fe 238.204 Radial† | -1.9 | -23.805 ug/L | 13.6151 | -23.805 ppb | 13.6151 57.19% |
| QC value within limits | for Fe 238.204 | Radial Recovery = Not calculated | | | |
| K 766.490 Radial† | 84.0 | 16.777 ug/L | 6.3621 | 16.777 ppb | 6.3621 37.92% |
| QC value within limits | for K 766.490 | Radial Recovery = Not calculated | | | |
| Mg 279.077 IEC† | 0.0 | 0.5104 ug/L | 43.18168 | 0.5104 ppb | 43.18168 >999.9% |
| QC value within limits | for Mg 279.077 | IEC Recovery = Not calculated | | | |
| Mn 257.610† | -7.1 | -0.0117 ug/L | 0.04609 | -0.0117 ppb | 0.04609 393.87% |
| QC value within limits | for Mn 257.610 | Recovery = Not calculated | | | |
| Mo 202.031† | 2.0 | 0.1727 ug/L | 0.38245 | 0.1727 ppb | 0.38245 221.40% |
| QC value within limits | for Mo 202.031 | Recovery = Not calculated | | | |
| Na 589.592 Radial† | -83.5 | -32.797 ug/L | 12.1164 | -32.797 ppb | 12.1164 36.94% |
| QC value within limits | for Na 589.592 | Radial Recovery = Not calculated | | | |
| Ni 231.604† | 7.2 | 0.2245 ug/L | 0.03714 | 0.2245 ppb | 0.03714 16.54% |
| QC value within limits | for Ni 231.604 | Recovery = Not calculated | | | |
| P 214.914† | 6.7 | 4.8389 ug/L | 4.04010 | 4.8389 ppb | 4.04010 83.49% |
| QC value within limits | for P 214.914 | Recovery = Not calculated | | | |
| Pb 220.353† | 9.0 | 1.3554 ug/L | 1.71207 | 1.3554 ppb | 1.71207 126.32% |
| QC value within limits | for Pb 220.353 | Recovery = Not calculated | | | |
| S 181.975 Axial† | 4.3 | 7.5304 ug/L | 2.17387 | 7.5304 ppb | 2.17387 28.87% |
| QC value within limits | for S 181.975 | Axial Recovery = Not calculated | | | |
| Sb 206.836† | 3.3 | 1.4162 ug/L | 1.16285 | 1.4162 ppb | 1.16285 82.11% |
| QC value within limits | for Sb 206.836 | Recovery = Not calculated | | | |
| Se 196.026† | -4.1 | -3.3663 ug/L | 3.52098 | -3.3663 ppb | 3.52098 104.59% |
| QC value within limits | for Se 196.026 | Recovery = Not calculated | | | |
| Si 251.611† | 24.9 | 0.9256 ug/L | 0.38740 | 0.9256 ppb | 0.38740 41.85% |
| QC value within limits | for Si 251.611 | Recovery = Not calculated | | | |
| Sn 189.927† | 6.7 | 1.4870 ug/L | 0.36133 | 1.4870 ppb | 0.36133 24.30% |
| QC value within limits | for Sn 189.927 | Recovery = Not calculated | | | |
| Sr 421.552† | -32.8 | -0.2797 ug/L | 0.24394 | -0.2797 ppb | 0.24394 87.22% |
| QC value within limits | for Sr 421.552 | Recovery = Not calculated | | | |
| Ti 334.940† | -20.1 | -0.0335 ug/L | 0.08921 | -0.0335 ppb | 0.08921 266.31% |
| QC value within limits | for Ti 334.940 | Recovery = Not calculated | | | |
| Tl 190.801† | 4.9 | 1.8921 ug/L | 0.56236 | 1.8921 ppb | 0.56236 29.72% |
| QC value within limits | for Tl 190.801 | Recovery = Not calculated | | | |
| U 409.014† | -1.6 | -0.0446 ug/L | 1.79095 | -0.0446 ppb | 1.79095 >999.9% |
| QC value within limits | for U 409.014 | Recovery = Not calculated | | | |
| V 292.402† | 26.9 | 0.2132 ug/L | 0.32755 | 0.2132 ppb | 0.32755 153.63% |
| QC value within limits | for V 292.402 | Recovery = Not calculated | | | |
| Zn 213.857† | 84.8 | 1.0091 ug/L | 0.16002 | 1.0091 ppb | 0.16002 15.86% |
| QC value within limits | for Zn 213.857 | Recovery = Not calculated | | | |
| SiO2† | 37.5 | 2.9913 ug/L | 3.14380 | 2.9913 ppb | 3.14380 105.10% |
| QC value within limits | for SiO2 | Recovery = Not calculated | | | |

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 11:24:07

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 | 3990.2 | 3990.2 | 98.9 % | | 11:26:19 |
| 1 | Y RADIAL | 4440.2 | 4440.2 | 98.28 % | | 11:25:59 |
| 1 | Al 396.153Radial† | 4642.7 | 4773.2 | 5062.7 ug/L | 5062.7 ppb | 11:25:59 |
| 1 | Ca 317.933Radial† | 2491.4 | 2501.5 | 5082.3 ug/L | 5082.3 ppb | 11:26:19 |
| 1 | Fe 238.204 Radial† | 407.9 | 403.3 | 5058.6 ug/L | 5058.6 ppb | 11:26:19 |
| 1 | K 766.490 Radial† | 26874.8 | 24365.7 | 4857.8 ug/L | 4857.8 ppb | 11:25:59 |
| 1 | Mg 279.077 IEC† | 117.9 | 118.5 | 5177.3 ug/L | 5177.3 ppb | 11:26:19 |
| 1 | Na 589.592 Radial† | 24850.2 | 25583.1 | 10047 ug/L | 10047 ppb | 11:25:59 |
| 1 | Sr 421.552† | 57384.7 | 57942.8 | 493.38 ug/L | 493.38 ppb | 11:25:59 |
| 1 | Sc 361.383 | 840225.5 | 840225.5 | 100.04 % | | 11:27:16 |
| 1 | Y 371.029 | 709397.8 | 709397.8 | 99.068 % | | 11:27:16 |
| 1 | Ag 328.068† | 100130.3 | 99832.8 | 506.40 ug/L | 506.40 ppb | 11:27:21 |
| 1 | As 188.979† | 902.3 | 922.7 | 498.92 ug/L | 498.92 ppb | 11:27:41 |
| 1 | B 249.677† | 17699.1 | 17941.5 | 490.89 ug/L | 490.89 ppb | 11:27:21 |
| 1 | Ba 233.527† | 53109.2 | 53067.3 | 498.73 ug/L | 498.73 ppb | 11:27:21 |
| 1 | Be 313.107† | 1226611.6 | 1230334.0 | 500.64 ug/L | 500.64 ppb | 11:27:16 |
| 1 | Cd 226.502† | 35313.6 | 35464.5 | 500.08 ug/L | 500.08 ppb | 11:27:21 |
| 1 | Co 228.616† | 19545.0 | 19575.3 | 509.57 ug/L | 509.57 ppb | 11:27:21 |
| 1 | Cr 267.716† | 38489.5 | 38377.6 | 500.69 ug/L | 500.69 ppb | 11:27:21 |
| 1 | Cu 324.752† | 158402.7 | 151980.2 | 492.79 ug/L | 492.79 ppb | 11:27:21 |
| 1 | Mn 257.610† | 374685.7 | 374068.2 | 491.08 ug/L | 491.08 ppb | 11:27:21 |
| 1 | Mo 202.031† | 5720.2 | 5703.5 | 501.89 ug/L | 501.89 ppb | 11:27:41 |
| 1 | Ni 231.604† | 16386.8 | 16286.0 | 508.22 ug/L | 508.22 ppb | 11:27:21 |
| 1 | P 214.914† | 3599.7 | 3429.9 | 2369.4 ug/L | 2369.4 ppb | 11:27:41 |
| 1 | Pb 220.353† | 3236.1 | 3293.5 | 497.98 ug/L | 497.98 ppb | 11:27:41 |
| 1 | S 181.975 Axial† | 592.6 | 567.9 | 994.49 ug/L | 994.49 ppb | 11:27:41 |
| 1 | Sb 206.836† | 1208.6 | 1181.5 | 520.10 ug/L | 520.10 ppb | 11:27:41 |
| 1 | Se 196.026† | 591.0 | 607.6 | 502.68 ug/L | 502.68 ppb | 11:27:41 |
| 1 | Si 251.611† | 67467.1 | 66911.9 | 2485.2 ug/L | 2485.2 ppb | 11:27:21 |
| 1 | Sn 189.927† | 2282.9 | 2278.8 | 505.31 ug/L | 505.31 ppb | 11:27:41 |
| 1 | Ti 334.940† | 285912.8 | 286870.2 | 493.42 ug/L | 493.42 ppb | 11:27:21 |
| 1 | Tl 190.801† | 1255.3 | 1279.8 | 498.09 ug/L | 498.09 ppb | 11:27:41 |
| 1 | U 409.014† | 15133.7 | 17162.2 | 503.29 ug/L | 503.29 ppb | 11:27:21 |
| 1 | V 292.402† | 63260.7 | 64660.4 | 505.17 ug/L | 505.17 ppb | 11:27:21 |
| 1 | Zn 213.857† | 42740.7 | 42115.4 | 495.66 ug/L | 495.66 ppb | 11:27:21 |
| 1 | SiO2† | 66865.1 | 66282.3 | 5282.0 ug/L | 5282.0 ppb | 11:28:48 |
| 2 | Sc Radial | 4028.6 | 4028.6 | 99.9 % | | 11:26:44 |
| 2 | Y RADIAL | 4417.9 | 4417.9 | 97.78 % | | 11:26:24 |
| 2 | Al 396.153Radial† | 4599.4 | 4685.0 | 4969.1 ug/L | 4969.1 ppb | 11:26:24 |
| 2 | Ca 317.933Radial† | 2511.2 | 2497.2 | 5073.8 ug/L | 5073.8 ppb | 11:26:44 |
| 2 | Fe 238.204 Radial† | 417.2 | 408.7 | 5126.3 ug/L | 5126.3 ppb | 11:26:44 |
| 2 | K 766.490 Radial† | 26910.2 | 24141.7 | 4813.1 ug/L | 4813.1 ppb | 11:26:24 |
| 2 | Mg 279.077 IEC† | 120.5 | 120.0 | 5239.9 ug/L | 5239.9 ppb | 11:26:44 |
| 2 | Na 589.592 Radial† | 24770.6 | 25263.4 | 9921.3 ug/L | 9921.3 ppb | 11:26:24 |
| 2 | Sr 421.552† | 57475.8 | 57480.0 | 489.44 ug/L | 489.44 ppb | 11:26:24 |
| 2 | Sc 361.383 | 847843.3 | 847843.3 | 100.95 % | | 11:27:47 |
| 2 | Y 371.029 | 713668.5 | 713668.5 | 99.664 % | | 11:27:47 |
| 2 | Ag 328.068† | 101003.7 | 99798.7 | 506.25 ug/L | 506.25 ppb | 11:27:52 |
| 2 | As 188.979† | 908.5 | 920.8 | 497.94 ug/L | 497.94 ppb | 11:28:12 |
| 2 | B 249.677† | 17800.3 | 17882.7 | 489.27 ug/L | 489.27 ppb | 11:27:52 |
| 2 | Ba 233.527† | 53763.9 | 53238.9 | 500.34 ug/L | 500.34 ppb | 11:27:52 |
| 2 | Be 313.107† | 1233238.9 | 1225882.8 | 498.83 ug/L | 498.83 ppb | 11:27:47 |
| 2 | Cd 226.502† | 35588.8 | 35419.9 | 499.45 ug/L | 499.45 ppb | 11:27:52 |
| 2 | Co 228.616† | 19718.6 | 19571.7 | 509.45 ug/L | 509.45 ppb | 11:27:52 |
| 2 | Cr 267.716† | 38775.9 | 38315.6 | 499.88 ug/L | 499.88 ppb | 11:27:52 |
| 2 | Cu 324.752† | 160240.0 | 152377.5 | 494.08 ug/L | 494.08 ppb | 11:27:52 |
| 2 | Mn 257.610† | 379038.5 | 375015.0 | 492.33 ug/L | 492.33 ppb | 11:27:52 |
| 2 | Mo 202.031† | 5682.2 | 5614.5 | 494.06 ug/L | 494.06 ppb | 11:28:12 |
| 2 | Ni 231.604† | 16571.5 | 16321.7 | 509.34 ug/L | 509.34 ppb | 11:27:52 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3569.3 | 3367.4 | 2324.0 ug/L | 2324.0 ppb | 11:28:12 |
| 2 | Pb 220.353† | 3213.9 | 3242.5 | 490.24 ug/L | 490.24 ppb | 11:28:12 |
| 2 | S 181.975 Axial† | 595.4 | 565.4 | 990.03 ug/L | 990.03 ppb | 11:28:12 |
| 2 | Sb 206.836† | 1192.8 | 1154.9 | 508.48 ug/L | 508.48 ppb | 11:28:12 |
| 2 | Se 196.026† | 593.7 | 605.1 | 500.78 ug/L | 500.78 ppb | 11:28:12 |
| 2 | Si 251.611† | 68198.4 | 67030.4 | 2489.7 ug/L | 2489.7 ppb | 11:27:52 |
| 2 | Sn 189.927† | 2250.9 | 2226.6 | 493.75 ug/L | 493.75 ppb | 11:28:12 |
| 2 | Ti 334.940† | 289227.8 | 287586.2 | 494.64 ug/L | 494.64 ppb | 11:27:52 |
| 2 | Tl 190.801† | 1254.9 | 1268.2 | 493.62 ug/L | 493.62 ppb | 11:28:12 |
| 2 | U 409.014† | 15319.9 | 17210.7 | 504.72 ug/L | 504.72 ppb | 11:27:52 |
| 2 | V 292.402† | 63726.6 | 64553.8 | 504.23 ug/L | 504.23 ppb | 11:27:52 |
| 2 | Zn 213.857† | 43156.5 | 42143.4 | 495.98 ug/L | 495.98 ppb | 11:27:52 |
| 2 | SiO2† | 67150.4 | 65964.3 | 5256.8 ug/L | 5256.8 ppb | 11:28:53 |
| 3 | Sc Radial | 4025.6 | 4025.6 | 99.8 % | | 11:27:09 |
| 3 | Y RADIAL | 4462.1 | 4462.1 | 98.76 % | | 11:26:49 |
| 3 | Al 396.153Radial† | 4644.3 | 4733.5 | 5020.4 ug/L | 5020.4 ppb | 11:26:49 |
| 3 | Ca 317.933Radial† | 2513.8 | 2501.8 | 5082.9 ug/L | 5082.9 ppb | 11:27:09 |
| 3 | Fe 238.204 Radial† | 414.1 | 405.9 | 5090.8 ug/L | 5090.8 ppb | 11:27:09 |
| 3 | K 766.490 Radial† | 26988.7 | 24241.0 | 4832.9 ug/L | 4832.9 ppb | 11:26:49 |
| 3 | Mg 279.077 IEC† | 119.9 | 119.5 | 5219.2 ug/L | 5219.2 ppb | 11:27:09 |
| 3 | Na 589.592 Radial† | 24952.8 | 25465.0 | 10000 ug/L | 10000 ppb | 11:26:49 |
| 3 | Sr 421.552† | 57929.4 | 57978.5 | 493.68 ug/L | 493.68 ppb | 11:26:49 |
| 3 | Sc 361.383 | 837106.2 | 837106.2 | 99.673 % | | 11:28:18 |
| 3 | Y 371.029 | 705777.7 | 705777.7 | 98.562 % | | 11:28:18 |
| 3 | Ag 328.068† | 100018.9 | 100093.9 | 507.72 ug/L | 507.72 ppb | 11:28:23 |
| 3 | As 188.979† | 900.0 | 923.8 | 499.50 ug/L | 499.50 ppb | 11:28:43 |
| 3 | B 249.677† | 17716.5 | 18024.8 | 493.19 ug/L | 493.19 ppb | 11:28:23 |
| 3 | Ba 233.527† | 52894.5 | 53049.7 | 498.56 ug/L | 498.56 ppb | 11:28:23 |
| 3 | Be 313.107† | 1218115.2 | 1226378.4 | 499.03 ug/L | 499.03 ppb | 11:28:18 |
| 3 | Cd 226.502† | 35063.9 | 35345.5 | 498.40 ug/L | 498.40 ppb | 11:28:23 |
| 3 | Co 228.616† | 19307.6 | 19409.9 | 505.26 ug/L | 505.26 ppb | 11:28:23 |
| 3 | Cr 267.716† | 38249.5 | 38280.1 | 499.42 ug/L | 499.42 ppb | 11:28:23 |
| 3 | Cu 324.752† | 158416.5 | 152584.0 | 494.75 ug/L | 494.75 ppb | 11:28:23 |
| 3 | Mn 257.610† | 372652.7 | 373424.1 | 490.24 ug/L | 490.24 ppb | 11:28:23 |
| 3 | Mo 202.031† | 5695.1 | 5699.6 | 501.55 ug/L | 501.55 ppb | 11:28:43 |
| 3 | Ni 231.604† | 16223.9 | 16183.5 | 505.03 ug/L | 505.03 ppb | 11:28:23 |
| 3 | P 214.914† | 3598.0 | 3441.6 | 2377.3 ug/L | 2377.3 ppb | 11:28:43 |
| 3 | Pb 220.353† | 3223.3 | 3292.7 | 497.84 ug/L | 497.84 ppb | 11:28:43 |
| 3 | S 181.975 Axial† | 589.2 | 566.8 | 992.47 ug/L | 992.47 ppb | 11:28:43 |
| 3 | Sb 206.836† | 1202.0 | 1179.3 | 519.14 ug/L | 519.14 ppb | 11:28:43 |
| 3 | Se 196.026† | 599.7 | 618.6 | 511.49 ug/L | 511.49 ppb | 11:28:43 |
| 3 | Si 251.611† | 67344.6 | 67040.3 | 2490.0 ug/L | 2490.0 ppb | 11:28:23 |
| 3 | Sn 189.927† | 2261.3 | 2265.6 | 502.40 ug/L | 502.40 ppb | 11:28:43 |
| 3 | Ti 334.940† | 284943.7 | 286962.9 | 493.57 ug/L | 493.57 ppb | 11:28:23 |
| 3 | Tl 190.801† | 1244.9 | 1274.0 | 495.88 ug/L | 495.88 ppb | 11:28:43 |
| 3 | U 409.014† | 15216.2 | 17301.3 | 507.39 ug/L | 507.39 ppb | 11:28:23 |
| 3 | V 292.402† | 62835.3 | 64469.2 | 503.70 ug/L | 503.70 ppb | 11:28:23 |
| 3 | Zn 213.857† | 42489.4 | 42022.5 | 494.57 ug/L | 494.57 ppb | 11:28:23 |
| 3 | SiO2† | 66902.6 | 66569.0 | 5304.9 ug/L | 5304.9 ppb | 11:28:58 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 841725.0 | 100.22 % | 0.658 | | | 0.66% |
| Sc Radial | 4014.8 | 99.5 % | 0.53 | | | 0.53% |
| Y 371.029 | 709614.7 | 99.098 % | 0.5516 | | | 0.56% |
| Y RADIAL | 4440.1 | 98.27 % | 0.489 | | | 0.50% |
| Ag 328.068† | 99908.5 | 506.79 ug/L | 0.809 | 506.79 ppb | 0.809 | 0.16% |
| QC value within limits for Ag 328.068 Recovery = 101.36% | | | | | | |
| Al 396.153Radial† | 4730.5 | 5017.4 ug/L | 46.86 | 5017.4 ppb | 46.86 | 0.93% |
| QC value within limits for Al 396.153Radial Recovery = 100.35% | | | | | | |
| As 188.979† | 922.4 | 498.79 ug/L | 0.789 | 498.79 ppb | 0.789 | 0.16% |
| QC value within limits for As 188.979 Recovery = 99.76% | | | | | | |
| B 249.677† | 17949.7 | 491.12 ug/L | 1.971 | 491.12 ppb | 1.971 | 0.40% |
| QC value within limits for B 249.677 Recovery = 98.22% | | | | | | |
| Ba 233.527† | 53118.6 | 499.21 ug/L | 0.981 | 499.21 ppb | 0.981 | 0.20% |
| QC value within limits for Ba 233.527 Recovery = 99.84% | | | | | | |
| Be 313.107† | 1227531.7 | 499.50 ug/L | 0.989 | 499.50 ppb | 0.989 | 0.20% |
| QC value within limits for Be 313.107 Recovery = 99.90% | | | | | | |
| Ca 317.933Radial† | 2500.2 | 5079.7 ug/L | 5.14 | 5079.7 ppb | 5.14 | 0.10% |

| | | | | | | | |
|---|----------|-------------|-------|------------|-------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 101.59% | | | | | | | |
| Cd 226.502† | 35410.0 | 499.31 ug/L | 0.850 | 499.31 ppb | 0.850 | 0.17% | |
| QC value within limits for Cd 226.502 Recovery = 99.86% | | | | | | | |
| Co 228.616† | 19519.0 | 508.10 ug/L | 2.454 | 508.10 ppb | 2.454 | 0.48% | |
| QC value within limits for Co 228.616 Recovery = 101.62% | | | | | | | |
| Cr 267.716† | 38324.4 | 500.00 ug/L | 0.642 | 500.00 ppb | 0.642 | 0.13% | |
| QC value within limits for Cr 267.716 Recovery = 100.00% | | | | | | | |
| Cu 324.752† | 152313.9 | 493.87 ug/L | 0.995 | 493.87 ppb | 0.995 | 0.20% | |
| QC value within limits for Cu 324.752 Recovery = 98.77% | | | | | | | |
| Fe 238.204 Radial† | 406.0 | 5091.9 ug/L | 33.87 | 5091.9 ppb | 33.87 | 0.67% | |
| QC value within limits for Fe 238.204 Radial Recovery = 101.84% | | | | | | | |
| K 766.490 Radial† | 24249.5 | 4834.6 ug/L | 22.37 | 4834.6 ppb | 22.37 | 0.46% | |
| QC value within limits for K 766.490 Radial Recovery = 96.69% | | | | | | | |
| Mg 279.077 IEC† | 119.3 | 5212.1 ug/L | 31.87 | 5212.1 ppb | 31.87 | 0.61% | |
| QC value within limits for Mg 279.077 IEC Recovery = 104.24% | | | | | | | |
| Mn 257.610† | 374169.1 | 491.22 ug/L | 1.051 | 491.22 ppb | 1.051 | 0.21% | |
| QC value within limits for Mn 257.610 Recovery = 98.24% | | | | | | | |
| Mo 202.031† | 5672.5 | 499.17 ug/L | 4.424 | 499.17 ppb | 4.424 | 0.89% | |
| QC value within limits for Mo 202.031 Recovery = 99.83% | | | | | | | |
| Na 589.592 Radial† | 25437.2 | 9989.5 ug/L | 63.47 | 9989.5 ppb | 63.47 | 0.64% | |
| QC value within limits for Na 589.592 Radial Recovery = 99.90% | | | | | | | |
| Ni 231.604† | 16263.7 | 507.53 ug/L | 2.238 | 507.53 ppb | 2.238 | 0.44% | |
| QC value within limits for Ni 231.604 Recovery = 101.51% | | | | | | | |
| P 214.914† | 3413.0 | 2356.9 ug/L | 28.76 | 2356.9 ppb | 28.76 | 1.22% | |
| QC value within limits for P 214.914 Recovery = 94.28% | | | | | | | |
| Pb 220.353† | 3276.2 | 495.35 ug/L | 4.433 | 495.35 ppb | 4.433 | 0.89% | |
| QC value within limits for Pb 220.353 Recovery = 99.07% | | | | | | | |
| S 181.975 Axial† | 566.7 | 992.33 ug/L | 2.233 | 992.33 ppb | 2.233 | 0.23% | |
| QC value within limits for S 181.975 Axial Recovery = 99.23% | | | | | | | |
| Sb 206.836† | 1171.9 | 515.91 ug/L | 6.451 | 515.91 ppb | 6.451 | 1.25% | |
| QC value within limits for Sb 206.836 Recovery = 103.18% | | | | | | | |
| Se 196.026† | 610.5 | 504.98 ug/L | 5.715 | 504.98 ppb | 5.715 | 1.13% | |
| QC value within limits for Se 196.026 Recovery = 101.00% | | | | | | | |
| Si 251.611† | 66994.2 | 2488.3 ug/L | 2.69 | 2488.3 ppb | 2.69 | 0.11% | |
| QC value within limits for Si 251.611 Recovery = 99.53% | | | | | | | |
| Sn 189.927† | 2257.0 | 500.49 ug/L | 6.013 | 500.49 ppb | 6.013 | 1.20% | |
| QC value within limits for Sn 189.927 Recovery = 100.10% | | | | | | | |
| Sr 421.552† | 57800.4 | 492.16 ug/L | 2.368 | 492.16 ppb | 2.368 | 0.48% | |
| QC value within limits for Sr 421.552 Recovery = 98.43% | | | | | | | |
| Ti 334.940† | 287139.7 | 493.88 ug/L | 0.667 | 493.88 ppb | 0.667 | 0.14% | |
| QC value within limits for Ti 334.940 Recovery = 98.78% | | | | | | | |
| Tl 190.801† | 1274.0 | 495.86 ug/L | 2.237 | 495.86 ppb | 2.237 | 0.45% | |
| QC value within limits for Tl 190.801 Recovery = 99.17% | | | | | | | |
| U 409.014† | 17224.8 | 505.13 ug/L | 2.078 | 505.13 ppb | 2.078 | 0.41% | |
| QC value within limits for U 409.014 Recovery = 101.03% | | | | | | | |
| V 292.402† | 64561.1 | 504.37 ug/L | 0.746 | 504.37 ppb | 0.746 | 0.15% | |
| QC value within limits for V 292.402 Recovery = 100.87% | | | | | | | |
| Zn 213.857† | 42093.8 | 495.40 ug/L | 0.737 | 495.40 ppb | 0.737 | 0.15% | |
| QC value within limits for Zn 213.857 Recovery = 99.08% | | | | | | | |
| SiO2† | 66271.9 | 5281.2 ug/L | 24.06 | 5281.2 ppb | 24.06 | 0.46% | |
| QC value within limits for SiO2 Recovery = 98.76% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 15
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/25/2010 11:31:09
 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 | 4038.3 | 4038.3 | 100 % | | 11:33:21 |
| 1 | Y RADIAL | 4571.2 | 4571.2 | 101.2 % | | 11:33:01 |
| 1 | Al 396.153Radial† | -81.2 | -1.5 | -1.5663 ug/L | -1.5663 ppb | 11:33:21 |
| 1 | Ca 317.933Radial† | 17.9 | 0.7 | 1.3285 ug/L | 1.3285 ppb | 11:33:21 |
| 1 | Fe 238.204 Radial† | 7.1 | -1.9 | -23.439 ug/L | -23.439 ppb | 11:33:21 |
| 1 | K 766.490 Radial† | 2759.8 | -46.5 | -9.2666 ug/L | -9.2666 ppb | 11:33:01 |
| 1 | Mg 279.077 IEC† | 2.6 | 1.9 | 82.585 ug/L | 82.585 ppb | 11:33:21 |
| 1 | Na 589.592 Radial† | -515.5 | -54.1 | -21.241 ug/L | -21.241 ppb | 11:33:01 |
| 1 | Sr 421.552† | 51.7 | -18.4 | -0.1567 ug/L | -0.1567 ppb | 11:33:01 |
| 1 | Sc 361.383 | 846065.6 | 846065.6 | 100.74 % | | 11:34:18 |
| 1 | Y 371.029 | 720715.5 | 720715.5 | 100.65 % | | 11:34:18 |
| 1 | Ag 328.068† | 214.6 | -40.4 | -0.2138 ug/L | -0.2138 ppb | 11:34:23 |
| 1 | As 188.979† | -26.6 | -5.5 | -2.9791 ug/L | -2.9791 ppb | 11:34:43 |
| 1 | B 249.677† | -174.3 | 77.2 | 2.1246 ug/L | 2.1246 ppb | 11:34:43 |
| 1 | Ba 233.527† | 24.8 | 6.1 | 0.0562 ug/L | 0.0562 ppb | 11:34:43 |
| 1 | Be 313.107† | -4273.9 | 20.2 | 0.0079 ug/L | 0.0079 ppb | 11:34:23 |
| 1 | Cd 226.502† | -165.9 | 1.7 | 0.0278 ug/L | 0.0278 ppb | 11:34:43 |
| 1 | Co 228.616† | -29.5 | 9.6 | 0.2506 ug/L | 0.2506 ppb | 11:34:43 |
| 1 | Cr 267.716† | 141.6 | 45.6 | 0.5900 ug/L | 0.5900 ppb | 11:34:43 |
| 1 | Cu 324.752† | 6430.0 | 30.1 | 0.0941 ug/L | 0.0941 ppb | 11:34:23 |
| 1 | Mn 257.610† | 458.5 | 2.7 | -0.0022 ug/L | -0.0022 ppb | 11:34:43 |
| 1 | Mo 202.031† | 17.1 | 2.8 | 0.2445 ug/L | 0.2445 ppb | 11:34:43 |
| 1 | Ni 231.604† | 97.4 | 3.1 | 0.0964 ug/L | 0.0964 ppb | 11:34:43 |
| 1 | P 214.914† | 174.5 | 5.0 | 3.5811 ug/L | 3.5811 ppb | 11:34:43 |
| 1 | Pb 220.353† | -51.2 | 8.0 | 1.2030 ug/L | 1.2030 ppb | 11:34:43 |
| 1 | S 181.975 Axial† | 23.9 | -0.7 | -1.2174 ug/L | -1.2174 ppb | 11:34:43 |
| 1 | Sb 206.836† | 29.4 | 2.6 | 1.1112 ug/L | 1.1112 ppb | 11:34:43 |
| 1 | Se 196.026† | -16.9 | 0.2 | 0.0885 ug/L | 0.0885 ppb | 11:34:43 |
| 1 | Si 251.611† | 544.6 | 15.1 | 0.5593 ug/L | 0.5593 ppb | 11:34:43 |
| 1 | Sn 189.927† | 8.5 | 5.4 | 1.1925 ug/L | 1.1925 ppb | 11:34:43 |
| 1 | Ti 334.940† | -1158.8 | -66.9 | -0.1236 ug/L | -0.1236 ppb | 11:34:23 |
| 1 | Tl 190.801† | -16.7 | 8.5 | 3.2918 ug/L | 3.2918 ppb | 11:34:43 |
| 1 | U 409.014† | -1916.5 | 132.7 | 3.9071 ug/L | 3.9071 ppb | 11:34:18 |
| 1 | V 292.402† | -1436.4 | 1.7 | 0.0287 ug/L | 0.0287 ppb | 11:34:23 |
| 1 | Zn 213.857† | 687.8 | 76.4 | 0.9100 ug/L | 0.9100 ppb | 11:34:43 |
| 1 | SiO2† | 555.6 | -1.9 | -0.1561 ug/L | -0.1561 ppb | 11:36:04 |
| 2 | Sc Radial | 4005.7 | 4005.7 | 99.3 % | | 11:33:46 |
| 2 | Y RADIAL | 4566.7 | 4566.7 | 101.1 % | | 11:33:26 |
| 2 | Al 396.153Radial† | -71.9 | 7.3 | 7.7202 ug/L | 7.7202 ppb | 11:33:46 |
| 2 | Ca 317.933Radial† | 23.4 | 6.3 | 12.868 ug/L | 12.868 ppb | 11:33:46 |
| 2 | Fe 238.204 Radial† | 9.4 | 0.5 | 6.3476 ug/L | 6.3476 ppb | 11:33:46 |
| 2 | K 766.490 Radial† | 2805.3 | 21.8 | 4.3624 ug/L | 4.3624 ppb | 11:33:26 |
| 2 | Mg 279.077 IEC† | 1.8 | 1.1 | 46.294 ug/L | 46.294 ppb | 11:33:46 |
| 2 | Na 589.592 Radial† | -567.7 | -110.8 | -43.527 ug/L | -43.527 ppb | 11:33:26 |
| 2 | Sr 421.552† | 26.6 | -43.3 | -0.3685 ug/L | -0.3685 ppb | 11:33:26 |
| 2 | Sc 361.383 | 847877.4 | 847877.4 | 100.96 % | | 11:34:48 |
| 2 | Y 371.029 | 722408.6 | 722408.6 | 100.88 % | | 11:34:48 |
| 2 | Ag 328.068† | 269.9 | 14.0 | 0.0666 ug/L | 0.0666 ppb | 11:34:53 |
| 2 | As 188.979† | -24.2 | -3.1 | -1.6820 ug/L | -1.6820 ppb | 11:35:13 |
| 2 | B 249.677† | -155.5 | 96.1 | 2.6416 ug/L | 2.6416 ppb | 11:35:13 |
| 2 | Ba 233.527† | 9.3 | -9.3 | -0.0884 ug/L | -0.0884 ppb | 11:35:13 |
| 2 | Be 313.107† | -4315.5 | -12.0 | -0.0052 ug/L | -0.0052 ppb | 11:34:53 |
| 2 | Cd 226.502† | -176.3 | -8.2 | -0.1155 ug/L | -0.1155 ppb | 11:35:13 |
| 2 | Co 228.616† | -38.1 | 1.2 | 0.0309 ug/L | 0.0309 ppb | 11:35:13 |
| 2 | Cr 267.716† | 125.8 | 29.7 | 0.3844 ug/L | 0.3844 ppb | 11:35:13 |
| 2 | Cu 324.752† | 6507.0 | 92.7 | 0.2986 ug/L | 0.2986 ppb | 11:34:53 |
| 2 | Mn 257.610† | 450.2 | -6.5 | -0.0098 ug/L | -0.0098 ppb | 11:35:13 |
| 2 | Mo 202.031† | 18.6 | 4.3 | 0.3747 ug/L | 0.3747 ppb | 11:35:13 |
| 2 | Ni 231.604† | 80.7 | -13.7 | -0.4271 ug/L | -0.4271 ppb | 11:35:13 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 177.9 | 8.0 | 5.7203 ug/L | 5.7203 ppb | 11:35:13 |
| 2 | Pb 220.353† | -45.2 | 14.0 | 2.1167 ug/L | 2.1167 ppb | 11:35:13 |
| 2 | S 181.975 Axial† | 21.5 | -3.1 | -5.4850 ug/L | -5.4850 ppb | 11:35:13 |
| 2 | Sb 206.836† | 19.6 | -7.3 | -3.0410 ug/L | -3.0410 ppb | 11:35:13 |
| 2 | Se 196.026† | -18.0 | -0.9 | -0.6654 ug/L | -0.6654 ppb | 11:35:13 |
| 2 | Si 251.611† | 526.8 | -3.6 | -0.1397 ug/L | -0.1397 ppb | 11:35:13 |
| 2 | Sn 189.927† | 13.7 | 10.5 | 2.3285 ug/L | 2.3285 ppb | 11:35:13 |
| 2 | Ti 334.940† | -1165.4 | -71.0 | -0.1262 ug/L | -0.1262 ppb | 11:34:53 |
| 2 | Tl 190.801† | -24.1 | 1.2 | 0.4697 ug/L | 0.4697 ppb | 11:35:13 |
| 2 | U 409.014† | -1911.5 | 141.8 | 4.1705 ug/L | 4.1705 ppb | 11:34:48 |
| 2 | V 292.402† | -1511.3 | -69.4 | -0.5219 ug/L | -0.5219 ppb | 11:34:53 |
| 2 | Zn 213.857† | 689.5 | 76.6 | 0.9113 ug/L | 0.9113 ppb | 11:35:13 |
| 2 | SiO2† | 547.4 | -11.2 | -0.9022 ug/L | -0.9022 ppb | 11:36:24 |
| 3 | Sc Radial | 4038.1 | 4038.1 | 100 % | | 11:34:11 |
| 3 | Y RADIAL | 4543.9 | 4543.9 | 100.6 % | | 11:33:51 |
| 3 | Al 396.153Radial† | -72.5 | 7.2 | 7.6809 ug/L | 7.6809 ppb | 11:34:11 |
| 3 | Ca 317.933Radial† | 20.6 | 3.4 | 6.9097 ug/L | 6.9097 ppb | 11:34:11 |
| 3 | Fe 238.204 Radial† | 9.9 | 0.8 | 10.614 ug/L | 10.614 ppb | 11:34:11 |
| 3 | K 766.490 Radial† | 2679.1 | -127.0 | -25.333 ug/L | -25.333 ppb | 11:33:51 |
| 3 | Mg 279.077 IEC† | 4.3 | 3.6 | 156.48 ug/L | 156.48 ppb | 11:34:11 |
| 3 | Na 589.592 Radial† | -602.0 | -140.5 | -55.166 ug/L | -55.166 ppb | 11:33:51 |
| 3 | Sr 421.552† | 21.6 | -48.4 | -0.4124 ug/L | -0.4124 ppb | 11:33:51 |
| 3 | Sc 361.383 | 852826.9 | 852826.9 | 101.54 % | | 11:35:19 |
| 3 | Y 371.029 | 728257.2 | 728257.2 | 101.70 % | | 11:35:19 |
| 3 | Ag 328.068† | 334.6 | 76.2 | 0.3851 ug/L | 0.3851 ppb | 11:35:24 |
| 3 | As 188.979† | -20.6 | 0.5 | 0.2872 ug/L | 0.2872 ppb | 11:35:44 |
| 3 | B 249.677† | -177.2 | 75.7 | 2.0790 ug/L | 2.0790 ppb | 11:35:44 |
| 3 | Ba 233.527† | 16.0 | -2.7 | -0.0250 ug/L | -0.0250 ppb | 11:35:44 |
| 3 | Be 313.107† | -4200.7 | 125.9 | 0.0515 ug/L | 0.0515 ppb | 11:35:24 |
| 3 | Cd 226.502† | -160.6 | 8.2 | 0.1154 ug/L | 0.1154 ppb | 11:35:44 |
| 3 | Co 228.616† | -37.0 | 2.4 | 0.0631 ug/L | 0.0631 ppb | 11:35:44 |
| 3 | Cr 267.716† | 122.6 | 25.7 | 0.3351 ug/L | 0.3351 ppb | 11:35:44 |
| 3 | Cu 324.752† | 6418.8 | -31.5 | -0.1035 ug/L | -0.1035 ppb | 11:35:24 |
| 3 | Mn 257.610† | 441.7 | -17.4 | -0.0282 ug/L | -0.0282 ppb | 11:35:44 |
| 3 | Mo 202.031† | 15.1 | 0.7 | 0.0607 ug/L | 0.0607 ppb | 11:35:44 |
| 3 | Ni 231.604† | 92.1 | -2.9 | -0.0913 ug/L | -0.0913 ppb | 11:35:44 |
| 3 | P 214.914† | 175.5 | 4.6 | 3.3600 ug/L | 3.3600 ppb | 11:35:44 |
| 3 | Pb 220.353† | -68.4 | -8.6 | -1.2889 ug/L | -1.2889 ppb | 11:35:44 |
| 3 | S 181.975 Axial† | 34.1 | 9.2 | 16.069 ug/L | 16.069 ppb | 11:35:44 |
| 3 | Sb 206.836† | 21.9 | -5.1 | -2.1284 ug/L | -2.1284 ppb | 11:35:44 |
| 3 | Se 196.026† | -15.1 | 2.0 | 1.6538 ug/L | 1.6538 ppb | 11:35:44 |
| 3 | Si 251.611† | 545.6 | 11.9 | 0.4422 ug/L | 0.4422 ppb | 11:35:44 |
| 3 | Sn 189.927† | 11.7 | 8.5 | 1.8774 ug/L | 1.8774 ppb | 11:35:44 |
| 3 | Ti 334.940† | -1002.0 | 96.6 | 0.1529 ug/L | 0.1529 ppb | 11:35:24 |
| 3 | Tl 190.801† | -22.6 | 2.8 | 1.0714 ug/L | 1.0714 ppb | 11:35:44 |
| 3 | U 409.014† | -1959.1 | 105.9 | 3.1145 ug/L | 3.1145 ppb | 11:35:19 |
| 3 | V 292.402† | -1431.0 | 18.3 | 0.1494 ug/L | 0.1494 ppb | 11:35:24 |
| 3 | Zn 213.857† | 683.9 | 67.1 | 0.7958 ug/L | 0.7958 ppb | 11:35:44 |
| 3 | SiO2† | 556.3 | -5.5 | -0.4399 ug/L | -0.4399 ppb | 11:36:44 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|-------------|--------|----------|---------|
| Sc 361.383 | 848923.3 | 101.08 % | | 0.417 | | | | 0.41% |
| Sc Radial | 4027.3 | 99.8 % | | 0.47 | | | | 0.47% |
| Y 371.029 | 723793.8 | 101.08 % | | 0.553 | | | | 0.55% |
| Y RADIAL | 4560.6 | 100.9 % | | 0.32 | | | | 0.32% |
| Ag 328.068† | 16.6 | 0.0793 ug/L | | 0.29968 | 0.0793 ppb | | 0.29968 | 377.93% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | | |
| Al 396.153Radial† | 4.3 | 4.6116 ug/L | | 5.35030 | 4.6116 ppb | | 5.35030 | 116.02% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | | |
| As 188.979† | -2.7 | -1.4579 ug/L | | 1.64460 | -1.4579 ppb | | 1.64460 | 112.80% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | | |
| B 249.677† | 83.0 | 2.2817 ug/L | | 0.31248 | 2.2817 ppb | | 0.31248 | 13.69% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | | |
| Ba 233.527† | -2.0 | -0.0191 ug/L | | 0.07249 | -0.0191 ppb | | 0.07249 | 380.21% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | | |
| Be 313.107† | 44.7 | 0.0181 ug/L | | 0.02967 | 0.0181 ppb | | 0.02967 | 163.89% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | | |
| Ca 317.933Radial† | 3.5 | 7.0354 ug/L | | 5.77078 | 7.0354 ppb | | 5.77078 | 82.03% |

| | | | |
|--|---------------------------|----------------------|------------------|
| QC value within limits for Ca 317.933 Radial | Recovery = Not calculated | | |
| Cd 226.502† | 0.6 0.0092 ug/L | 0.11655 0.0092 ppb | 0.11655 >999.9% |
| QC value within limits for Cd 226.502 | Recovery = Not calculated | | |
| Co 228.616† | 4.4 0.1149 ug/L | 0.11864 0.1149 ppb | 0.11864 103.28% |
| QC value within limits for Co 228.616 | Recovery = Not calculated | | |
| Cr 267.716† | 33.7 0.4365 ug/L | 0.13521 0.4365 ppb | 0.13521 30.97% |
| QC value within limits for Cr 267.716 | Recovery = Not calculated | | |
| Cu 324.752† | 30.4 0.0964 ug/L | 0.20104 0.0964 ppb | 0.20104 208.56% |
| QC value within limits for Cu 324.752 | Recovery = Not calculated | | |
| Fe 238.204 Radial† | -0.2 -2.1594 ug/L | 18.55204 -2.1594 ppb | 18.55204 859.13% |
| QC value within limits for Fe 238.204 Radial | Recovery = Not calculated | | |
| K 766.490 Radial† | -50.6 -10.079 ug/L | 14.8643 -10.079 ppb | 14.8643 147.48% |
| QC value within limits for K 766.490 Radial | Recovery = Not calculated | | |
| Mg 279.077 IEC† | 2.2 95.121 ug/L | 56.1537 95.121 ppb | 56.1537 59.03% |
| QC value within limits for Mg 279.077 IEC | Recovery = Not calculated | | |
| Mn 257.610† | -7.1 -0.0134 ug/L | 0.01337 -0.0134 ppb | 0.01337 99.90% |
| QC value within limits for Mn 257.610 | Recovery = Not calculated | | |
| Mo 202.031† | 2.6 0.2266 ug/L | 0.15776 0.2266 ppb | 0.15776 69.61% |
| QC value within limits for Mo 202.031 | Recovery = Not calculated | | |
| Na 589.592 Radial† | -101.8 -39.978 ug/L | 17.2388 -39.978 ppb | 17.2388 43.12% |
| QC value within limits for Na 589.592 Radial | Recovery = Not calculated | | |
| Ni 231.604† | -4.5 -0.1407 ug/L | 0.26523 -0.1407 ppb | 0.26523 188.52% |
| QC value within limits for Ni 231.604 | Recovery = Not calculated | | |
| P 214.914† | 5.9 4.2204 ug/L | 1.30360 4.2204 ppb | 1.30360 30.89% |
| QC value within limits for P 214.914 | Recovery = Not calculated | | |
| Pb 220.353† | 4.5 0.6769 ug/L | 1.76266 0.6769 ppb | 1.76266 260.39% |
| QC value within limits for Pb 220.353 | Recovery = Not calculated | | |
| S 181.975 Axial† | 1.8 3.1223 ug/L | 11.41367 3.1223 ppb | 11.41367 365.55% |
| QC value within limits for S 181.975 Axial | Recovery = Not calculated | | |
| Sb 206.836† | -3.3 -1.3527 ug/L | 2.18209 -1.3527 ppb | 2.18209 161.31% |
| QC value within limits for Sb 206.836 | Recovery = Not calculated | | |
| Se 196.026† | 0.5 0.3590 ug/L | 1.18305 0.3590 ppb | 1.18305 329.56% |
| QC value within limits for Se 196.026 | Recovery = Not calculated | | |
| Si 251.611† | 7.8 0.2873 ug/L | 0.37435 0.2873 ppb | 0.37435 130.30% |
| QC value within limits for Si 251.611 | Recovery = Not calculated | | |
| Sn 189.927† | 8.1 1.7995 ug/L | 0.57200 1.7995 ppb | 0.57200 31.79% |
| QC value within limits for Sn 189.927 | Recovery = Not calculated | | |
| Sr 421.552† | -36.7 -0.3125 ug/L | 0.13675 -0.3125 ppb | 0.13675 43.76% |
| QC value within limits for Sr 421.552 | Recovery = Not calculated | | |
| Ti 334.940† | -13.8 -0.0323 ug/L | 0.16039 -0.0323 ppb | 0.16039 495.93% |
| QC value within limits for Ti 334.940 | Recovery = Not calculated | | |
| Tl 190.801† | 4.2 1.6110 ug/L | 1.48641 1.6110 ppb | 1.48641 92.27% |
| QC value within limits for Tl 190.801 | Recovery = Not calculated | | |
| U 409.014† | 126.8 3.7307 ug/L | 0.54967 3.7307 ppb | 0.54967 14.73% |
| QC value within limits for U 409.014 | Recovery = Not calculated | | |
| V 292.402† | -16.5 -0.1146 ug/L | 0.35785 -0.1146 ppb | 0.35785 312.20% |
| QC value within limits for V 292.402 | Recovery = Not calculated | | |
| Zn 213.857† | 73.3 0.8724 ug/L | 0.06630 0.8724 ppb | 0.06630 7.60% |
| QC value within limits for Zn 213.857 | Recovery = Not calculated | | |
| SiO2† | -6.2 -0.4994 ug/L | 0.37657 -0.4994 ppb | 0.37657 75.41% |
| QC value within limits for SiO2 | Recovery = Not calculated | | |

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 12:43:21

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 | 4016.1 | 4016.1 | 99.6 % | | | 12:45:33 |
| 1 | Y RADIAL | 4482.3 | 4482.3 | 99.21 % | | | 12:45:13 |
| 1 | Al 396.153Radial† | 4698.8 | 4799.2 | 5090.4 ug/L | | 5090.4 ppb | 12:45:13 |
| 1 | Ca 317.933Radial† | 2497.0 | 2490.8 | 5060.7 ug/L | | 5060.7 ppb | 12:45:33 |
| 1 | Fe 238.204 Radial† | 404.8 | 397.6 | 4986.6 ug/L | | 4986.6 ppb | 12:45:33 |
| 1 | K 766.490 Radial† | 27612.4 | 24931.1 | 4970.6 ug/L | | 4970.6 ppb | 12:45:13 |
| 1 | Mg 279.077 IEC† | 118.7 | 118.6 | 5178.9 ug/L | | 5178.9 ppb | 12:45:33 |
| 1 | Na 589.592 Radial† | 25254.5 | 25826.9 | 10143 ug/L | | 10143 ppb | 12:45:13 |
| 1 | Sr 421.552† | 58354.8 | 58542.5 | 498.48 ug/L | | 498.48 ppb | 12:45:13 |
| 1 | Sc 361.383 | 841186.5 | 841186.5 | 100.16 % | | | 12:46:30 |
| 1 | Y 371.029 | 708161.3 | 708161.3 | 98.895 % | | | 12:46:30 |
| 1 | Ag 328.068† | 99947.0 | 99535.5 | 504.86 ug/L | | 504.86 ppb | 12:46:35 |
| 1 | As 188.979† | 917.0 | 936.4 | 506.23 ug/L | | 506.23 ppb | 12:46:55 |
| 1 | B 249.677† | 17482.4 | 17704.9 | 484.41 ug/L | | 484.41 ppb | 12:46:35 |
| 1 | Ba 233.527† | 53089.0 | 52986.5 | 497.96 ug/L | | 497.96 ppb | 12:46:35 |
| 1 | Be 313.107† | 1217794.2 | 1220129.9 | 496.50 ug/L | | 496.50 ppb | 12:46:30 |
| 1 | Cd 226.502† | 35263.6 | 35374.2 | 498.82 ug/L | | 498.82 ppb | 12:46:35 |
| 1 | Co 228.616† | 19495.6 | 19503.7 | 507.71 ug/L | | 507.71 ppb | 12:46:35 |
| 1 | Cr 267.716† | 38241.0 | 38085.5 | 496.87 ug/L | | 496.87 ppb | 12:46:35 |
| 1 | Cu 324.752† | 158615.9 | 152012.1 | 492.89 ug/L | | 492.89 ppb | 12:46:35 |
| 1 | Mn 257.610† | 374449.3 | 373404.4 | 490.20 ug/L | | 490.20 ppb | 12:46:35 |
| 1 | Mo 202.031† | 5758.9 | 5735.6 | 504.70 ug/L | | 504.70 ppb | 12:46:55 |
| 1 | Ni 231.604† | 16296.7 | 16177.3 | 504.83 ug/L | | 504.83 ppb | 12:46:35 |
| 1 | P 214.914† | 3619.4 | 3445.5 | 2380.6 ug/L | | 2380.6 ppb | 12:46:55 |
| 1 | Pb 220.353† | 3247.9 | 3301.6 | 499.22 ug/L | | 499.22 ppb | 12:46:55 |
| 1 | S 181.975 Axial† | 600.7 | 575.4 | 1007.6 ug/L | | 1007.6 ppb | 12:46:55 |
| 1 | Sb 206.836† | 1218.5 | 1190.0 | 523.79 ug/L | | 523.79 ppb | 12:46:55 |
| 1 | Se 196.026† | 615.3 | 631.3 | 521.35 ug/L | | 521.35 ppb | 12:46:55 |
| 1 | Si 251.611† | 67500.0 | 66867.8 | 2483.5 ug/L | | 2483.5 ppb | 12:46:35 |
| 1 | Sn 189.927† | 2291.5 | 2284.7 | 506.64 ug/L | | 506.64 ppb | 12:46:55 |
| 1 | Ti 334.940† | 285947.3 | 286578.1 | 492.91 ug/L | | 492.91 ppb | 12:46:35 |
| 1 | Tl 190.801† | 1264.3 | 1287.4 | 501.02 ug/L | | 501.02 ppb | 12:46:55 |
| 1 | U 409.014† | 15336.8 | 17347.7 | 508.77 ug/L | | 508.77 ppb | 12:46:35 |
| 1 | V 292.402† | 62941.0 | 64269.0 | 502.22 ug/L | | 502.22 ppb | 12:46:35 |
| 1 | Zn 213.857† | 42716.7 | 42042.7 | 494.83 ug/L | | 494.83 ppb | 12:46:35 |
| 1 | SiO2† | 66365.9 | 65707.5 | 5236.0 ug/L | | 5236.0 ppb | 12:48:02 |
| 2 | Sc Radial | 4056.4 | 4056.4 | 101 % | | | 12:45:58 |
| 2 | Y RADIAL | 4468.9 | 4468.9 | 98.91 % | | | 12:45:38 |
| 2 | Al 396.153Radial† | 4655.2 | 4709.0 | 4994.3 ug/L | | 4994.3 ppb | 12:45:38 |
| 2 | Ca 317.933Radial† | 2515.5 | 2484.3 | 5047.5 ug/L | | 5047.5 ppb | 12:45:58 |
| 2 | Fe 238.204 Radial† | 411.8 | 400.5 | 5023.7 ug/L | | 5023.7 ppb | 12:45:58 |
| 2 | K 766.490 Radial† | 27575.5 | 24618.7 | 4908.3 ug/L | | 4908.3 ppb | 12:45:38 |
| 2 | Mg 279.077 IEC† | 121.2 | 119.9 | 5236.0 ug/L | | 5236.0 ppb | 12:45:58 |
| 2 | Na 589.592 Radial† | 25344.7 | 25664.4 | 10079 ug/L | | 10079 ppb | 12:45:38 |
| 2 | Sr 421.552† | 57713.2 | 57321.8 | 488.09 ug/L | | 488.09 ppb | 12:45:38 |
| 2 | Sc 361.383 | 838552.3 | 838552.3 | 99.845 % | | | 12:47:00 |
| 2 | Y 371.029 | 705908.9 | 705908.9 | 98.580 % | | | 12:47:00 |
| 2 | Ag 328.068† | 100319.6 | 100222.1 | 508.35 ug/L | | 508.35 ppb | 12:47:06 |
| 2 | As 188.979† | 892.7 | 914.9 | 494.75 ug/L | | 494.75 ppb | 12:47:26 |
| 2 | B 249.677† | 17680.5 | 17958.1 | 491.35 ug/L | | 491.35 ppb | 12:47:06 |
| 2 | Ba 233.527† | 53161.6 | 53225.7 | 500.21 ug/L | | 500.21 ppb | 12:47:06 |
| 2 | Be 313.107† | 1213909.8 | 1220058.9 | 496.47 ug/L | | 496.47 ppb | 12:47:00 |
| 2 | Cd 226.502† | 35387.3 | 35608.7 | 502.12 ug/L | | 502.12 ppb | 12:47:06 |
| 2 | Co 228.616† | 19601.5 | 19670.9 | 512.05 ug/L | | 512.05 ppb | 12:47:06 |
| 2 | Cr 267.716† | 38409.7 | 38374.5 | 500.64 ug/L | | 500.64 ppb | 12:47:06 |
| 2 | Cu 324.752† | 159091.9 | 152986.3 | 496.05 ug/L | | 496.05 ppb | 12:47:06 |
| 2 | Mn 257.610† | 375744.2 | 375875.6 | 493.45 ug/L | | 493.45 ppb | 12:47:06 |
| 2 | Mo 202.031† | 5703.8 | 5698.4 | 501.44 ug/L | | 501.44 ppb | 12:47:26 |
| 2 | Ni 231.604† | 16327.3 | 16259.0 | 507.38 ug/L | | 507.38 ppb | 12:47:06 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3600.7 | 3438.1 | 2374.6 ug/L | 2374.6 ppb | 12:47:26 |
| 2 | Pb 220.353† | 3214.2 | 3278.0 | 495.63 ug/L | 495.63 ppb | 12:47:26 |
| 2 | S 181.975 Axial† | 599.7 | 576.2 | 1009.1 ug/L | 1009.1 ppb | 12:47:26 |
| 2 | Sb 206.836† | 1219.0 | 1194.3 | 525.49 ug/L | 525.49 ppb | 12:47:26 |
| 2 | Se 196.026† | 604.8 | 622.6 | 514.50 ug/L | 514.50 ppb | 12:47:26 |
| 2 | Si 251.611† | 67756.6 | 67336.5 | 2501.0 ug/L | 2501.0 ppb | 12:47:06 |
| 2 | Sn 189.927† | 2264.1 | 2264.5 | 502.16 ug/L | 502.16 ppb | 12:47:26 |
| 2 | Ti 334.940† | 286751.7 | 288280.6 | 495.83 ug/L | 495.83 ppb | 12:47:06 |
| 2 | Tl 190.801† | 1246.0 | 1273.0 | 495.50 ug/L | 495.50 ppb | 12:47:26 |
| 2 | U 409.014† | 15232.2 | 17291.0 | 507.09 ug/L | 507.09 ppb | 12:47:06 |
| 2 | V 292.402† | 63059.4 | 64584.9 | 504.59 ug/L | 504.59 ppb | 12:47:06 |
| 2 | Zn 213.857† | 42838.8 | 42299.0 | 497.85 ug/L | 497.85 ppb | 12:47:06 |
| 2 | SiO2† | 67558.6 | 67110.2 | 5348.1 ug/L | 5348.1 ppb | 12:48:07 |
| 3 | Sc Radial | 4021.5 | 4021.5 | 99.7 % | | 12:46:23 |
| 3 | Y RADIAL | 4461.3 | 4461.3 | 98.74 % | | 12:46:03 |
| 3 | Al 396.153Radial† | 4671.7 | 4765.6 | 5054.9 ug/L | 5054.9 ppb | 12:46:03 |
| 3 | Ca 317.933Radial† | 2501.1 | 2491.5 | 5062.2 ug/L | 5062.2 ppb | 12:46:23 |
| 3 | Fe 238.204 Radial† | 412.5 | 404.8 | 5076.7 ug/L | 5076.7 ppb | 12:46:23 |
| 3 | K 766.490 Radial† | 27153.4 | 24433.4 | 4871.3 ug/L | 4871.3 ppb | 12:46:03 |
| 3 | Mg 279.077 IEC† | 119.3 | 119.0 | 5198.3 ug/L | 5198.3 ppb | 12:46:23 |
| 3 | Na 589.592 Radial† | 24843.9 | 25380.9 | 9967.4 ug/L | 9967.4 ppb | 12:46:03 |
| 3 | Sr 421.552† | 57318.1 | 57423.8 | 488.96 ug/L | 488.96 ppb | 12:46:03 |
| 3 | Sc 361.383 | 849495.3 | 849495.3 | 101.15 % | | 12:47:31 |
| 3 | Y 371.029 | 714922.7 | 714922.7 | 99.839 % | | 12:47:31 |
| 3 | Ag 328.068† | 99931.1 | 98543.7 | 499.88 ug/L | 499.88 ppb | 12:47:36 |
| 3 | As 188.979† | 906.7 | 917.2 | 495.93 ug/L | 495.93 ppb | 12:47:57 |
| 3 | B 249.677† | 17518.6 | 17570.0 | 480.69 ug/L | 480.69 ppb | 12:47:36 |
| 3 | Ba 233.527† | 53102.6 | 52481.5 | 493.22 ug/L | 493.22 ppb | 12:47:36 |
| 3 | Be 313.107† | 1226338.0 | 1216684.5 | 495.09 ug/L | 495.09 ppb | 12:47:31 |
| 3 | Cd 226.502† | 35287.3 | 35053.3 | 494.28 ug/L | 494.28 ppb | 12:47:36 |
| 3 | Co 228.616† | 19541.7 | 19358.8 | 503.93 ug/L | 503.93 ppb | 12:47:36 |
| 3 | Cr 267.716† | 38294.8 | 37765.3 | 492.71 ug/L | 492.71 ppb | 12:47:36 |
| 3 | Cu 324.752† | 158203.0 | 150055.0 | 486.55 ug/L | 486.55 ppb | 12:47:36 |
| 3 | Mn 257.610† | 374860.7 | 370154.4 | 485.95 ug/L | 485.95 ppb | 12:47:36 |
| 3 | Mo 202.031† | 5723.1 | 5644.0 | 496.65 ug/L | 496.65 ppb | 12:47:57 |
| 3 | Ni 231.604† | 16327.3 | 16048.5 | 500.81 ug/L | 500.81 ppb | 12:47:36 |
| 3 | P 214.914† | 3601.4 | 3392.3 | 2343.5 ug/L | 2343.5 ppb | 12:47:57 |
| 3 | Pb 220.353† | 3222.3 | 3244.6 | 490.59 ug/L | 490.59 ppb | 12:47:57 |
| 3 | S 181.975 Axial† | 591.7 | 560.6 | 981.65 ug/L | 981.65 ppb | 12:47:57 |
| 3 | Sb 206.836† | 1215.3 | 1174.9 | 517.04 ug/L | 517.04 ppb | 12:47:57 |
| 3 | Se 196.026† | 601.9 | 612.0 | 506.16 ug/L | 506.16 ppb | 12:47:57 |
| 3 | Si 251.611† | 67506.7 | 66215.2 | 2459.3 ug/L | 2459.3 ppb | 12:47:36 |
| 3 | Sn 189.927† | 2269.9 | 2241.0 | 496.95 ug/L | 496.95 ppb | 12:47:57 |
| 3 | Ti 334.940† | 286155.2 | 283991.3 | 488.46 ug/L | 488.46 ppb | 12:47:36 |
| 3 | Tl 190.801† | 1247.7 | 1258.6 | 489.87 ug/L | 489.87 ppb | 12:47:57 |
| 3 | U 409.014† | 15212.8 | 17075.4 | 500.76 ug/L | 500.76 ppb | 12:47:36 |
| 3 | V 292.402† | 62953.2 | 63666.4 | 497.43 ug/L | 497.43 ppb | 12:47:36 |
| 3 | Zn 213.857† | 42677.2 | 41586.5 | 489.43 ug/L | 489.43 ppb | 12:47:36 |
| 3 | SiO2† | 67090.6 | 65775.9 | 5241.7 ug/L | 5241.7 ppb | 12:48:12 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 843078.0 | 100.38 % | 0.680 | | | 0.68% |
| Sc Radial | 4031.3 | 99.9 % | 0.54 | | | 0.54% |
| Y 371.029 | 709664.3 | 99.105 % | 0.6551 | | | 0.66% |
| Y RADIAL | 4470.9 | 98.96 % | 0.235 | | | 0.24% |
| Ag 328.068† | 99433.8 | 504.36 ug/L | 4.257 | 504.36 ppb | 4.257 | 0.84% |
| QC value within limits for Ag 328.068 Recovery = 100.87% | | | | | | |
| Al 396.153Radial† | 4757.9 | 5046.5 ug/L | 48.57 | 5046.5 ppb | 48.57 | 0.96% |
| QC value within limits for Al 396.153Radial Recovery = 100.93% | | | | | | |
| As 188.979† | 922.9 | 498.97 ug/L | 6.314 | 498.97 ppb | 6.314 | 1.27% |
| QC value within limits for As 188.979 Recovery = 99.79% | | | | | | |
| B 249.677† | 17744.3 | 485.48 ug/L | 5.408 | 485.48 ppb | 5.408 | 1.11% |
| QC value within limits for B 249.677 Recovery = 97.10% | | | | | | |
| Ba 233.527† | 52897.9 | 497.13 ug/L | 3.568 | 497.13 ppb | 3.568 | 0.72% |
| QC value within limits for Ba 233.527 Recovery = 99.43% | | | | | | |
| Be 313.107† | 1218957.8 | 496.02 ug/L | 0.807 | 496.02 ppb | 0.807 | 0.16% |
| QC value within limits for Be 313.107 Recovery = 99.20% | | | | | | |
| Ca 317.933Radial† | 2488.9 | 5056.8 ug/L | 8.06 | 5056.8 ppb | 8.06 | 0.16% |

QC value within limits for Ca 317.933 Radial Recovery = 101.14%

| | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502† | 35345.4 | 498.40 ug/L | 3.938 | 498.40 ppb | 3.938 | 0.79% |
| QC value within limits for Cd 226.502 Recovery = 99.68% | | | | | | |
| Co 228.616† | 19511.1 | 507.90 ug/L | 4.062 | 507.90 ppb | 4.062 | 0.80% |
| QC value within limits for Co 228.616 Recovery = 101.58% | | | | | | |
| Cr 267.716† | 38075.1 | 496.74 ug/L | 3.968 | 496.74 ppb | 3.968 | 0.80% |
| QC value within limits for Cr 267.716 Recovery = 99.35% | | | | | | |
| Cu 324.752† | 151684.5 | 491.83 ug/L | 4.837 | 491.83 ppb | 4.837 | 0.98% |
| QC value within limits for Cu 324.752 Recovery = 98.37% | | | | | | |
| Fe 238.204 Radial† | 401.0 | 5029.0 ug/L | 45.28 | 5029.0 ppb | 45.28 | 0.90% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.58% | | | | | | |
| K 766.490 Radial† | 24661.1 | 4916.7 ug/L | 50.18 | 4916.7 ppb | 50.18 | 1.02% |
| QC value within limits for K 766.490 Radial Recovery = 98.33% | | | | | | |
| Mg 279.077 IEC† | 119.1 | 5204.4 ug/L | 29.03 | 5204.4 ppb | 29.03 | 0.56% |
| QC value within limits for Mg 279.077 IEC Recovery = 104.09% | | | | | | |
| Mn 257.610† | 373144.8 | 489.87 ug/L | 3.761 | 489.87 ppb | 3.761 | 0.77% |
| QC value within limits for Mn 257.610 Recovery = 97.97% | | | | | | |
| Mo 202.031† | 5692.7 | 500.93 ug/L | 4.047 | 500.93 ppb | 4.047 | 0.81% |
| QC value within limits for Mo 202.031 Recovery = 100.19% | | | | | | |
| Na 589.592 Radial† | 25624.1 | 10063 ug/L | 88.6 | 10063 ppb | 88.6 | 0.88% |
| QC value within limits for Na 589.592 Radial Recovery = 100.63% | | | | | | |
| Ni 231.604† | 16161.6 | 504.34 ug/L | 3.312 | 504.34 ppb | 3.312 | 0.66% |
| QC value within limits for Ni 231.604 Recovery = 100.87% | | | | | | |
| P 214.914† | 3425.3 | 2366.3 ug/L | 19.93 | 2366.3 ppb | 19.93 | 0.84% |
| QC value within limits for P 214.914 Recovery = 94.65% | | | | | | |
| Pb 220.353† | 3274.7 | 495.14 ug/L | 4.336 | 495.14 ppb | 4.336 | 0.88% |
| QC value within limits for Pb 220.353 Recovery = 99.03% | | | | | | |
| S 181.975 Axial† | 570.7 | 999.44 ug/L | 15.425 | 999.44 ppb | 15.425 | 1.54% |
| QC value within limits for S 181.975 Axial Recovery = 99.94% | | | | | | |
| Sb 206.836† | 1186.4 | 522.11 ug/L | 4.469 | 522.11 ppb | 4.469 | 0.86% |
| QC value within limits for Sb 206.836 Recovery = 104.42% | | | | | | |
| Se 196.026† | 622.0 | 514.00 ug/L | 7.609 | 514.00 ppb | 7.609 | 1.48% |
| QC value within limits for Se 196.026 Recovery = 102.80% | | | | | | |
| Si 251.611† | 66806.5 | 2481.3 ug/L | 20.93 | 2481.3 ppb | 20.93 | 0.84% |
| QC value within limits for Si 251.611 Recovery = 99.25% | | | | | | |
| Sn 189.927† | 2263.4 | 501.92 ug/L | 4.847 | 501.92 ppb | 4.847 | 0.97% |
| QC value within limits for Sn 189.927 Recovery = 100.38% | | | | | | |
| Sr 421.552† | 57762.7 | 491.84 ug/L | 5.767 | 491.84 ppb | 5.767 | 1.17% |
| QC value within limits for Sr 421.552 Recovery = 98.37% | | | | | | |
| Ti 334.940† | 286283.4 | 492.40 ug/L | 3.711 | 492.40 ppb | 3.711 | 0.75% |
| QC value within limits for Ti 334.940 Recovery = 98.48% | | | | | | |
| Tl 190.801† | 1273.0 | 495.46 ug/L | 5.576 | 495.46 ppb | 5.576 | 1.13% |
| QC value within limits for Tl 190.801 Recovery = 99.09% | | | | | | |
| U 409.014† | 17238.0 | 505.54 ug/L | 4.226 | 505.54 ppb | 4.226 | 0.84% |
| QC value within limits for U 409.014 Recovery = 101.11% | | | | | | |
| V 292.402† | 64173.4 | 501.41 ug/L | 3.646 | 501.41 ppb | 3.646 | 0.73% |
| QC value within limits for V 292.402 Recovery = 100.28% | | | | | | |
| Zn 213.857† | 41976.1 | 494.04 ug/L | 4.264 | 494.04 ppb | 4.264 | 0.86% |
| QC value within limits for Zn 213.857 Recovery = 98.81% | | | | | | |
| SiO2† | 66197.9 | 5275.3 ug/L | 63.18 | 5275.3 ppb | 63.18 | 1.20% |
| QC value within limits for SiO2 Recovery = 98.65% | | | | | | |

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 12:50:23

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 | 4078.4 | 4078.4 | 101 % | | 12:52:35 |
| 1 | Y RADIAL | 4530.8 | 4530.8 | 100.3 % | | 12:52:15 |
| 1 | Al 396.153Radial† | -85.8 | -5.2 | -5.6017 ug/L | -5.6017 ppb | 12:52:35 |
| 1 | Ca 317.933Radial† | 24.4 | 7.0 | 14.122 ug/L | 14.122 ppb | 12:52:35 |
| 1 | Fe 238.204 Radial† | 8.9 | -0.2 | -2.3690 ug/L | -2.3690 ppb | 12:52:35 |
| 1 | K 766.490 Radial† | 2815.2 | -18.8 | -3.7799 ug/L | -3.7799 ppb | 12:52:15 |
| 1 | Mg 279.077 IEC† | 1.5 | 0.7 | 32.710 ug/L | 32.710 ppb | 12:52:35 |
| 1 | Na 589.592 Radial† | -314.3 | 150.0 | 58.903 ug/L | 58.903 ppb | 12:52:15 |
| 1 | Sr 421.552† | 71.1 | 0.3 | 0.0027 ug/L | 0.0027 ppb | 12:52:15 |
| 1 | Sc 361.383 | 825990.6 | 825990.6 | 98.349 % | | 12:53:32 |
| 1 | Y 371.029 | 705250.2 | 705250.2 | 98.488 % | | 12:53:32 |
| 1 | Ag 328.068† | 270.4 | 21.5 | 0.1103 ug/L | 0.1103 ppb | 12:53:32 |
| 1 | As 188.979† | -24.9 | -4.4 | -2.3839 ug/L | -2.3839 ppb | 12:53:52 |
| 1 | B 249.677† | -281.2 | -35.8 | -0.9832 ug/L | -0.9832 ppb | 12:53:52 |
| 1 | Ba 233.527† | 33.3 | 15.3 | 0.1439 ug/L | 0.1439 ppb | 12:53:52 |
| 1 | Be 313.107† | -4239.9 | -48.4 | -0.0199 ug/L | -0.0199 ppb | 12:53:32 |
| 1 | Cd 226.502† | -169.0 | -5.4 | -0.0762 ug/L | -0.0762 ppb | 12:53:52 |
| 1 | Co 228.616† | -46.5 | -8.4 | -0.2171 ug/L | -0.2171 ppb | 12:53:52 |
| 1 | Cr 267.716† | 102.5 | 9.2 | 0.1214 ug/L | 0.1214 ppb | 12:53:52 |
| 1 | Cu 324.752† | 6371.8 | 126.0 | 0.4099 ug/L | 0.4099 ppb | 12:53:32 |
| 1 | Mn 257.610† | 439.1 | -6.0 | -0.0094 ug/L | -0.0094 ppb | 12:53:52 |
| 1 | Mo 202.031† | 16.2 | 2.3 | 0.1985 ug/L | 0.1985 ppb | 12:53:52 |
| 1 | Ni 231.604† | 89.2 | -2.9 | -0.0894 ug/L | -0.0894 ppb | 12:53:52 |
| 1 | P 214.914† | 183.2 | 18.1 | 12.930 ug/L | 12.930 ppb | 12:53:52 |
| 1 | Pb 220.353† | -66.0 | -8.3 | -1.2528 ug/L | -1.2528 ppb | 12:53:52 |
| 1 | S 181.975 Axial† | 30.2 | 6.3 | 11.056 ug/L | 11.056 ppb | 12:53:52 |
| 1 | Sb 206.836† | 22.9 | -3.4 | -1.4271 ug/L | -1.4271 ppb | 12:53:52 |
| 1 | Se 196.026† | -15.2 | 1.5 | 1.1525 ug/L | 1.1525 ppb | 12:53:52 |
| 1 | Si 251.611† | 524.3 | 7.6 | 0.2807 ug/L | 0.2807 ppb | 12:53:52 |
| 1 | Sn 189.927† | 0.7 | -2.3 | -0.5133 ug/L | -0.5133 ppb | 12:53:52 |
| 1 | Ti 334.940† | -1118.9 | -54.3 | -0.0932 ug/L | -0.0932 ppb | 12:53:32 |
| 1 | Tl 190.801† | -22.1 | 2.6 | 1.0191 ug/L | 1.0191 ppb | 12:53:52 |
| 1 | U 409.014† | -2085.8 | -85.6 | -2.5192 ug/L | -2.5192 ppb | 12:53:32 |
| 1 | V 292.402† | -1379.9 | 24.5 | 0.1875 ug/L | 0.1875 ppb | 12:53:32 |
| 1 | Zn 213.857† | 696.7 | 102.0 | 1.2115 ug/L | 1.2115 ppb | 12:53:52 |
| 1 | SiO2† | 552.0 | 7.9 | 0.6277 ug/L | 0.6277 ppb | 12:55:03 |
| 2 | Sc Radial | 4038.2 | 4038.2 | 100 % | | 12:53:00 |
| 2 | Y RADIAL | 4445.9 | 4445.9 | 98.40 % | | 12:52:40 |
| 2 | Al 396.153Radial† | -81.9 | -2.1 | -2.3141 ug/L | -2.3141 ppb | 12:53:00 |
| 2 | Ca 317.933Radial† | 20.2 | 3.0 | 5.9981 ug/L | 5.9981 ppb | 12:53:00 |
| 2 | Fe 238.204 Radial† | 7.7 | -1.3 | -16.731 ug/L | -16.731 ppb | 12:53:00 |
| 2 | K 766.490 Radial† | 2951.3 | 144.9 | 28.894 ug/L | 28.894 ppb | 12:52:40 |
| 2 | Mg 279.077 IEC† | 0.1 | -0.6 | -26.836 ug/L | -26.836 ppb | 12:53:00 |
| 2 | Na 589.592 Radial† | -316.2 | 145.1 | 56.969 ug/L | 56.969 ppb | 12:52:40 |
| 2 | Sr 421.552† | 89.1 | 19.0 | 0.1615 ug/L | 0.1615 ppb | 12:52:40 |
| 2 | Sc 361.383 | 831254.3 | 831254.3 | 98.976 % | | 12:53:57 |
| 2 | Y 371.029 | 709547.1 | 709547.1 | 99.088 % | | 12:53:57 |
| 2 | Ag 328.068† | 136.8 | -115.2 | -0.5869 ug/L | -0.5869 ppb | 12:53:57 |
| 2 | As 188.979† | -25.7 | -5.1 | -2.7625 ug/L | -2.7625 ppb | 12:54:17 |
| 2 | B 249.677† | -310.2 | -63.3 | -1.7371 ug/L | -1.7371 ppb | 12:54:17 |
| 2 | Ba 233.527† | 21.9 | 3.6 | 0.0320 ug/L | 0.0320 ppb | 12:54:17 |
| 2 | Be 313.107† | -4291.2 | -72.9 | -0.0297 ug/L | -0.0297 ppb | 12:53:57 |
| 2 | Cd 226.502† | -162.9 | 1.9 | 0.0276 ug/L | 0.0276 ppb | 12:54:17 |
| 2 | Co 228.616† | -35.1 | 3.4 | 0.0906 ug/L | 0.0906 ppb | 12:54:17 |
| 2 | Cr 267.716† | 91.8 | -2.2 | -0.0312 ug/L | -0.0312 ppb | 12:54:17 |
| 2 | Cu 324.752† | 6512.1 | 226.7 | 0.7350 ug/L | 0.7350 ppb | 12:53:57 |
| 2 | Mn 257.610† | 444.6 | -3.2 | -0.0048 ug/L | -0.0048 ppb | 12:54:17 |
| 2 | Mo 202.031† | 20.2 | 6.2 | 0.5415 ug/L | 0.5415 ppb | 12:54:17 |
| 2 | Ni 231.604† | 94.5 | 1.9 | 0.0591 ug/L | 0.0591 ppb | 12:54:17 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 181.2 | 14.8 | 10.547 ug/L | 10.547 ppb | 12:54:17 |
| 2 | Pb 220.353† | -58.3 | -0.1 | -0.0149 ug/L | -0.0149 ppb | 12:54:17 |
| 2 | S 181.975 Axial† | 31.8 | 7.7 | 13.504 ug/L | 13.504 ppb | 12:54:17 |
| 2 | Sb 206.836† | 21.1 | -5.3 | -2.2106 ug/L | -2.2106 ppb | 12:54:17 |
| 2 | Se 196.026† | -22.5 | -5.7 | -4.6285 ug/L | -4.6285 ppb | 12:54:17 |
| 2 | Si 251.611† | 531.2 | 11.2 | 0.4112 ug/L | 0.4112 ppb | 12:54:17 |
| 2 | Sn 189.927† | 11.3 | 8.4 | 1.8515 ug/L | 1.8515 ppb | 12:54:17 |
| 2 | Ti 334.940† | -1096.0 | -24.0 | -0.0377 ug/L | -0.0377 ppb | 12:53:57 |
| 2 | Tl 190.801† | -19.7 | 5.2 | 2.0112 ug/L | 2.0112 ppb | 12:54:17 |
| 2 | U 409.014† | -2062.3 | -48.5 | -1.4240 ug/L | -1.4240 ppb | 12:53:57 |
| 2 | V 292.402† | -1479.1 | -66.9 | -0.5087 ug/L | -0.5087 ppb | 12:53:57 |
| 2 | Zn 213.857† | 680.8 | 81.4 | 0.9680 ug/L | 0.9680 ppb | 12:54:17 |
| 2 | SiO2† | 544.8 | -2.9 | -0.2493 ug/L | -0.2493 ppb | 12:55:23 |
| 3 | Sc Radial | 4048.1 | 4048.1 | 100 % | | 12:53:25 |
| 3 | Y RADIAL | 4454.2 | 4454.2 | 98.59 % | | 12:53:05 |
| 3 | Al 396.153Radial† | -70.8 | 9.1 | 9.6519 ug/L | 9.6519 ppb | 12:53:25 |
| 3 | Ca 317.933Radial† | 26.9 | 9.6 | 19.443 ug/L | 19.443 ppb | 12:53:25 |
| 3 | Fe 238.204 Radial† | 9.0 | -0.1 | -0.7986 ug/L | -0.7986 ppb | 12:53:25 |
| 3 | K 766.490 Radial† | 2816.6 | 3.4 | 0.6589 ug/L | 0.6589 ppb | 12:53:05 |
| 3 | Mg 279.077 IEC† | 0.3 | -0.4 | -16.027 ug/L | -16.027 ppb | 12:53:25 |
| 3 | Na 589.592 Radial† | -355.2 | 106.9 | 41.981 ug/L | 41.981 ppb | 12:53:05 |
| 3 | Sr 421.552† | 40.2 | -30.0 | -0.2555 ug/L | -0.2555 ppb | 12:53:05 |
| 3 | Sc 361.383 | 829647.3 | 829647.3 | 98.785 % | | 12:54:23 |
| 3 | Y 371.029 | 707961.0 | 707961.0 | 98.867 % | | 12:54:23 |
| 3 | Ag 328.068† | 168.8 | -82.5 | -0.4209 ug/L | -0.4209 ppb | 12:54:23 |
| 3 | As 188.979† | -18.5 | 2.1 | 1.1239 ug/L | 1.1239 ppb | 12:54:43 |
| 3 | B 249.677† | -269.6 | -22.8 | -0.6252 ug/L | -0.6252 ppb | 12:54:43 |
| 3 | Ba 233.527† | 27.2 | 9.0 | 0.0833 ug/L | 0.0833 ppb | 12:54:43 |
| 3 | Be 313.107† | -4218.6 | -7.8 | -0.0034 ug/L | -0.0034 ppb | 12:54:23 |
| 3 | Cd 226.502† | -158.0 | 6.4 | 0.0916 ug/L | 0.0916 ppb | 12:54:43 |
| 3 | Co 228.616† | -39.1 | -0.7 | -0.0182 ug/L | -0.0182 ppb | 12:54:43 |
| 3 | Cr 267.716† | 98.2 | 4.4 | 0.0555 ug/L | 0.0555 ppb | 12:54:43 |
| 3 | Cu 324.752† | 6325.2 | 50.2 | 0.1609 ug/L | 0.1609 ppb | 12:54:23 |
| 3 | Mn 257.610† | 458.2 | 11.4 | 0.0156 ug/L | 0.0156 ppb | 12:54:43 |
| 3 | Mo 202.031† | 13.9 | -0.2 | -0.0140 ug/L | -0.0140 ppb | 12:54:43 |
| 3 | Ni 231.604† | 89.2 | -3.3 | -0.1034 ug/L | -0.1034 ppb | 12:54:43 |
| 3 | P 214.914† | 168.4 | 2.3 | 1.6113 ug/L | 1.6113 ppb | 12:54:43 |
| 3 | Pb 220.353† | -54.3 | 3.8 | 0.5815 ug/L | 0.5815 ppb | 12:54:43 |
| 3 | S 181.975 Axial† | 33.6 | 9.6 | 16.791 ug/L | 16.791 ppb | 12:54:43 |
| 3 | Sb 206.836† | 20.1 | -6.3 | -2.6748 ug/L | -2.6748 ppb | 12:54:43 |
| 3 | Se 196.026† | -18.8 | -2.1 | -1.6605 ug/L | -1.6605 ppb | 12:54:43 |
| 3 | Si 251.611† | 533.5 | 14.6 | 0.5435 ug/L | 0.5435 ppb | 12:54:43 |
| 3 | Sn 189.927† | 3.6 | 0.5 | 0.1252 ug/L | 0.1252 ppb | 12:54:43 |
| 3 | Ti 334.940† | -1134.9 | -65.5 | -0.1103 ug/L | -0.1103 ppb | 12:54:23 |
| 3 | Tl 190.801† | -29.7 | -4.9 | -1.9137 ug/L | -1.9137 ppb | 12:54:43 |
| 3 | U 409.014† | -1894.3 | 117.6 | 3.4589 ug/L | 3.4589 ppb | 12:54:23 |
| 3 | V 292.402† | -1462.4 | -52.9 | -0.4012 ug/L | -0.4012 ppb | 12:54:23 |
| 3 | Zn 213.857† | 697.2 | 99.3 | 1.1803 ug/L | 1.1803 ppb | 12:54:43 |
| 3 | SiO2† | 555.6 | 9.0 | 0.7231 ug/L | 0.7231 ppb | 12:55:43 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 828964.0 | 98.703 % | | 0.3212 | | | 0.33% |
| Sc Radial | 4054.9 | 101 % | | 0.5 | | | 0.52% |
| Y 371.029 | 707586.1 | 98.815 % | | 0.3034 | | | 0.31% |
| Y RADIAL | 4477.0 | 99.09 % | | 1.036 | | | 1.05% |
| Ag 328.068† | -58.7 | -0.2992 ug/L | | 0.36422 | -0.2992 ppb | 0.36422 | 121.74% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 0.6 | 0.5787 ug/L | | 8.02774 | 0.5787 ppb | 8.02774 | >999.9% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -2.5 | -1.3408 ug/L | | 2.14290 | -1.3408 ppb | 2.14290 | 159.82% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | -40.6 | -1.1152 ug/L | | 0.56754 | -1.1152 ppb | 0.56754 | 50.89% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 9.3 | 0.0864 ug/L | | 0.05603 | 0.0864 ppb | 0.05603 | 64.85% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -43.0 | -0.0177 ug/L | | 0.01327 | -0.0177 ppb | 0.01327 | 75.15% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 6.5 | 13.188 ug/L | | 6.7711 | 13.188 ppb | 6.7711 | 51.34% |

| | | | | | | |
|--|-------|--------------|----------|-------------|----------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | 1.0 | 0.0143 ug/L | 0.08473 | 0.0143 ppb | 0.08473 | 591.05% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -1.9 | -0.0482 ug/L | 0.15603 | -0.0482 ppb | 0.15603 | 323.64% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 3.8 | 0.0486 ug/L | 0.07653 | 0.0486 ppb | 0.07653 | 157.54% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 134.3 | 0.4352 ug/L | 0.28788 | 0.4352 ppb | 0.28788 | 66.14% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | -0.5 | -6.6329 ug/L | 8.78042 | -6.6329 ppb | 8.78042 | 132.38% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | 43.2 | 8.5909 ug/L | 17.72225 | 8.5909 ppb | 17.72225 | 206.29% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | -0.1 | -3.3842 ug/L | 31.72242 | -3.3842 ppb | 31.72242 | 937.37% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 0.7 | 0.0005 ug/L | 0.01329 | 0.0005 ppb | 0.01329 | >999.9% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | 2.8 | 0.2420 ug/L | 0.28030 | 0.2420 ppb | 0.28030 | 115.82% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 134.0 | 52.618 ug/L | 9.2624 | 52.618 ppb | 9.2624 | 17.60% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -1.4 | -0.0446 ug/L | 0.09007 | -0.0446 ppb | 0.09007 | 202.01% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 11.7 | 8.3628 ug/L | 5.96708 | 8.3628 ppb | 5.96708 | 71.35% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | -1.5 | -0.2287 ug/L | 0.93564 | -0.2287 ppb | 0.93564 | 409.03% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 7.9 | 13.783 ug/L | 2.8777 | 13.783 ppb | 2.8777 | 20.88% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | -5.0 | -2.1042 ug/L | 0.63064 | -2.1042 ppb | 0.63064 | 29.97% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -2.1 | -1.7122 ug/L | 2.89089 | -1.7122 ppb | 2.89089 | 168.85% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 11.1 | 0.4118 ug/L | 0.13139 | 0.4118 ppb | 0.13139 | 31.90% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 2.2 | 0.4878 ug/L | 1.22343 | 0.4878 ppb | 1.22343 | 250.80% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -3.6 | -0.0304 ug/L | 0.21048 | -0.0304 ppb | 0.21048 | 691.42% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | -48.0 | -0.0804 ug/L | 0.03797 | -0.0804 ppb | 0.03797 | 47.22% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 1.0 | 0.3722 ug/L | 2.04086 | 0.3722 ppb | 2.04086 | 548.33% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | -5.5 | -0.1614 ug/L | 3.18274 | -0.1614 ppb | 3.18274 | >999.9% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | -31.8 | -0.2408 ug/L | 0.37479 | -0.2408 ppb | 0.37479 | 155.64% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 94.2 | 1.1199 ug/L | 0.13250 | 1.1199 ppb | 0.13250 | 11.83% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 4.7 | 0.3672 ug/L | 0.53596 | 0.3672 ppb | 0.53596 | 145.98% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 13:50:52

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 | 4044.0 | 4044.0 | 100 % | | 13:53:05 |
| 1 | Y RADIAL | 4505.9 | 4505.9 | 99.73 % | | 13:52:45 |
| 1 | Al 396.153Radial† | 4688.7 | 4756.5 | 5045.1 ug/L | 5045.1 ppb | 13:52:45 |
| 1 | Ca 317.933Radial† | 2520.7 | 2497.2 | 5073.7 ug/L | 5073.7 ppb | 13:53:05 |
| 1 | Fe 238.204 Radial† | 421.8 | 411.7 | 5163.5 ug/L | 5163.5 ppb | 13:53:05 |
| 1 | K 766.490 Radial† | 27547.3 | 24674.6 | 4919.4 ug/L | 4919.4 ppb | 13:52:45 |
| 1 | Mg 279.077 IEC† | 120.5 | 119.5 | 5219.9 ug/L | 5219.9 ppb | 13:53:05 |
| 1 | Na 589.592 Radial† | 25649.5 | 26045.7 | 10229 ug/L | 10229 ppb | 13:52:45 |
| 1 | Sr 421.552† | 58843.0 | 58624.5 | 499.18 ug/L | 499.18 ppb | 13:52:45 |
| 1 | Sc 361.383 | 840360.4 | 840360.4 | 100.06 % | | 13:54:02 |
| 1 | Y 371.029 | 708486.1 | 708486.1 | 98.940 % | | 13:54:02 |
| 1 | Ag 328.068† | 100353.9 | 100040.1 | 507.47 ug/L | 507.47 ppb | 13:54:07 |
| 1 | As 188.979† | 884.1 | 904.4 | 489.15 ug/L | 489.15 ppb | 13:54:27 |
| 1 | B 249.677† | 17599.9 | 17839.5 | 488.08 ug/L | 488.08 ppb | 13:54:07 |
| 1 | Ba 233.527† | 53110.2 | 53059.8 | 498.66 ug/L | 498.66 ppb | 13:54:07 |
| 1 | Be 313.107† | 1217906.0 | 1221436.8 | 497.03 ug/L | 497.03 ppb | 13:54:02 |
| 1 | Cd 226.502† | 35270.5 | 35415.7 | 499.38 ug/L | 499.38 ppb | 13:54:07 |
| 1 | Co 228.616† | 19490.9 | 19518.1 | 508.07 ug/L | 508.07 ppb | 13:54:07 |
| 1 | Cr 267.716† | 38252.1 | 38134.2 | 497.52 ug/L | 497.52 ppb | 13:54:07 |
| 1 | Cu 324.752† | 159121.0 | 152672.6 | 495.04 ug/L | 495.04 ppb | 13:54:07 |
| 1 | Mn 257.610† | 380251.8 | 379570.9 | 498.31 ug/L | 498.31 ppb | 13:54:02 |
| 1 | Mo 202.031† | 5688.7 | 5671.1 | 499.05 ug/L | 499.05 ppb | 13:54:27 |
| 1 | Ni 231.604† | 16270.0 | 16166.7 | 504.50 ug/L | 504.50 ppb | 13:54:07 |
| 1 | P 214.914† | 3604.2 | 3433.8 | 2371.6 ug/L | 2371.6 ppb | 13:54:27 |
| 1 | Pb 220.353† | 3232.9 | 3289.8 | 497.39 ug/L | 497.39 ppb | 13:54:27 |
| 1 | S 181.975 Axial† | 595.7 | 571.0 | 999.84 ug/L | 999.84 ppb | 13:54:27 |
| 1 | Sb 206.836† | 1210.8 | 1183.4 | 520.77 ug/L | 520.77 ppb | 13:54:27 |
| 1 | Se 196.026† | 600.5 | 617.1 | 510.51 ug/L | 510.51 ppb | 13:54:27 |
| 1 | Si 251.611† | 67799.6 | 67233.4 | 2497.2 ug/L | 2497.2 ppb | 13:54:07 |
| 1 | Sn 189.927† | 2257.4 | 2253.0 | 499.60 ug/L | 499.60 ppb | 13:54:27 |
| 1 | Ti 334.940† | 286682.7 | 287593.8 | 494.66 ug/L | 494.66 ppb | 13:54:07 |
| 1 | Tl 190.801† | 1241.7 | 1266.0 | 492.81 ug/L | 492.81 ppb | 13:54:27 |
| 1 | U 409.014† | 15330.7 | 17356.7 | 509.01 ug/L | 509.01 ppb | 13:54:07 |
| 1 | V 292.402† | 63122.5 | 64512.1 | 503.98 ug/L | 503.98 ppb | 13:54:07 |
| 1 | Zn 213.857† | 42709.5 | 42077.4 | 495.22 ug/L | 495.22 ppb | 13:54:07 |
| 1 | SiO2† | 68322.1 | 67727.7 | 5397.5 ug/L | 5397.5 ppb | 13:55:35 |
| 2 | Sc Radial | 4038.4 | 4038.4 | 100 % | | 13:53:30 |
| 2 | Y RADIAL | 4419.7 | 4419.7 | 97.82 % | | 13:53:10 |
| 2 | Al 396.153Radial† | 4591.9 | 4666.4 | 4948.9 ug/L | 4948.9 ppb | 13:53:10 |
| 2 | Ca 317.933Radial† | 2514.1 | 2494.1 | 5067.4 ug/L | 5067.4 ppb | 13:53:30 |
| 2 | Fe 238.204 Radial† | 415.6 | 406.2 | 5094.2 ug/L | 5094.2 ppb | 13:53:30 |
| 2 | K 766.490 Radial† | 27285.7 | 24451.5 | 4874.9 ug/L | 4874.9 ppb | 13:53:10 |
| 2 | Mg 279.077 IEC† | 122.4 | 121.5 | 5308.3 ug/L | 5308.3 ppb | 13:53:30 |
| 2 | Na 589.592 Radial† | 25081.2 | 25513.6 | 10020 ug/L | 10020 ppb | 13:53:10 |
| 2 | Sr 421.552† | 57525.7 | 57390.4 | 488.67 ug/L | 488.67 ppb | 13:53:10 |
| 2 | Sc 361.383 | 846854.3 | 846854.3 | 100.83 % | | 13:54:33 |
| 2 | Y 371.029 | 712864.1 | 712864.1 | 99.552 % | | 13:54:33 |
| 2 | Ag 328.068† | 101347.1 | 100256.1 | 508.53 ug/L | 508.53 ppb | 13:54:38 |
| 2 | As 188.979† | 912.5 | 925.7 | 500.57 ug/L | 500.57 ppb | 13:54:58 |
| 2 | B 249.677† | 17842.5 | 17945.2 | 490.98 ug/L | 490.98 ppb | 13:54:38 |
| 2 | Ba 233.527† | 53622.2 | 53160.5 | 499.60 ug/L | 499.60 ppb | 13:54:38 |
| 2 | Be 313.107† | 1228699.1 | 1222807.1 | 497.59 ug/L | 497.59 ppb | 13:54:33 |
| 2 | Cd 226.502† | 35543.3 | 35415.9 | 499.40 ug/L | 499.40 ppb | 13:54:38 |
| 2 | Co 228.616† | 19755.9 | 19631.6 | 511.03 ug/L | 511.03 ppb | 13:54:38 |
| 2 | Cr 267.716† | 38587.6 | 38173.8 | 498.03 ug/L | 498.03 ppb | 13:54:38 |
| 2 | Cu 324.752† | 160676.3 | 152995.6 | 496.08 ug/L | 496.08 ppb | 13:54:38 |
| 2 | Mn 257.610† | 384358.4 | 380729.4 | 499.82 ug/L | 499.82 ppb | 13:54:33 |
| 2 | Mo 202.031† | 5758.8 | 5697.1 | 501.32 ug/L | 501.32 ppb | 13:54:58 |
| 2 | Ni 231.604† | 16448.7 | 16219.2 | 506.14 ug/L | 506.14 ppb | 13:54:38 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3644.8 | 3446.5 | 2380.6 ug/L | 2380.6 ppb | 13:54:58 |
| 2 | Pb 220.353† | 3256.2 | 3288.1 | 497.13 ug/L | 497.13 ppb | 13:54:58 |
| 2 | S 181.975 Axial† | 603.4 | 574.0 | 1005.3 ug/L | 1005.3 ppb | 13:54:58 |
| 2 | Sb 206.836† | 1238.5 | 1201.6 | 528.66 ug/L | 528.66 ppb | 13:54:58 |
| 2 | Se 196.026† | 609.3 | 621.2 | 513.56 ug/L | 513.56 ppb | 13:54:58 |
| 2 | Si 251.611† | 68622.5 | 67529.9 | 2508.2 ug/L | 2508.2 ppb | 13:54:38 |
| 2 | Sn 189.927† | 2307.4 | 2285.2 | 506.73 ug/L | 506.73 ppb | 13:54:58 |
| 2 | Ti 334.940† | 289790.3 | 288478.6 | 496.17 ug/L | 496.17 ppb | 13:54:38 |
| 2 | Tl 190.801† | 1272.6 | 1287.2 | 501.01 ug/L | 501.01 ppb | 13:54:58 |
| 2 | U 409.014† | 15604.4 | 17510.6 | 513.55 ug/L | 513.55 ppb | 13:54:38 |
| 2 | V 292.402† | 63590.2 | 64492.2 | 503.88 ug/L | 503.88 ppb | 13:54:38 |
| 2 | Zn 213.857† | 43096.8 | 42134.2 | 495.89 ug/L | 495.89 ppb | 13:54:38 |
| 2 | SiO2† | 68125.9 | 67009.5 | 5340.1 ug/L | 5340.1 ppb | 13:55:40 |
| 3 | Sc Radial | 4046.3 | 4046.3 | 100 % | | 13:53:55 |
| 3 | Y RADIAL | 4454.7 | 4454.7 | 98.60 % | | 13:53:35 |
| 3 | Al 396.153Radial† | 4627.1 | 4692.5 | 4976.9 ug/L | 4976.9 ppb | 13:53:35 |
| 3 | Ca 317.933Radial† | 2528.4 | 2503.4 | 5086.3 ug/L | 5086.3 ppb | 13:53:55 |
| 3 | Fe 238.204 Radial† | 420.9 | 410.6 | 5149.7 ug/L | 5149.7 ppb | 13:53:55 |
| 3 | K 766.490 Radial† | 27392.2 | 24504.7 | 4885.5 ug/L | 4885.5 ppb | 13:53:35 |
| 3 | Mg 279.077 IEC† | 122.6 | 121.6 | 5309.9 ug/L | 5309.9 ppb | 13:53:55 |
| 3 | Na 589.592 Radial† | 25262.9 | 25646.1 | 10072 ug/L | 10072 ppb | 13:53:35 |
| 3 | Sr 421.552† | 57999.4 | 57751.1 | 491.74 ug/L | 491.74 ppb | 13:53:35 |
| 3 | Sc 361.383 | 842137.7 | 842137.7 | 100.27 % | | 13:55:04 |
| 3 | Y 371.029 | 708731.8 | 708731.8 | 98.975 % | | 13:55:04 |
| 3 | Ag 328.068† | 99642.5 | 99119.1 | 502.81 ug/L | 502.81 ppb | 13:55:09 |
| 3 | As 188.979† | 901.9 | 920.3 | 497.61 ug/L | 497.61 ppb | 13:55:29 |
| 3 | B 249.677† | 17475.1 | 17677.9 | 483.64 ug/L | 483.64 ppb | 13:55:09 |
| 3 | Ba 233.527† | 52913.4 | 52751.5 | 495.76 ug/L | 495.76 ppb | 13:55:09 |
| 3 | Be 313.107† | 1218643.0 | 1219603.0 | 496.28 ug/L | 496.28 ppb | 13:55:04 |
| 3 | Cd 226.502† | 35055.1 | 35126.5 | 495.30 ug/L | 495.30 ppb | 13:55:09 |
| 3 | Co 228.616† | 19413.2 | 19399.5 | 504.99 ug/L | 504.99 ppb | 13:55:09 |
| 3 | Cr 267.716† | 38045.2 | 37847.1 | 493.78 ug/L | 493.78 ppb | 13:55:09 |
| 3 | Cu 324.752† | 157947.7 | 151166.8 | 490.16 ug/L | 490.16 ppb | 13:55:09 |
| 3 | Mn 257.610† | 381504.5 | 380018.1 | 498.89 ug/L | 498.89 ppb | 13:55:04 |
| 3 | Mo 202.031† | 5703.1 | 5673.5 | 499.25 ug/L | 499.25 ppb | 13:55:29 |
| 3 | Ni 231.604† | 16230.9 | 16093.3 | 502.21 ug/L | 502.21 ppb | 13:55:09 |
| 3 | P 214.914† | 3618.6 | 3440.6 | 2377.4 ug/L | 2377.4 ppb | 13:55:29 |
| 3 | Pb 220.353† | 3231.4 | 3281.5 | 496.13 ug/L | 496.13 ppb | 13:55:29 |
| 3 | S 181.975 Axial† | 596.2 | 570.2 | 998.49 ug/L | 998.49 ppb | 13:55:29 |
| 3 | Sb 206.836† | 1212.1 | 1182.2 | 520.29 ug/L | 520.29 ppb | 13:55:29 |
| 3 | Se 196.026† | 597.2 | 612.5 | 506.77 ug/L | 506.77 ppb | 13:55:29 |
| 3 | Si 251.611† | 67449.7 | 66741.4 | 2478.9 ug/L | 2478.9 ppb | 13:55:09 |
| 3 | Sn 189.927† | 2269.8 | 2260.6 | 501.28 ug/L | 501.28 ppb | 13:55:29 |
| 3 | Ti 334.940† | 285085.7 | 285396.4 | 490.87 ug/L | 490.87 ppb | 13:55:09 |
| 3 | Tl 190.801† | 1250.0 | 1271.6 | 494.99 ug/L | 494.99 ppb | 13:55:29 |
| 3 | U 409.014† | 15215.1 | 17209.1 | 504.68 ug/L | 504.68 ppb | 13:55:09 |
| 3 | V 292.402† | 62618.2 | 63876.0 | 499.08 ug/L | 499.08 ppb | 13:55:09 |
| 3 | Zn 213.857† | 42482.8 | 41761.2 | 491.48 ug/L | 491.48 ppb | 13:55:09 |
| 3 | SiO2† | 68406.1 | 67667.3 | 5392.7 ug/L | 5392.7 ppb | 13:55:45 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 843117.5 | 100.39 % | 0.400 | | | 0.40% |
| Sc Radial | 4042.9 | 100 % | 0.1 | | | 0.10% |
| Y 371.029 | 710027.3 | 99.155 % | 0.3435 | | | 0.35% |
| Y RADIAL | 4460.1 | 98.72 % | 0.959 | | | 0.97% |
| Ag 328.068† | 99805.1 | 506.27 ug/L | 3.047 | 506.27 ppb | 3.047 | 0.60% |
| QC value within limits for Ag 328.068 Recovery = 101.25% | | | | | | |
| Al 396.153Radial† | 4705.1 | 4990.3 ug/L | 49.46 | 4990.3 ppb | 49.46 | 0.99% |
| QC value within limits for Al 396.153Radial Recovery = 99.81% | | | | | | |
| As 188.979† | 916.8 | 495.78 ug/L | 5.924 | 495.78 ppb | 5.924 | 1.19% |
| QC value within limits for As 188.979 Recovery = 99.16% | | | | | | |
| B 249.677† | 17820.8 | 487.57 ug/L | 3.696 | 487.57 ppb | 3.696 | 0.76% |
| QC value within limits for B 249.677 Recovery = 97.51% | | | | | | |
| Ba 233.527† | 52990.6 | 498.01 ug/L | 2.003 | 498.01 ppb | 2.003 | 0.40% |
| QC value within limits for Ba 233.527 Recovery = 99.60% | | | | | | |
| Be 313.107† | 1221282.3 | 496.97 ug/L | 0.659 | 496.97 ppb | 0.659 | 0.13% |
| QC value within limits for Be 313.107 Recovery = 99.39% | | | | | | |
| Ca 317.933Radial† | 2498.2 | 5075.8 ug/L | 9.63 | 5075.8 ppb | 9.63 | 0.19% |

QC value within limits for Ca 317.933 Radial Recovery = 101.52%

| | | | | | | |
|---|----------|-------------|-------|------------|-------|-------|
| Cd 226.502† | 35319.4 | 498.03 ug/L | 2.359 | 498.03 ppb | 2.359 | 0.47% |
| QC value within limits for Cd 226.502 Recovery = 99.61% | | | | | | |
| Co 228.616† | 19516.4 | 508.03 ug/L | 3.018 | 508.03 ppb | 3.018 | 0.59% |
| QC value within limits for Co 228.616 Recovery = 101.61% | | | | | | |
| Cr 267.716† | 38051.7 | 496.44 ug/L | 2.322 | 496.44 ppb | 2.322 | 0.47% |
| QC value within limits for Cr 267.716 Recovery = 99.29% | | | | | | |
| Cu 324.752† | 152278.4 | 493.76 ug/L | 3.162 | 493.76 ppb | 3.162 | 0.64% |
| QC value within limits for Cu 324.752 Recovery = 98.75% | | | | | | |
| Fe 238.204 Radial† | 409.5 | 5135.8 ug/L | 36.69 | 5135.8 ppb | 36.69 | 0.71% |
| QC value within limits for Fe 238.204 Radial Recovery = 102.72% | | | | | | |
| K 766.490 Radial† | 24543.6 | 4893.3 ug/L | 23.22 | 4893.3 ppb | 23.22 | 0.47% |
| QC value within limits for K 766.490 Radial Recovery = 97.87% | | | | | | |
| Mg 279.077 IEC† | 120.9 | 5279.4 ug/L | 51.52 | 5279.4 ppb | 51.52 | 0.98% |
| QC value within limits for Mg 279.077 IEC Recovery = 105.59% | | | | | | |
| Mn 257.610† | 380106.2 | 499.01 ug/L | 0.761 | 499.01 ppb | 0.761 | 0.15% |
| QC value within limits for Mn 257.610 Recovery = 99.80% | | | | | | |
| Mo 202.031† | 5680.6 | 499.87 ug/L | 1.259 | 499.87 ppb | 1.259 | 0.25% |
| QC value within limits for Mo 202.031 Recovery = 99.97% | | | | | | |
| Na 589.592 Radial† | 25735.1 | 10107 ug/L | 108.8 | 10107 ppb | 108.8 | 1.08% |
| QC value within limits for Na 589.592 Radial Recovery = 101.07% | | | | | | |
| Ni 231.604† | 16159.7 | 504.28 ug/L | 1.972 | 504.28 ppb | 1.972 | 0.39% |
| QC value within limits for Ni 231.604 Recovery = 100.86% | | | | | | |
| P 214.914† | 3440.3 | 2376.5 ug/L | 4.57 | 2376.5 ppb | 4.57 | 0.19% |
| QC value within limits for P 214.914 Recovery = 95.06% | | | | | | |
| Pb 220.353† | 3286.5 | 496.88 ug/L | 0.664 | 496.88 ppb | 0.664 | 0.13% |
| QC value within limits for Pb 220.353 Recovery = 99.38% | | | | | | |
| S 181.975 Axial† | 571.7 | 1001.2 ug/L | 3.58 | 1001.2 ppb | 3.58 | 0.36% |
| QC value within limits for S 181.975 Axial Recovery = 100.12% | | | | | | |
| Sb 206.836† | 1189.1 | 523.24 ug/L | 4.705 | 523.24 ppb | 4.705 | 0.90% |
| QC value within limits for Sb 206.836 Recovery = 104.65% | | | | | | |
| Se 196.026† | 616.9 | 510.28 ug/L | 3.403 | 510.28 ppb | 3.403 | 0.67% |
| QC value within limits for Se 196.026 Recovery = 102.06% | | | | | | |
| Si 251.611† | 67168.2 | 2494.7 ug/L | 14.82 | 2494.7 ppb | 14.82 | 0.59% |
| QC value within limits for Si 251.611 Recovery = 99.79% | | | | | | |
| Sn 189.927† | 2266.3 | 502.54 ug/L | 3.731 | 502.54 ppb | 3.731 | 0.74% |
| QC value within limits for Sn 189.927 Recovery = 100.51% | | | | | | |
| Sr 421.552† | 57922.0 | 493.20 ug/L | 5.403 | 493.20 ppb | 5.403 | 1.10% |
| QC value within limits for Sr 421.552 Recovery = 98.64% | | | | | | |
| Ti 334.940† | 287156.3 | 493.90 ug/L | 2.728 | 493.90 ppb | 2.728 | 0.55% |
| QC value within limits for Ti 334.940 Recovery = 98.78% | | | | | | |
| Tl 190.801† | 1274.9 | 496.27 ug/L | 4.247 | 496.27 ppb | 4.247 | 0.86% |
| QC value within limits for Tl 190.801 Recovery = 99.25% | | | | | | |
| U 409.014† | 17358.8 | 509.08 ug/L | 4.435 | 509.08 ppb | 4.435 | 0.87% |
| QC value within limits for U 409.014 Recovery = 101.82% | | | | | | |
| V 292.402† | 64293.4 | 502.32 ug/L | 2.800 | 502.32 ppb | 2.800 | 0.56% |
| QC value within limits for V 292.402 Recovery = 100.46% | | | | | | |
| Zn 213.857† | 41990.9 | 494.20 ug/L | 2.373 | 494.20 ppb | 2.373 | 0.48% |
| QC value within limits for Zn 213.857 Recovery = 98.84% | | | | | | |
| SiO2† | 67468.2 | 5376.8 ug/L | 31.86 | 5376.8 ppb | 31.86 | 0.59% |
| QC value within limits for SiO2 Recovery = 100.55% | | | | | | |

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/25/2010 13:57:56
 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 | 4058.9 | 4058.9 | 101 % | | 14:00:08 |
| 1 | Y RADIAL | 4458.4 | 4458.4 | 98.68 % | | 13:59:48 |
| 1 | Al 396.153Radial† | -73.2 | 6.9 | 7.3267 ug/L | 7.3267 ppb | 14:00:08 |
| 1 | Ca 317.933Radial† | 30.1 | 12.7 | 25.764 ug/L | 25.764 ppb | 14:00:08 |
| 1 | Fe 238.204 Radial† | 9.5 | 0.4 | 5.6043 ug/L | 5.6043 ppb | 14:00:08 |
| 1 | K 766.490 Radial† | 2743.0 | -77.2 | -15.420 ug/L | -15.420 ppb | 13:59:48 |
| 1 | Mg 279.077 IEC† | 3.1 | 2.4 | 105.62 ug/L | 105.62 ppb | 14:00:08 |
| 1 | Na 589.592 Radial† | -447.7 | 16.0 | 6.2689 ug/L | 6.2689 ppb | 13:59:48 |
| 1 | Sr 421.552† | 140.1 | 69.2 | 0.5890 ug/L | 0.5890 ppb | 13:59:48 |
| 1 | Sc 361.383 | 838243.7 | 838243.7 | 99.808 % | | 14:01:05 |
| 1 | Y 371.029 | 715520.3 | 715520.3 | 99.923 % | | 14:01:05 |
| 1 | Ag 328.068† | 167.6 | -85.4 | -0.4265 ug/L | -0.4265 ppb | 14:01:05 |
| 1 | As 188.979† | -25.3 | -4.5 | -2.4064 ug/L | -2.4064 ppb | 14:01:25 |
| 1 | B 249.677† | -220.5 | 29.2 | 0.8029 ug/L | 0.8029 ppb | 14:01:25 |
| 1 | Ba 233.527† | 69.2 | 50.8 | 0.4778 ug/L | 0.4778 ppb | 14:01:25 |
| 1 | Be 313.107† | -4065.1 | 189.8 | 0.0776 ug/L | 0.0776 ppb | 14:01:05 |
| 1 | Cd 226.502† | -151.5 | 14.6 | 0.2052 ug/L | 0.2052 ppb | 14:01:25 |
| 1 | Co 228.616† | -37.4 | 1.5 | 0.0391 ug/L | 0.0391 ppb | 14:01:25 |
| 1 | Cr 267.716† | 113.3 | 18.6 | 0.2431 ug/L | 0.2431 ppb | 14:01:25 |
| 1 | Cu 324.752† | 6616.3 | 276.2 | 0.8959 ug/L | 0.8959 ppb | 14:01:05 |
| 1 | Mn 257.610† | 1002.3 | 551.8 | 0.7202 ug/L | 0.7202 ppb | 14:01:25 |
| 1 | Mo 202.031† | 19.2 | 5.0 | 0.4417 ug/L | 0.4417 ppb | 14:01:25 |
| 1 | Ni 231.604† | 89.6 | -3.9 | -0.1205 ug/L | -0.1205 ppb | 14:01:25 |
| 1 | P 214.914† | 181.8 | 14.0 | 9.8659 ug/L | 9.8659 ppb | 14:01:25 |
| 1 | Pb 220.353† | -54.2 | 4.5 | 0.6826 ug/L | 0.6826 ppb | 14:01:25 |
| 1 | S 181.975 Axial† | 25.0 | 0.7 | 1.2449 ug/L | 1.2449 ppb | 14:01:25 |
| 1 | Sb 206.836† | 15.8 | -10.8 | -4.5919 ug/L | -4.5919 ppb | 14:01:25 |
| 1 | Se 196.026† | -17.1 | -0.2 | -0.1145 ug/L | -0.1145 ppb | 14:01:25 |
| 1 | Si 251.611† | 591.2 | 66.9 | 2.4852 ug/L | 2.4852 ppb | 14:01:25 |
| 1 | Sn 189.927† | 4.0 | 0.9 | 0.2085 ug/L | 0.2085 ppb | 14:01:25 |
| 1 | Ti 334.940† | -950.1 | 131.4 | 0.2207 ug/L | 0.2207 ppb | 14:01:05 |
| 1 | Tl 190.801† | -20.2 | 4.8 | 1.8662 ug/L | 1.8662 ppb | 14:01:25 |
| 1 | U 409.014† | -2022.9 | 8.4 | 0.2451 ug/L | 0.2451 ppb | 14:01:05 |
| 1 | V 292.402† | -1329.8 | 95.1 | 0.7411 ug/L | 0.7411 ppb | 14:01:05 |
| 1 | Zn 213.857† | 720.8 | 115.7 | 1.3738 ug/L | 1.3738 ppb | 14:01:25 |
| 1 | SiO2† | 613.7 | 61.5 | 4.8993 ug/L | 4.8993 ppb | 14:02:21 |
| 2 | Sc Radial | 3830.0 | 3830.0 | 94.9 % | | 14:00:33 |
| 2 | Y RADIAL | 4455.2 | 4455.2 | 98.61 % | | 14:00:13 |
| 2 | Al 396.153Radial† | -72.3 | 3.5 | 3.6648 ug/L | 3.6648 ppb | 14:00:33 |
| 2 | Ca 317.933Radial† | 37.9 | 22.7 | 46.157 ug/L | 46.157 ppb | 14:00:33 |
| 2 | Fe 238.204 Radial† | 11.2 | 2.8 | 34.408 ug/L | 34.408 ppb | 14:00:33 |
| 2 | K 766.490 Radial† | 2966.2 | 320.8 | 63.999 ug/L | 63.999 ppb | 14:00:13 |
| 2 | Mg 279.077 IEC† | -0.4 | -1.1 | -49.444 ug/L | -49.444 ppb | 14:00:33 |
| 2 | Na 589.592 Radial† | -323.6 | 120.0 | 47.138 ug/L | 47.138 ppb | 14:00:13 |
| 2 | Sr 421.552† | 200.6 | 141.3 | 1.2028 ug/L | 1.2028 ppb | 14:00:13 |
| 2 | Sc 361.383 | 840601.1 | 840601.1 | 100.09 % | | 14:01:30 |
| 2 | Y 371.029 | 717400.3 | 717400.3 | 100.19 % | | 14:01:30 |
| 2 | Ag 328.068† | 222.7 | -30.9 | -0.1451 ug/L | -0.1451 ppb | 14:01:30 |
| 2 | As 188.979† | -23.5 | -2.7 | -1.4315 ug/L | -1.4315 ppb | 14:01:50 |
| 2 | B 249.677† | -233.5 | 16.9 | 0.4575 ug/L | 0.4575 ppb | 14:01:50 |
| 2 | Ba 233.527† | 99.6 | 81.0 | 0.7598 ug/L | 0.7598 ppb | 14:01:50 |
| 2 | Be 313.107† | -4211.1 | 55.4 | 0.0226 ug/L | 0.0226 ppb | 14:01:30 |
| 2 | Cd 226.502† | -151.0 | 15.6 | 0.2154 ug/L | 0.2154 ppb | 14:01:50 |
| 2 | Co 228.616† | -34.0 | 4.9 | 0.1279 ug/L | 0.1279 ppb | 14:01:50 |
| 2 | Cr 267.716† | 124.2 | 29.1 | 0.3832 ug/L | 0.3832 ppb | 14:01:50 |
| 2 | Cu 324.752† | 6594.0 | 235.4 | 0.7662 ug/L | 0.7662 ppb | 14:01:30 |
| 2 | Mn 257.610† | 935.9 | 482.6 | 0.6386 ug/L | 0.6386 ppb | 14:01:50 |
| 2 | Mo 202.031† | 17.6 | 3.3 | 0.2977 ug/L | 0.2977 ppb | 14:01:50 |
| 2 | Ni 231.604† | 90.0 | -3.7 | -0.1161 ug/L | -0.1161 ppb | 14:01:50 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 186.0 | 17.6 | 12.465 ug/L | 12.465 ppb | 14:01:50 |
| 2 | Pb 220.353† | -63.0 | -4.2 | -0.6330 ug/L | -0.6330 ppb | 14:01:50 |
| 2 | S 181.975 Axial† | 34.1 | 9.7 | 16.995 ug/L | 16.995 ppb | 14:01:50 |
| 2 | Sb 206.836† | 32.2 | 5.5 | 2.3592 ug/L | 2.3592 ppb | 14:01:50 |
| 2 | Se 196.026† | -19.0 | -2.0 | -1.4891 ug/L | -1.4891 ppb | 14:01:50 |
| 2 | Si 251.611† | 576.9 | 51.0 | 1.8946 ug/L | 1.8946 ppb | 14:01:50 |
| 2 | Sn 189.927† | 6.1 | 3.0 | 0.6774 ug/L | 0.6774 ppb | 14:01:50 |
| 2 | Ti 334.940† | -1049.8 | 34.5 | 0.0703 ug/L | 0.0703 ppb | 14:01:30 |
| 2 | Tl 190.801† | -30.1 | -5.0 | -1.9115 ug/L | -1.9115 ppb | 14:01:50 |
| 2 | U 409.014† | -2108.0 | -71.0 | -2.0926 ug/L | -2.0926 ppb | 14:01:30 |
| 2 | V 292.402† | -1467.7 | -38.8 | -0.3053 ug/L | -0.3053 ppb | 14:01:30 |
| 2 | Zn 213.857† | 723.4 | 116.3 | 1.3765 ug/L | 1.3765 ppb | 14:01:50 |
| 2 | SiO2† | 603.0 | 49.1 | 3.9173 ug/L | 3.9173 ppb | 14:02:26 |
| 3 | Sc Radial | 3962.8 | 3962.8 | 98.2 % | | 14:00:58 |
| 3 | Y RADIAL | 4487.4 | 4487.4 | 99.32 % | | 14:00:38 |
| 3 | Al 396.153Radial† | -64.0 | 14.5 | 15.437 ug/L | 15.437 ppb | 14:00:58 |
| 3 | Ca 317.933Radial† | 32.2 | 15.6 | 31.716 ug/L | 31.716 ppb | 14:00:58 |
| 3 | Fe 238.204 Radial† | 12.4 | 3.7 | 45.852 ug/L | 45.852 ppb | 14:00:58 |
| 3 | K 766.490 Radial† | 2728.5 | -25.9 | -5.1803 ug/L | -5.1803 ppb | 14:00:38 |
| 3 | Mg 279.077 IEC† | 2.2 | 1.5 | 66.449 ug/L | 66.449 ppb | 14:00:58 |
| 3 | Na 589.592 Radial† | -404.2 | 49.4 | 19.416 ug/L | 19.416 ppb | 14:00:38 |
| 3 | Sr 421.552† | 132.8 | 65.1 | 0.5544 ug/L | 0.5544 ppb | 14:00:38 |
| 3 | Sc 361.383 | 828569.8 | 828569.8 | 98.656 % | | 14:01:56 |
| 3 | Y 371.029 | 705817.8 | 705817.8 | 98.568 % | | 14:01:56 |
| 3 | Ag 328.068† | 260.9 | 11.0 | 0.0676 ug/L | 0.0676 ppb | 14:01:56 |
| 3 | As 188.979† | -23.8 | -3.3 | -1.7490 ug/L | -1.7490 ppb | 14:02:16 |
| 3 | B 249.677† | -244.7 | 2.1 | 0.0504 ug/L | 0.0504 ppb | 14:02:16 |
| 3 | Ba 233.527† | 70.4 | 52.8 | 0.4963 ug/L | 0.4963 ppb | 14:02:16 |
| 3 | Be 313.107† | -4149.9 | 56.3 | 0.0239 ug/L | 0.0239 ppb | 14:01:56 |
| 3 | Cd 226.502† | -162.1 | 2.1 | 0.0253 ug/L | 0.0253 ppb | 14:02:16 |
| 3 | Co 228.616† | -33.3 | 5.2 | 0.1333 ug/L | 0.1333 ppb | 14:02:16 |
| 3 | Cr 267.716† | 141.2 | 48.1 | 0.6309 ug/L | 0.6309 ppb | 14:02:16 |
| 3 | Cu 324.752† | 6559.2 | 295.8 | 0.9606 ug/L | 0.9606 ppb | 14:01:56 |
| 3 | Mn 257.610† | 914.9 | 474.9 | 0.6249 ug/L | 0.6249 ppb | 14:02:16 |
| 3 | Mo 202.031† | 12.9 | -1.1 | -0.0907 ug/L | -0.0907 ppb | 14:02:16 |
| 3 | Ni 231.604† | 105.9 | 13.7 | 0.4275 ug/L | 0.4275 ppb | 14:02:16 |
| 3 | P 214.914† | 182.2 | 16.4 | 11.595 ug/L | 11.595 ppb | 14:02:16 |
| 3 | Pb 220.353† | -53.4 | 4.7 | 0.7036 ug/L | 0.7036 ppb | 14:02:16 |
| 3 | S 181.975 Axial† | 24.1 | 0.1 | 0.1369 ug/L | 0.1369 ppb | 14:02:16 |
| 3 | Sb 206.836† | 36.9 | 10.8 | 4.5941 ug/L | 4.5941 ppb | 14:02:16 |
| 3 | Se 196.026† | -16.1 | 0.6 | 0.6445 ug/L | 0.6445 ppb | 14:02:16 |
| 3 | Si 251.611† | 582.1 | 64.5 | 2.4042 ug/L | 2.4042 ppb | 14:02:16 |
| 3 | Sn 189.927† | 6.4 | 3.4 | 0.7567 ug/L | 0.7567 ppb | 14:02:16 |
| 3 | Ti 334.940† | -803.5 | 268.9 | 0.4605 ug/L | 0.4605 ppb | 14:01:56 |
| 3 | Tl 190.801† | -24.0 | 0.8 | 0.3076 ug/L | 0.3076 ppb | 14:02:16 |
| 3 | U 409.014† | -1951.7 | 56.9 | 1.6673 ug/L | 1.6673 ppb | 14:01:56 |
| 3 | V 292.402† | -1420.1 | -11.9 | -0.0963 ug/L | -0.0963 ppb | 14:01:56 |
| 3 | Zn 213.857† | 728.3 | 131.8 | 1.5550 ug/L | 1.5550 ppb | 14:02:16 |
| 3 | SiO2† | 575.4 | 29.9 | 2.3904 ug/L | 2.3904 ppb | 14:02:31 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 835804.9 | 99.518 % | 0.7591 | | | 0.76% |
| Sc Radial | 3950.6 | 97.9 % | 2.85 | | | 2.91% |
| Y 371.029 | 712912.8 | 99.558 % | 0.8681 | | | 0.87% |
| Y RADIAL | 4467.0 | 98.87 % | 0.393 | | | 0.40% |
| Ag 328.068† | -35.1 | -0.1680 ug/L | 0.24789 | -0.1680 ppb | 0.24789 | 147.57% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 8.3 | 8.8095 ug/L | 6.02450 | 8.8095 ppb | 6.02450 | 68.39% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | |
| As 188.979† | -3.5 | -1.8623 ug/L | 0.49720 | -1.8623 ppb | 0.49720 | 26.70% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | 16.1 | 0.4369 ug/L | 0.37666 | 0.4369 ppb | 0.37666 | 86.20% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 61.5 | 0.5780 ug/L | 0.15775 | 0.5780 ppb | 0.15775 | 27.29% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | 100.5 | 0.0414 ug/L | 0.03137 | 0.0414 ppb | 0.03137 | 75.83% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933Radial† | 17.0 | 34.546 ug/L | 10.4868 | 34.546 ppb | 10.4868 | 30.36% |

| | | | | | | | |
|--|-----------------|-------------|--------------|------------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | | |
| Cd | 226.502† | 10.7 | 0.1486 ug/L | 0.10693 | 0.1486 ppb | 0.10693 | 71.93% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | | |
| Co | 228.616† | 3.9 | 0.1001 ug/L | 0.05291 | 0.1001 ppb | 0.05291 | 52.87% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr | 267.716† | 31.9 | 0.4190 ug/L | 0.19639 | 0.4190 ppb | 0.19639 | 46.87% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu | 324.752† | 269.1 | 0.8743 ug/L | 0.09898 | 0.8743 ppb | 0.09898 | 11.32% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe | 238.204 Radial† | 2.3 | 28.622 ug/L | 20.7386 | 28.622 ppb | 20.7386 | 72.46% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | | |
| K | 766.490 Radial† | 72.6 | 14.467 ug/L | 43.2011 | 14.467 ppb | 43.2011 | 298.63% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | | |
| Mg | 279.077 IEC† | 0.9 | 40.874 ug/L | 80.6315 | 40.874 ppb | 80.6315 | 197.27% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | | |
| Mn | 257.610† | 503.1 | 0.6613 ug/L | 0.05155 | 0.6613 ppb | 0.05155 | 7.80% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo | 202.031† | 2.4 | 0.2162 ug/L | 0.27543 | 0.2162 ppb | 0.27543 | 127.39% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na | 589.592 Radial† | 61.8 | 24.274 ug/L | 20.8631 | 24.274 ppb | 20.8631 | 85.95% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | | |
| Ni | 231.604† | 2.0 | 0.0636 ug/L | 0.31511 | 0.0636 ppb | 0.31511 | 495.08% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | | |
| P | 214.914† | 16.0 | 11.309 ug/L | 1.3232 | 11.309 ppb | 1.3232 | 11.70% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | | |
| Pb | 220.353† | 1.7 | 0.2511 ug/L | 0.76569 | 0.2511 ppb | 0.76569 | 304.96% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| S | 181.975 Axial† | 3.5 | 6.1255 ug/L | 9.42930 | 6.1255 ppb | 9.42930 | 153.93% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | | |
| Sb | 206.836† | 1.8 | 0.7871 ug/L | 4.79057 | 0.7871 ppb | 4.79057 | 608.62% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se | 196.026† | -0.5 | -0.3197 ug/L | 1.08146 | -0.3197 ppb | 1.08146 | 338.26% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Si | 251.611† | 60.8 | 2.2613 ug/L | 0.32018 | 2.2613 ppb | 0.32018 | 14.16% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |
| Sn | 189.927† | 2.5 | 0.5475 ug/L | 0.29624 | 0.5475 ppb | 0.29624 | 54.10% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | | |
| Sr | 421.552† | 91.9 | 0.7821 ug/L | 0.36475 | 0.7821 ppb | 0.36475 | 46.64% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | | |
| Ti | 334.940† | 144.9 | 0.2505 ug/L | 0.19679 | 0.2505 ppb | 0.19679 | 78.56% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | | |
| Tl | 190.801† | 0.2 | 0.0874 ug/L | 1.89840 | 0.0874 ppb | 1.89840 | >999.9% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| U | 409.014† | -1.9 | -0.0601 ug/L | 1.89845 | -0.0601 ppb | 1.89845 | >999.9% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | | |
| V | 292.402† | 14.8 | 0.1131 ug/L | 0.55375 | 0.1131 ppb | 0.55375 | 489.45% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn | 213.857† | 121.3 | 1.4351 ug/L | 0.10387 | 1.4351 ppb | 0.10387 | 7.24% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| SiO2† | 46.8 | 3.7357 ug/L | 1.26426 | 3.7357 ppb | 1.26426 | 33.84% | |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 19
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/25/2010 15:00:52
 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 | 3978.8 | 3978.8 | 98.6 % | | 15:03:04 |
| 1 | Y RADIAL | 4474.7 | 4474.7 | 99.04 % | | 15:02:44 |
| 1 | Al 396.153Radial† | 4629.9 | 4773.6 | 5063.2 ug/L | 5063.2 ppb | 15:02:44 |
| 1 | Ca 317.933Radial† | 2486.6 | 2503.8 | 5087.2 ug/L | 5087.2 ppb | 15:03:04 |
| 1 | Fe 238.204 Radial† | 412.1 | 408.8 | 5126.5 ug/L | 5126.5 ppb | 15:03:04 |
| 1 | K 766.490 Radial† | 27183.0 | 24756.0 | 4935.8 ug/L | 4935.8 ppb | 15:02:44 |
| 1 | Mg 279.077 IEC† | 120.4 | 121.4 | 5301.0 ug/L | 5301.0 ppb | 15:03:04 |
| 1 | Na 589.592 Radial† | 24122.1 | 24916.9 | 9785.2 ug/L | 9785.2 ppb | 15:02:44 |
| 1 | Sr 421.552† | 56711.5 | 57426.6 | 488.98 ug/L | 488.98 ppb | 15:02:44 |
| 1 | Sc 361.383 | 840365.2 | 840365.2 | 100.06 % | | 15:04:01 |
| 1 | Y 371.029 | 707495.8 | 707495.8 | 98.802 % | | 15:04:01 |
| 1 | Ag 328.068† | 99634.9 | 99321.1 | 503.81 ug/L | 503.81 ppb | 15:04:06 |
| 1 | As 188.979† | 899.5 | 919.8 | 497.34 ug/L | 497.34 ppb | 15:04:26 |
| 1 | B 249.677† | 17377.5 | 17617.1 | 481.98 ug/L | 481.98 ppb | 15:04:06 |
| 1 | Ba 233.527† | 52690.6 | 52640.1 | 494.71 ug/L | 494.71 ppb | 15:04:06 |
| 1 | Be 313.107† | 1216301.3 | 1219826.2 | 496.37 ug/L | 496.37 ppb | 15:04:01 |
| 1 | Cd 226.502† | 35000.3 | 35145.5 | 495.57 ug/L | 495.57 ppb | 15:04:06 |
| 1 | Co 228.616† | 19400.5 | 19427.6 | 505.73 ug/L | 505.73 ppb | 15:04:06 |
| 1 | Cr 267.716† | 37837.8 | 37719.9 | 492.12 ug/L | 492.12 ppb | 15:04:06 |
| 1 | Cu 324.752† | 158060.2 | 151611.6 | 491.60 ug/L | 491.60 ppb | 15:04:06 |
| 1 | Mn 257.610† | 371832.2 | 371154.2 | 487.26 ug/L | 487.26 ppb | 15:04:06 |
| 1 | Mo 202.031† | 5707.1 | 5689.4 | 500.65 ug/L | 500.65 ppb | 15:04:26 |
| 1 | Ni 231.604† | 16175.5 | 16072.1 | 501.55 ug/L | 501.55 ppb | 15:04:06 |
| 1 | P 214.914† | 3614.4 | 3444.0 | 2379.7 ug/L | 2379.7 ppb | 15:04:26 |
| 1 | Pb 220.353† | 3240.7 | 3297.5 | 498.57 ug/L | 498.57 ppb | 15:04:26 |
| 1 | S 181.975 Axial† | 606.2 | 581.4 | 1018.1 ug/L | 1018.1 ppb | 15:04:26 |
| 1 | Sb 206.836† | 1221.3 | 1193.9 | 525.26 ug/L | 525.26 ppb | 15:04:26 |
| 1 | Se 196.026† | 601.3 | 617.9 | 511.06 ug/L | 511.06 ppb | 15:04:26 |
| 1 | Si 251.611† | 67386.7 | 66820.4 | 2481.8 ug/L | 2481.8 ppb | 15:04:06 |
| 1 | Sn 189.927† | 2257.5 | 2253.0 | 499.61 ug/L | 499.61 ppb | 15:04:26 |
| 1 | Ti 334.940† | 284797.7 | 285708.3 | 491.41 ug/L | 491.41 ppb | 15:04:06 |
| 1 | Tl 190.801† | 1246.8 | 1271.1 | 494.74 ug/L | 494.74 ppb | 15:04:26 |
| 1 | U 409.014† | 15230.6 | 17256.5 | 506.08 ug/L | 506.08 ppb | 15:04:06 |
| 1 | V 292.402† | 62410.7 | 63800.4 | 498.53 ug/L | 498.53 ppb | 15:04:06 |
| 1 | Zn 213.857† | 42338.7 | 41706.5 | 490.84 ug/L | 490.84 ppb | 15:04:06 |
| 1 | SiO2† | 67957.1 | 67362.5 | 5368.3 ug/L | 5368.3 ppb | 15:05:33 |
| 2 | Sc Radial | 4035.3 | 4035.3 | 100 % | | 15:03:29 |
| 2 | Y RADIAL | 4431.7 | 4431.7 | 98.09 % | | 15:03:09 |
| 2 | Al 396.153Radial† | 4623.1 | 4701.1 | 4986.3 ug/L | 4986.3 ppb | 15:03:09 |
| 2 | Ca 317.933Radial† | 2495.0 | 2476.9 | 5032.4 ug/L | 5032.4 ppb | 15:03:29 |
| 2 | Fe 238.204 Radial† | 409.6 | 400.4 | 5022.4 ug/L | 5022.4 ppb | 15:03:29 |
| 2 | K 766.490 Radial† | 27236.3 | 24423.4 | 4869.5 ug/L | 4869.5 ppb | 15:03:09 |
| 2 | Mg 279.077 IEC† | 118.8 | 118.1 | 5157.8 ug/L | 5157.8 ppb | 15:03:29 |
| 2 | Na 589.592 Radial† | 23876.0 | 24328.4 | 9554.1 ug/L | 9554.1 ppb | 15:03:09 |
| 2 | Sr 421.552† | 56567.5 | 56477.4 | 480.90 ug/L | 480.90 ppb | 15:03:09 |
| 2 | Sc 361.383 | 851485.6 | 851485.6 | 101.38 % | | 15:04:31 |
| 2 | Y 371.029 | 715289.6 | 715289.6 | 99.890 % | | 15:04:31 |
| 2 | Ag 328.068† | 100449.5 | 98824.1 | 501.27 ug/L | 501.27 ppb | 15:04:37 |
| 2 | As 188.979† | 905.2 | 913.7 | 494.04 ug/L | 494.04 ppb | 15:04:57 |
| 2 | B 249.677† | 17454.3 | 17466.0 | 477.85 ug/L | 477.85 ppb | 15:04:37 |
| 2 | Ba 233.527† | 52983.8 | 52241.6 | 490.97 ug/L | 490.97 ppb | 15:04:37 |
| 2 | Be 313.107† | 1227735.1 | 1215228.6 | 494.50 ug/L | 494.50 ppb | 15:04:31 |
| 2 | Cd 226.502† | 35179.3 | 34865.2 | 491.63 ug/L | 491.63 ppb | 15:04:37 |
| 2 | Co 228.616† | 19497.3 | 19269.9 | 501.61 ug/L | 501.61 ppb | 15:04:37 |
| 2 | Cr 267.716† | 38113.0 | 37497.4 | 489.21 ug/L | 489.21 ppb | 15:04:37 |
| 2 | Cu 324.752† | 159560.4 | 151028.2 | 489.70 ug/L | 489.70 ppb | 15:04:37 |
| 2 | Mn 257.610† | 374464.9 | 368897.7 | 484.30 ug/L | 484.30 ppb | 15:04:37 |
| 2 | Mo 202.031† | 5703.6 | 5611.5 | 493.80 ug/L | 493.80 ppb | 15:04:57 |
| 2 | Ni 231.604† | 16210.8 | 15895.8 | 496.04 ug/L | 496.04 ppb | 15:04:37 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3608.5 | 3391.0 | 2341.9 ug/L | 2341.9 ppb | 15:04:57 |
| 2 | Pb 220.353† | 3215.3 | 3230.2 | 488.40 ug/L | 488.40 ppb | 15:04:57 |
| 2 | S 181.975 Axial† | 596.5 | 564.0 | 987.56 ug/L | 987.56 ppb | 15:04:57 |
| 2 | Sb 206.836† | 1213.4 | 1170.2 | 514.97 ug/L | 514.97 ppb | 15:04:57 |
| 2 | Se 196.026† | 605.2 | 613.9 | 507.46 ug/L | 507.46 ppb | 15:04:57 |
| 2 | Si 251.611† | 67890.0 | 66437.3 | 2467.6 ug/L | 2467.6 ppb | 15:04:37 |
| 2 | Sn 189.927† | 2262.4 | 2228.4 | 494.15 ug/L | 494.15 ppb | 15:04:57 |
| 2 | Ti 334.940† | 287230.5 | 284390.6 | 489.15 ug/L | 489.15 ppb | 15:04:37 |
| 2 | Tl 190.801† | 1233.9 | 1242.1 | 483.49 ug/L | 483.49 ppb | 15:04:57 |
| 2 | U 409.014† | 15424.8 | 17249.3 | 505.89 ug/L | 505.89 ppb | 15:04:37 |
| 2 | V 292.402† | 63078.1 | 63644.1 | 497.24 ug/L | 497.24 ppb | 15:04:37 |
| 2 | Zn 213.857† | 42600.9 | 41412.6 | 487.40 ug/L | 487.40 ppb | 15:04:37 |
| 2 | SiO2† | 67267.2 | 65795.0 | 5243.3 ug/L | 5243.3 ppb | 15:05:38 |
| 3 | Sc Radial | 4022.9 | 4022.9 | 99.7 % | | 15:03:54 |
| 3 | Y RADIAL | 4491.5 | 4491.5 | 99.41 % | | 15:03:34 |
| 3 | Al 396.153Radial† | 4653.7 | 4745.9 | 5033.8 ug/L | 5033.8 ppb | 15:03:34 |
| 3 | Ca 317.933Radial† | 2497.1 | 2486.7 | 5052.4 ug/L | 5052.4 ppb | 15:03:54 |
| 3 | Fe 238.204 Radial† | 412.5 | 404.6 | 5074.0 ug/L | 5074.0 ppb | 15:03:54 |
| 3 | K 766.490 Radial† | 27496.7 | 24768.0 | 4938.3 ug/L | 4938.3 ppb | 15:03:34 |
| 3 | Mg 279.077 IEC† | 114.8 | 114.4 | 4998.0 ug/L | 4998.0 ppb | 15:03:54 |
| 3 | Na 589.592 Radial† | 24011.2 | 24537.2 | 9636.1 ug/L | 9636.1 ppb | 15:03:34 |
| 3 | Sr 421.552† | 56770.7 | 56854.5 | 484.11 ug/L | 484.11 ppb | 15:03:34 |
| 3 | Sc 361.383 | 840431.3 | 840431.3 | 100.07 % | | 15:05:02 |
| 3 | Y 371.029 | 708222.0 | 708222.0 | 98.903 % | | 15:05:02 |
| 3 | Ag 328.068† | 99494.5 | 99172.9 | 503.05 ug/L | 503.05 ppb | 15:05:08 |
| 3 | As 188.979† | 900.8 | 921.0 | 497.98 ug/L | 497.98 ppb | 15:05:28 |
| 3 | B 249.677† | 17320.2 | 17558.5 | 480.38 ug/L | 480.38 ppb | 15:05:08 |
| 3 | Ba 233.527† | 52505.1 | 52450.7 | 492.94 ug/L | 492.94 ppb | 15:05:08 |
| 3 | Be 313.107† | 1209434.6 | 1212868.5 | 493.54 ug/L | 493.54 ppb | 15:05:02 |
| 3 | Cd 226.502† | 34858.2 | 35000.7 | 493.54 ug/L | 493.54 ppb | 15:05:08 |
| 3 | Co 228.616† | 19270.0 | 19295.7 | 502.29 ug/L | 502.29 ppb | 15:05:08 |
| 3 | Cr 267.716† | 37844.6 | 37723.7 | 492.16 ug/L | 492.16 ppb | 15:05:08 |
| 3 | Cu 324.752† | 157942.6 | 151481.6 | 491.17 ug/L | 491.17 ppb | 15:05:08 |
| 3 | Mn 257.610† | 371131.3 | 370424.6 | 486.31 ug/L | 486.31 ppb | 15:05:08 |
| 3 | Mo 202.031† | 5688.4 | 5670.3 | 498.96 ug/L | 498.96 ppb | 15:05:28 |
| 3 | Ni 231.604† | 16109.7 | 16005.1 | 499.46 ug/L | 499.46 ppb | 15:05:08 |
| 3 | P 214.914† | 3595.0 | 3424.4 | 2365.6 ug/L | 2365.6 ppb | 15:05:28 |
| 3 | Pb 220.353† | 3221.5 | 3278.1 | 495.64 ug/L | 495.64 ppb | 15:05:28 |
| 3 | S 181.975 Axial† | 597.9 | 573.1 | 1003.6 ug/L | 1003.6 ppb | 15:05:28 |
| 3 | Sb 206.836† | 1213.6 | 1186.1 | 521.85 ug/L | 521.85 ppb | 15:05:28 |
| 3 | Se 196.026† | 596.3 | 612.9 | 506.87 ug/L | 506.87 ppb | 15:05:28 |
| 3 | Si 251.611† | 67090.6 | 66519.1 | 2470.6 ug/L | 2470.6 ppb | 15:05:08 |
| 3 | Sn 189.927† | 2239.4 | 2234.7 | 495.56 ug/L | 495.56 ppb | 15:05:28 |
| 3 | Ti 334.940† | 284382.5 | 285271.0 | 490.68 ug/L | 490.68 ppb | 15:05:08 |
| 3 | Tl 190.801† | 1244.5 | 1268.7 | 493.80 ug/L | 493.80 ppb | 15:05:28 |
| 3 | U 409.014† | 15419.4 | 17444.0 | 511.61 ug/L | 511.61 ppb | 15:05:08 |
| 3 | V 292.402† | 62508.5 | 63893.2 | 499.23 ug/L | 499.23 ppb | 15:05:08 |
| 3 | Zn 213.857† | 42243.6 | 41608.2 | 489.69 ug/L | 489.69 ppb | 15:05:08 |
| 3 | SiO2† | 68202.7 | 67602.5 | 5387.5 ug/L | 5387.5 ppb | 15:05:43 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383 | 844094.0 | 100.50 % | | 0.762 | | | 0.76% |
| Sc Radial | 4012.3 | 99.5 % | | 0.74 | | | 0.74% |
| Y 371.029 | 710335.8 | 99.199 % | | 0.6013 | | | 0.61% |
| Y RADIAL | 4466.0 | 98.85 % | | 0.683 | | | 0.69% |
| Ag 328.068† | 99106.0 | 502.71 ug/L | | 1.304 | 502.71 ppb | 1.304 | 0.26% |
| QC value within limits for Ag 328.068 Recovery = 100.54% | | | | | | | |
| Al 396.153Radial† | 4740.2 | 5027.8 ug/L | | 38.82 | 5027.8 ppb | 38.82 | 0.77% |
| QC value within limits for Al 396.153Radial Recovery = 100.56% | | | | | | | |
| As 188.979† | 918.2 | 496.45 ug/L | | 2.115 | 496.45 ppb | 2.115 | 0.43% |
| QC value within limits for As 188.979 Recovery = 99.29% | | | | | | | |
| B 249.677† | 17547.2 | 480.07 ug/L | | 2.079 | 480.07 ppb | 2.079 | 0.43% |
| QC value within limits for B 249.677 Recovery = 96.01% | | | | | | | |
| Ba 233.527† | 52444.1 | 492.87 ug/L | | 1.871 | 492.87 ppb | 1.871 | 0.38% |
| QC value within limits for Ba 233.527 Recovery = 98.57% | | | | | | | |
| Be 313.107† | 1215974.4 | 494.80 ug/L | | 1.438 | 494.80 ppb | 1.438 | 0.29% |
| QC value within limits for Be 313.107 Recovery = 98.96% | | | | | | | |
| Ca 317.933Radial† | 2489.2 | 5057.3 ug/L | | 27.70 | 5057.3 ppb | 27.70 | 0.55% |

| | | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933Radial Recovery = 101.15% | | | | | | | |
| Cd 226.502† | 35003.8 | 493.58 ug/L | 1.973 | 493.58 ppb | 1.973 | 0.40% | |
| QC value within limits for Cd 226.502 Recovery = 98.72% | | | | | | | |
| Co 228.616† | 19331.1 | 503.21 ug/L | 2.207 | 503.21 ppb | 2.207 | 0.44% | |
| QC value within limits for Co 228.616 Recovery = 100.64% | | | | | | | |
| Cr 267.716† | 37647.0 | 491.16 ug/L | 1.692 | 491.16 ppb | 1.692 | 0.34% | |
| QC value within limits for Cr 267.716 Recovery = 98.23% | | | | | | | |
| Cu 324.752† | 151373.8 | 490.82 ug/L | 0.995 | 490.82 ppb | 0.995 | 0.20% | |
| QC value within limits for Cu 324.752 Recovery = 98.16% | | | | | | | |
| Fe 238.204 Radial† | 404.6 | 5074.3 ug/L | 52.08 | 5074.3 ppb | 52.08 | 1.03% | |
| QC value within limits for Fe 238.204 Radial Recovery = 101.49% | | | | | | | |
| K 766.490 Radial† | 24649.1 | 4914.5 ug/L | 39.00 | 4914.5 ppb | 39.00 | 0.79% | |
| QC value within limits for K 766.490 Radial Recovery = 98.29% | | | | | | | |
| Mg 279.077 IEC† | 117.9 | 5152.3 ug/L | 151.55 | 5152.3 ppb | 151.55 | 2.94% | |
| QC value within limits for Mg 279.077 IEC Recovery = 103.05% | | | | | | | |
| Mn 257.610† | 370158.8 | 485.96 ug/L | 1.514 | 485.96 ppb | 1.514 | 0.31% | |
| QC value within limits for Mn 257.610 Recovery = 97.19% | | | | | | | |
| Mo 202.031† | 5657.1 | 497.80 ug/L | 3.572 | 497.80 ppb | 3.572 | 0.72% | |
| QC value within limits for Mo 202.031 Recovery = 99.56% | | | | | | | |
| Na 589.592 Radial† | 24594.2 | 9658.5 ug/L | 117.17 | 9658.5 ppb | 117.17 | 1.21% | |
| QC value within limits for Na 589.592 Radial Recovery = 96.58% | | | | | | | |
| Ni 231.604† | 15991.0 | 499.02 ug/L | 2.777 | 499.02 ppb | 2.777 | 0.56% | |
| QC value within limits for Ni 231.604 Recovery = 99.80% | | | | | | | |
| P 214.914† | 3419.8 | 2362.4 ug/L | 19.06 | 2362.4 ppb | 19.06 | 0.81% | |
| QC value within limits for P 214.914 Recovery = 94.50% | | | | | | | |
| Pb 220.353† | 3268.6 | 494.20 ug/L | 5.236 | 494.20 ppb | 5.236 | 1.06% | |
| QC value within limits for Pb 220.353 Recovery = 98.84% | | | | | | | |
| S 181.975 Axial† | 572.8 | 1003.1 ug/L | 15.30 | 1003.1 ppb | 15.30 | 1.52% | |
| QC value within limits for S 181.975 Axial Recovery = 100.31% | | | | | | | |
| Sb 206.836† | 1183.4 | 520.70 ug/L | 5.242 | 520.70 ppb | 5.242 | 1.01% | |
| QC value within limits for Sb 206.836 Recovery = 104.14% | | | | | | | |
| Se 196.026† | 614.9 | 508.46 ug/L | 2.264 | 508.46 ppb | 2.264 | 0.45% | |
| QC value within limits for Se 196.026 Recovery = 101.69% | | | | | | | |
| Si 251.611† | 66592.3 | 2473.3 ug/L | 7.48 | 2473.3 ppb | 7.48 | 0.30% | |
| QC value within limits for Si 251.611 Recovery = 98.93% | | | | | | | |
| Sn 189.927† | 2238.7 | 496.44 ug/L | 2.831 | 496.44 ppb | 2.831 | 0.57% | |
| QC value within limits for Sn 189.927 Recovery = 99.29% | | | | | | | |
| Sr 421.552† | 56919.5 | 484.66 ug/L | 4.070 | 484.66 ppb | 4.070 | 0.84% | |
| QC value within limits for Sr 421.552 Recovery = 96.93% | | | | | | | |
| Ti 334.940† | 285123.3 | 490.41 ug/L | 1.154 | 490.41 ppb | 1.154 | 0.24% | |
| QC value within limits for Ti 334.940 Recovery = 98.08% | | | | | | | |
| Tl 190.801† | 1260.6 | 490.68 ug/L | 6.241 | 490.68 ppb | 6.241 | 1.27% | |
| QC value within limits for Tl 190.801 Recovery = 98.14% | | | | | | | |
| U 409.014† | 17316.6 | 507.86 ug/L | 3.246 | 507.86 ppb | 3.246 | 0.64% | |
| QC value within limits for U 409.014 Recovery = 101.57% | | | | | | | |
| V 292.402† | 63779.2 | 498.33 ug/L | 1.010 | 498.33 ppb | 1.010 | 0.20% | |
| QC value within limits for V 292.402 Recovery = 99.67% | | | | | | | |
| Zn 213.857† | 41575.8 | 489.31 ug/L | 1.751 | 489.31 ppb | 1.751 | 0.36% | |
| QC value within limits for Zn 213.857 Recovery = 97.86% | | | | | | | |
| SiO2† | 66920.0 | 5333.0 ug/L | 78.34 | 5333.0 ppb | 78.34 | 1.47% | |
| QC value within limits for SiO2 Recovery = 99.73% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 15:07:55

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 | 4049.0 | 4049.0 | 100 % | | 15:10:08 |
| 1 | Y RADIAL | 4251.7 | 4251.7 | 94.10 % | | 15:09:48 |
| 1 | Al 396.153Radial† | -79.0 | 1.0 | 1.0294 ug/L | 1.0294 ppb | 15:10:08 |
| 1 | Ca 317.933Radial† | 30.9 | 13.6 | 27.624 ug/L | 27.624 ppb | 15:10:08 |
| 1 | Fe 238.204 Radial† | 16.0 | 7.0 | 87.330 ug/L | 87.330 ppb | 15:10:08 |
| 1 | K 766.490 Radial† | 2621.3 | -191.7 | -38.297 ug/L | -38.297 ppb | 15:09:48 |
| 1 | Mg 279.077 IEC† | 1.3 | 0.6 | 25.497 ug/L | 25.497 ppb | 15:10:08 |
| 1 | Na 589.592 Radial† | -399.4 | 63.0 | 24.736 ug/L | 24.736 ppb | 15:09:48 |
| 1 | Sr 421.552† | 97.3 | 26.9 | 0.2290 ug/L | 0.2290 ppb | 15:09:48 |
| 1 | Sc 361.383 | 837525.5 | 837525.5 | 99.723 % | | 15:11:05 |
| 1 | Y 371.029 | 713954.7 | 713954.7 | 99.704 % | | 15:11:05 |
| 1 | Ag 328.068† | 233.0 | -19.7 | -0.0714 ug/L | -0.0714 ppb | 15:11:05 |
| 1 | As 188.979† | -23.6 | -2.8 | -1.4911 ug/L | -1.4911 ppb | 15:11:25 |
| 1 | B 249.677† | -347.7 | -98.5 | -2.7219 ug/L | -2.7219 ppb | 15:11:25 |
| 1 | Ba 233.527† | 48.2 | 29.8 | 0.2843 ug/L | 0.2843 ppb | 15:11:25 |
| 1 | Be 313.107† | -4335.5 | -84.8 | -0.0340 ug/L | -0.0340 ppb | 15:11:05 |
| 1 | Cd 226.502† | -173.8 | -7.9 | -0.1202 ug/L | -0.1202 ppb | 15:11:25 |
| 1 | Co 228.616† | -40.9 | -2.1 | -0.0560 ug/L | -0.0560 ppb | 15:11:25 |
| 1 | Cr 267.716† | 95.6 | 0.9 | 0.0218 ug/L | 0.0218 ppb | 15:11:25 |
| 1 | Cu 324.752† | 6511.7 | 177.1 | 0.5775 ug/L | 0.5775 ppb | 15:11:05 |
| 1 | Mn 257.610† | 1001.0 | 551.3 | 0.7309 ug/L | 0.7309 ppb | 15:11:25 |
| 1 | Mo 202.031† | 16.0 | 1.8 | 0.1682 ug/L | 0.1682 ppb | 15:11:25 |
| 1 | Ni 231.604† | 99.6 | 6.3 | 0.1964 ug/L | 0.1964 ppb | 15:11:25 |
| 1 | P 214.914† | 184.9 | 17.2 | 12.165 ug/L | 12.165 ppb | 15:11:25 |
| 1 | Pb 220.353† | -52.1 | 6.6 | 0.9817 ug/L | 0.9817 ppb | 15:11:25 |
| 1 | S 181.975 Axial† | 28.7 | 4.4 | 7.7009 ug/L | 7.7009 ppb | 15:11:25 |
| 1 | Sb 206.836† | 26.4 | -0.2 | -0.0352 ug/L | -0.0352 ppb | 15:11:25 |
| 1 | Se 196.026† | -22.2 | -5.4 | -4.0105 ug/L | -4.0105 ppb | 15:11:25 |
| 1 | Si 251.611† | 600.7 | 76.9 | 2.8617 ug/L | 2.8617 ppb | 15:11:25 |
| 1 | Sn 189.927† | 12.9 | 9.8 | 2.1756 ug/L | 2.1756 ppb | 15:11:25 |
| 1 | Ti 334.940† | -977.8 | 102.8 | 0.1774 ug/L | 0.1774 ppb | 15:11:05 |
| 1 | Tl 190.801† | -25.9 | -0.9 | -0.3364 ug/L | -0.3364 ppb | 15:11:25 |
| 1 | U 409.014† | -1948.6 | 81.2 | 2.3787 ug/L | 2.3787 ppb | 15:11:05 |
| 1 | V 292.402† | -1314.2 | 109.7 | 0.8402 ug/L | 0.8402 ppb | 15:11:05 |
| 1 | Zn 213.857† | 755.8 | 151.5 | 1.7845 ug/L | 1.7845 ppb | 15:11:25 |
| 1 | SiO2† | 646.2 | 94.6 | 7.5532 ug/L | 7.5532 ppb | 15:12:36 |
| 2 | Sc Radial | 4073.1 | 4073.1 | 101 % | | 15:10:33 |
| 2 | Y RADIAL | 4547.3 | 4547.3 | 100.6 % | | 15:10:13 |
| 2 | Al 396.153Radial† | -67.3 | 13.0 | 13.821 ug/L | 13.821 ppb | 15:10:33 |
| 2 | Ca 317.933Radial† | 36.9 | 19.4 | 39.422 ug/L | 39.422 ppb | 15:10:33 |
| 2 | Fe 238.204 Radial† | 15.9 | 6.8 | 84.626 ug/L | 84.626 ppb | 15:10:33 |
| 2 | K 766.490 Radial† | 2567.8 | -260.2 | -51.973 ug/L | -51.973 ppb | 15:10:13 |
| 2 | Mg 279.077 IEC† | 2.7 | 1.9 | 84.928 ug/L | 84.928 ppb | 15:10:33 |
| 2 | Na 589.592 Radial† | -410.4 | 54.5 | 21.390 ug/L | 21.390 ppb | 15:10:13 |
| 2 | Sr 421.552† | 52.8 | -17.7 | -0.1512 ug/L | -0.1512 ppb | 15:10:13 |
| 2 | Sc 361.383 | 833423.5 | 833423.5 | 99.234 % | | 15:11:30 |
| 2 | Y 371.029 | 710884.3 | 710884.3 | 99.275 % | | 15:11:30 |
| 2 | Ag 328.068† | 212.3 | -39.5 | -0.1722 ug/L | -0.1722 ppb | 15:11:30 |
| 2 | As 188.979† | -20.5 | 0.2 | 0.1387 ug/L | 0.1387 ppb | 15:11:50 |
| 2 | B 249.677† | -328.6 | -81.0 | -2.2403 ug/L | -2.2403 ppb | 15:11:50 |
| 2 | Ba 233.527† | 56.7 | 38.6 | 0.3658 ug/L | 0.3658 ppb | 15:11:50 |
| 2 | Be 313.107† | -4238.6 | -8.6 | -0.0035 ug/L | -0.0035 ppb | 15:11:30 |
| 2 | Cd 226.502† | -172.7 | -7.6 | -0.1159 ug/L | -0.1159 ppb | 15:11:50 |
| 2 | Co 228.616† | -29.8 | 8.9 | 0.2316 ug/L | 0.2316 ppb | 15:11:50 |
| 2 | Cr 267.716† | 77.3 | -17.0 | -0.2125 ug/L | -0.2125 ppb | 15:11:50 |
| 2 | Cu 324.752† | 6563.5 | 261.4 | 0.8515 ug/L | 0.8515 ppb | 15:11:30 |
| 2 | Mn 257.610† | 1042.1 | 597.7 | 0.7891 ug/L | 0.7891 ppb | 15:11:50 |
| 2 | Mo 202.031† | 18.3 | 4.2 | 0.3791 ug/L | 0.3791 ppb | 15:11:50 |
| 2 | Ni 231.604† | 83.2 | -9.8 | -0.3050 ug/L | -0.3050 ppb | 15:11:50 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 179.7 | 12.8 | 9.0036 ug/L | 9.0036 ppb | 15:11:50 |
| 2 | Pb 220.353† | -37.4 | 21.1 | 3.1773 ug/L | 3.1773 ppb | 15:11:50 |
| 2 | S 181.975 Axial† | 22.6 | -1.7 | -2.9006 ug/L | -2.9006 ppb | 15:11:50 |
| 2 | Sb 206.836† | 19.9 | -6.5 | -2.7427 ug/L | -2.7427 ppb | 15:11:50 |
| 2 | Se 196.026† | -18.1 | -1.3 | -0.7638 ug/L | -0.7638 ppb | 15:11:50 |
| 2 | Si 251.611† | 614.8 | 94.1 | 3.5005 ug/L | 3.5005 ppb | 15:11:50 |
| 2 | Sn 189.927† | 10.1 | 7.1 | 1.5742 ug/L | 1.5742 ppb | 15:11:50 |
| 2 | Ti 334.940† | -1070.9 | 4.2 | 0.0052 ug/L | 0.0052 ppb | 15:11:30 |
| 2 | Tl 190.801† | -16.0 | 8.9 | 3.4617 ug/L | 3.4617 ppb | 15:11:50 |
| 2 | U 409.014† | -1987.0 | 32.9 | 0.9580 ug/L | 0.9580 ppb | 15:11:30 |
| 2 | V 292.402† | -1356.3 | 60.8 | 0.4653 ug/L | 0.4653 ppb | 15:11:30 |
| 2 | Zn 213.857† | 785.7 | 185.3 | 2.1896 ug/L | 2.1896 ppb | 15:11:50 |
| 2 | SiO2† | 657.3 | 109.0 | 8.6996 ug/L | 8.6996 ppb | 15:12:56 |
| 3 | Sc Radial | 4129.2 | 4129.2 | 102 % | | 15:10:58 |
| 3 | Y RADIAL | 4507.3 | 4507.3 | 99.76 % | | 15:10:38 |
| 3 | Al 396.153Radial† | -75.5 | 5.9 | 6.3646 ug/L | 6.3646 ppb | 15:10:58 |
| 3 | Ca 317.933Radial† | 34.9 | 16.9 | 34.375 ug/L | 34.375 ppb | 15:10:58 |
| 3 | Fe 238.204 Radial† | 12.0 | 2.8 | 34.447 ug/L | 34.447 ppb | 15:10:58 |
| 3 | K 766.490 Radial† | 2630.9 | -233.1 | -46.549 ug/L | -46.549 ppb | 15:10:38 |
| 3 | Mg 279.077 IEC† | 3.6 | 2.8 | 124.13 ug/L | 124.13 ppb | 15:10:58 |
| 3 | Na 589.592 Radial† | -392.7 | 77.2 | 30.327 ug/L | 30.327 ppb | 15:10:38 |
| 3 | Sr 421.552† | 82.4 | 10.5 | 0.0889 ug/L | 0.0889 ppb | 15:10:38 |
| 3 | Sc 361.383 | 841735.2 | 841735.2 | 100.22 % | | 15:11:55 |
| 3 | Y 371.029 | 717451.5 | 717451.5 | 100.19 % | | 15:11:55 |
| 3 | Ag 328.068† | 211.3 | -42.5 | -0.2026 ug/L | -0.2026 ppb | 15:11:55 |
| 3 | As 188.979† | -20.9 | -0.0 | 0.0088 ug/L | 0.0088 ppb | 15:12:15 |
| 3 | B 249.677† | -318.9 | -68.0 | -1.8756 ug/L | -1.8756 ppb | 15:12:15 |
| 3 | Ba 233.527† | 55.1 | 36.5 | 0.3452 ug/L | 0.3452 ppb | 15:12:15 |
| 3 | Be 313.107† | -4343.5 | -71.1 | -0.0288 ug/L | -0.0288 ppb | 15:11:55 |
| 3 | Cd 226.502† | -151.8 | 14.9 | 0.2075 ug/L | 0.2075 ppb | 15:12:15 |
| 3 | Co 228.616† | -34.7 | 4.3 | 0.1087 ug/L | 0.1087 ppb | 15:12:15 |
| 3 | Cr 267.716† | 120.7 | 25.5 | 0.3354 ug/L | 0.3354 ppb | 15:12:15 |
| 3 | Cu 324.752† | 6538.5 | 171.1 | 0.5553 ug/L | 0.5553 ppb | 15:11:55 |
| 3 | Mn 257.610† | 971.7 | 517.1 | 0.6767 ug/L | 0.6767 ppb | 15:12:15 |
| 3 | Mo 202.031† | 1.7 | -12.5 | -1.0973 ug/L | -1.0973 ppb | 15:12:15 |
| 3 | Ni 231.604† | 95.8 | 2.0 | 0.0614 ug/L | 0.0614 ppb | 15:12:15 |
| 3 | P 214.914† | 189.9 | 21.2 | 15.111 ug/L | 15.111 ppb | 15:12:15 |
| 3 | Pb 220.353† | -46.4 | 12.6 | 1.8885 ug/L | 1.8885 ppb | 15:12:15 |
| 3 | S 181.975 Axial† | 29.3 | 4.9 | 8.5863 ug/L | 8.5863 ppb | 15:12:15 |
| 3 | Sb 206.836† | 25.4 | -1.3 | -0.5621 ug/L | -0.5621 ppb | 15:12:15 |
| 3 | Se 196.026† | -20.9 | -3.9 | -3.0185 ug/L | -3.0185 ppb | 15:12:15 |
| 3 | Si 251.611† | 608.1 | 81.3 | 3.0404 ug/L | 3.0404 ppb | 15:12:15 |
| 3 | Sn 189.927† | 3.6 | 0.5 | 0.1074 ug/L | 0.1074 ppb | 15:12:15 |
| 3 | Ti 334.940† | -1060.1 | 25.6 | 0.0372 ug/L | 0.0372 ppb | 15:11:55 |
| 3 | Tl 190.801† | -26.4 | -1.3 | -0.5014 ug/L | -0.5014 ppb | 15:12:15 |
| 3 | U 409.014† | -1947.0 | 92.6 | 2.7191 ug/L | 2.7191 ppb | 15:11:55 |
| 3 | V 292.402† | -1303.1 | 127.3 | 0.9686 ug/L | 0.9686 ppb | 15:11:55 |
| 3 | Zn 213.857† | 757.1 | 149.0 | 1.7638 ug/L | 1.7638 ppb | 15:12:15 |
| 3 | SiO2† | 644.7 | 89.9 | 7.2120 ug/L | 7.2120 ppb | 15:13:16 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 837561.4 | 99.727 % | 0.4948 | | | 0.50% |
| Sc Radial | 4083.8 | 101 % | 1.0 | | | 1.01% |
| Y 371.029 | 714096.8 | 99.724 % | 0.4589 | | | 0.46% |
| Y RADIAL | 4435.4 | 98.17 % | 3.550 | | | 3.62% |
| Ag 328.068† | -33.9 | -0.1487 ug/L | 0.06865 | -0.1487 ppb | 0.06865 | 46.16% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 6.6 | 7.0717 ug/L | 6.42508 | 7.0717 ppb | 6.42508 | 90.86% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | |
| As 188.979† | -0.9 | -0.4479 ug/L | 0.90576 | -0.4479 ppb | 0.90576 | 202.24% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | -82.5 | -2.2793 ug/L | 0.42453 | -2.2793 ppb | 0.42453 | 18.63% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 35.0 | 0.3318 ug/L | 0.04240 | 0.3318 ppb | 0.04240 | 12.78% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | -54.9 | -0.0221 ug/L | 0.01634 | -0.0221 ppb | 0.01634 | 73.94% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933Radial† | 16.6 | 33.807 ug/L | 5.9196 | 33.807 ppb | 5.9196 | 17.51% |

| | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | -0.2 | -0.0095 ug/L | 0.18795 | -0.0095 ppb | 0.18795 | >999.9% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | 3.7 | 0.0948 ug/L | 0.14428 | 0.0948 ppb | 0.14428 | 152.25% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 3.1 | 0.0482 ug/L | 0.27490 | 0.0482 ppb | 0.27490 | 570.12% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 203.2 | 0.6614 ug/L | 0.16501 | 0.6614 ppb | 0.16501 | 24.95% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 5.5 | 68.801 ug/L | 29.7817 | 68.801 ppb | 29.7817 | 43.29% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -228.3 | -45.606 ug/L | 6.8866 | -45.606 ppb | 6.8866 | 15.10% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 1.8 | 78.184 ug/L | 49.6597 | 78.184 ppb | 49.6597 | 63.52% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 555.4 | 0.7323 ug/L | 0.05621 | 0.7323 ppb | 0.05621 | 7.68% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -2.2 | -0.1833 ug/L | 0.79850 | -0.1833 ppb | 0.79850 | 435.60% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 64.9 | 25.484 ug/L | 4.5152 | 25.484 ppb | 4.5152 | 17.72% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -0.5 | -0.0157 ug/L | 0.25940 | -0.0157 ppb | 0.25940 | >999.9% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 17.1 | 12.093 ug/L | 3.0543 | 12.093 ppb | 3.0543 | 25.26% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 13.4 | 2.0158 ug/L | 1.10334 | 2.0158 ppb | 1.10334 | 54.73% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 2.5 | 4.4622 ug/L | 6.39171 | 4.4622 ppb | 6.39171 | 143.24% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | -2.7 | -1.1133 ug/L | 1.43544 | -1.1133 ppb | 1.43544 | 128.93% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -3.5 | -2.5976 ug/L | 1.66377 | -2.5976 ppb | 1.66377 | 64.05% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 84.1 | 3.1342 ug/L | 0.32957 | 3.1342 ppb | 0.32957 | 10.52% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 5.8 | 1.2857 ug/L | 1.06382 | 1.2857 ppb | 1.06382 | 82.74% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | 6.6 | 0.0556 ug/L | 0.19230 | 0.0556 ppb | 0.19230 | 346.00% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 44.2 | 0.0732 ug/L | 0.09163 | 0.0732 ppb | 0.09163 | 125.10% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 2.3 | 0.8746 ug/L | 2.24202 | 0.8746 ppb | 2.24202 | 256.34% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 68.9 | 2.0186 ug/L | 0.93415 | 2.0186 ppb | 0.93415 | 46.28% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 99.3 | 0.7580 ug/L | 0.26148 | 0.7580 ppb | 0.26148 | 34.50% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 161.9 | 1.9126 ug/L | 0.24005 | 1.9126 ppb | 0.24005 | 12.55% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 97.8 | 7.8216 ug/L | 0.77927 | 7.8216 ppb | 0.77927 | 9.96% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 16:11:21

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 | 3955.1 | 3955.1 | 98.0 % | | 16:13:33 |
| 1 | Y RADIAL | 4264.1 | 4264.1 | 94.38 % | | 16:13:13 |
| 1 | Al 396.153Radial† | 4353.6 | 4519.9 | 4793.1 ug/L | 4793.1 ppb | 16:13:13 |
| 1 | Ca 317.933Radial† | 2507.2 | 2539.9 | 5160.5 ug/L | 5160.5 ppb | 16:13:33 |
| 1 | Fe 238.204 Radial† | 418.1 | 417.4 | 5234.4 ug/L | 5234.4 ppb | 16:13:33 |
| 1 | K 766.490 Radial† | 26095.8 | 23812.0 | 4747.3 ug/L | 4747.3 ppb | 16:13:13 |
| 1 | Mg 279.077 IEC† | 115.5 | 117.1 | 5114.9 ug/L | 5114.9 ppb | 16:13:33 |
| 1 | Na 589.592 Radial† | 23882.0 | 24818.2 | 9746.5 ug/L | 9746.5 ppb | 16:13:13 |
| 1 | Sr 421.552† | 54468.9 | 55482.9 | 472.43 ug/L | 472.43 ppb | 16:13:13 |
| 1 | Sc 361.383 | 851735.6 | 851735.6 | 101.41 % | | 16:14:30 |
| 1 | Y 371.029 | 716677.2 | 716677.2 | 100.08 % | | 16:14:30 |
| 1 | Ag 328.068† | 102350.6 | 100669.6 | 510.66 ug/L | 510.66 ppb | 16:14:36 |
| 1 | As 188.979† | 904.7 | 913.0 | 493.79 ug/L | 493.79 ppb | 16:14:56 |
| 1 | B 249.677† | 17886.5 | 17887.2 | 489.36 ug/L | 489.36 ppb | 16:14:36 |
| 1 | Ba 233.527† | 54021.1 | 53249.0 | 500.44 ug/L | 500.44 ppb | 16:14:36 |
| 1 | Be 313.107† | 1223562.6 | 1210758.8 | 492.70 ug/L | 492.70 ppb | 16:14:30 |
| 1 | Cd 226.502† | 35970.2 | 35634.9 | 502.47 ug/L | 502.47 ppb | 16:14:36 |
| 1 | Co 228.616† | 19899.8 | 19661.2 | 511.77 ug/L | 511.77 ppb | 16:14:36 |
| 1 | Cr 267.716† | 38784.0 | 38148.1 | 497.71 ug/L | 497.71 ppb | 16:14:36 |
| 1 | Cu 324.752† | 162631.4 | 154010.2 | 499.37 ug/L | 499.37 ppb | 16:14:36 |
| 1 | Mn 257.610† | 381507.5 | 375733.7 | 493.29 ug/L | 493.29 ppb | 16:14:36 |
| 1 | Mo 202.031† | 5709.1 | 5615.2 | 494.14 ug/L | 494.14 ppb | 16:14:56 |
| 1 | Ni 231.604† | 16531.3 | 16207.2 | 505.76 ug/L | 505.76 ppb | 16:14:36 |
| 1 | P 214.914† | 3656.8 | 3437.6 | 2373.3 ug/L | 2373.3 ppb | 16:14:56 |
| 1 | Pb 220.353† | 3210.4 | 3224.4 | 487.45 ug/L | 487.45 ppb | 16:14:56 |
| 1 | S 181.975 Axial† | 596.7 | 564.0 | 987.65 ug/L | 987.65 ppb | 16:14:56 |
| 1 | Sb 206.836† | 1234.5 | 1190.6 | 523.66 ug/L | 523.66 ppb | 16:14:56 |
| 1 | Se 196.026† | 614.6 | 623.0 | 515.30 ug/L | 515.30 ppb | 16:14:56 |
| 1 | Si 251.611† | 69288.9 | 67797.0 | 2518.2 ug/L | 2518.2 ppb | 16:14:36 |
| 1 | Sn 189.927† | 2265.3 | 2230.6 | 494.65 ug/L | 494.65 ppb | 16:14:56 |
| 1 | Ti 334.940† | 292870.9 | 289869.2 | 498.59 ug/L | 498.59 ppb | 16:14:36 |
| 1 | Tl 190.801† | 1247.7 | 1255.4 | 488.69 ug/L | 488.69 ppb | 16:14:56 |
| 1 | U 409.014† | 15779.8 | 17594.8 | 516.01 ug/L | 516.01 ppb | 16:14:36 |
| 1 | V 292.402† | 64101.9 | 64635.3 | 504.86 ug/L | 504.86 ppb | 16:14:36 |
| 1 | Zn 213.857† | 43396.4 | 42184.7 | 496.47 ug/L | 496.47 ppb | 16:14:36 |
| 1 | SiO2† | 67954.3 | 66453.1 | 5295.8 ug/L | 5295.8 ppb | 16:16:03 |
| 2 | Sc Radial | 4089.1 | 4089.1 | 101 % | | 16:13:59 |
| 2 | Y RADIAL | 4456.6 | 4456.6 | 98.64 % | | 16:13:38 |
| 2 | Al 396.153Radial† | 4622.2 | 4639.4 | 4920.3 ug/L | 4920.3 ppb | 16:13:38 |
| 2 | Ca 317.933Radial† | 2516.3 | 2465.1 | 5008.4 ug/L | 5008.4 ppb | 16:13:59 |
| 2 | Fe 238.204 Radial† | 420.7 | 406.1 | 5092.6 ug/L | 5092.6 ppb | 16:13:59 |
| 2 | K 766.490 Radial† | 27245.4 | 24074.0 | 4799.7 ug/L | 4799.7 ppb | 16:13:38 |
| 2 | Mg 279.077 IEC† | 124.0 | 121.6 | 5311.9 ug/L | 5311.9 ppb | 16:13:59 |
| 2 | Na 589.592 Radial† | 24954.2 | 25077.9 | 9848.5 ug/L | 9848.5 ppb | 16:13:38 |
| 2 | Sr 421.552† | 57722.5 | 56872.6 | 484.26 ug/L | 484.26 ppb | 16:13:38 |
| 2 | Sc 361.383 | 844511.7 | 844511.7 | 100.55 % | | 16:15:01 |
| 2 | Y 371.029 | 710119.0 | 710119.0 | 99.168 % | | 16:15:01 |
| 2 | Ag 328.068† | 99552.0 | 98749.7 | 500.92 ug/L | 500.92 ppb | 16:15:07 |
| 2 | As 188.979† | 911.4 | 927.2 | 501.29 ug/L | 501.29 ppb | 16:15:27 |
| 2 | B 249.677† | 17196.5 | 17351.9 | 474.70 ug/L | 474.70 ppb | 16:15:07 |
| 2 | Ba 233.527† | 52682.8 | 52373.8 | 492.21 ug/L | 492.21 ppb | 16:15:07 |
| 2 | Be 313.107† | 1216567.1 | 1214122.0 | 494.05 ug/L | 494.05 ppb | 16:15:01 |
| 2 | Cd 226.502† | 34951.6 | 34925.3 | 492.47 ug/L | 492.47 ppb | 16:15:07 |
| 2 | Co 228.616† | 19388.6 | 19320.6 | 502.94 ug/L | 502.94 ppb | 16:15:07 |
| 2 | Cr 267.716† | 37862.2 | 37558.5 | 490.01 ug/L | 490.01 ppb | 16:15:07 |
| 2 | Cu 324.752† | 157569.6 | 150348.1 | 487.50 ug/L | 487.50 ppb | 16:15:07 |
| 2 | Mn 257.610† | 371566.0 | 369064.9 | 484.52 ug/L | 484.52 ppb | 16:15:07 |
| 2 | Mo 202.031† | 5708.1 | 5662.5 | 498.28 ug/L | 498.28 ppb | 16:15:27 |
| 2 | Ni 231.604† | 16094.9 | 15912.6 | 496.57 ug/L | 496.57 ppb | 16:15:07 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3619.1 | 3430.9 | 2371.0 ug/L | 2371.0 ppb | 16:15:27 |
| 2 | Pb 220.353† | 3219.3 | 3260.3 | 492.94 ug/L | 492.94 ppb | 16:15:27 |
| 2 | S 181.975 Axial† | 606.8 | 579.1 | 1014.1 ug/L | 1014.1 ppb | 16:15:27 |
| 2 | Sb 206.836† | 1217.9 | 1184.5 | 521.16 ug/L | 521.16 ppb | 16:15:27 |
| 2 | Se 196.026† | 613.2 | 626.8 | 517.96 ug/L | 517.96 ppb | 16:15:27 |
| 2 | Si 251.611† | 67320.9 | 66424.3 | 2467.1 ug/L | 2467.1 ppb | 16:15:07 |
| 2 | Sn 189.927† | 2248.8 | 2233.4 | 495.24 ug/L | 495.24 ppb | 16:15:27 |
| 2 | Ti 334.940† | 284804.9 | 284318.0 | 489.01 ug/L | 489.01 ppb | 16:15:07 |
| 2 | Tl 190.801† | 1237.8 | 1256.1 | 488.89 ug/L | 488.89 ppb | 16:15:27 |
| 2 | U 409.014† | 15178.5 | 17130.0 | 502.37 ug/L | 502.37 ppb | 16:15:07 |
| 2 | V 292.402† | 62516.5 | 63599.3 | 496.94 ug/L | 496.94 ppb | 16:15:07 |
| 2 | Zn 213.857† | 42311.4 | 41471.7 | 488.09 ug/L | 488.09 ppb | 16:15:07 |
| 2 | SiO2† | 68280.0 | 67350.2 | 5367.4 ug/L | 5367.4 ppb | 16:16:08 |
| 3 | Sc Radial | 4069.0 | 4069.0 | 101 % | | 16:14:24 |
| 3 | Y RADIAL | 4521.2 | 4521.2 | 100.1 % | | 16:14:04 |
| 3 | Al 396.153Radial† | 4660.6 | 4699.9 | 4985.3 ug/L | 4985.3 ppb | 16:14:04 |
| 3 | Ca 317.933Radial† | 2520.8 | 2481.9 | 5042.5 ug/L | 5042.5 ppb | 16:14:24 |
| 3 | Fe 238.204 Radial† | 423.5 | 410.8 | 5152.3 ug/L | 5152.3 ppb | 16:14:24 |
| 3 | K 766.490 Radial† | 27644.1 | 24601.9 | 4905.0 ug/L | 4905.0 ppb | 16:14:04 |
| 3 | Mg 279.077 IEC† | 119.8 | 118.0 | 5156.1 ug/L | 5156.1 ppb | 16:14:24 |
| 3 | Na 589.592 Radial† | 25232.9 | 25475.6 | 10005 ug/L | 10005 ppb | 16:14:04 |
| 3 | Sr 421.552† | 58133.1 | 57560.5 | 490.12 ug/L | 490.12 ppb | 16:14:04 |
| 3 | Sc 361.383 | 858583.8 | 858583.8 | 102.23 % | | 16:15:32 |
| 3 | Y 371.029 | 722897.7 | 722897.7 | 100.95 % | | 16:15:32 |
| 3 | Ag 328.068† | 100684.4 | 98234.8 | 498.33 ug/L | 498.33 ppb | 16:15:37 |
| 3 | As 188.979† | 893.9 | 895.2 | 484.15 ug/L | 484.15 ppb | 16:15:57 |
| 3 | B 249.677† | 17528.9 | 17396.7 | 475.93 ug/L | 475.93 ppb | 16:15:37 |
| 3 | Ba 233.527† | 53210.8 | 52031.6 | 489.00 ug/L | 489.00 ppb | 16:15:37 |
| 3 | Be 313.107† | 1234647.0 | 1211978.2 | 493.17 ug/L | 493.17 ppb | 16:15:32 |
| 3 | Cd 226.502† | 35314.6 | 34710.7 | 489.43 ug/L | 489.43 ppb | 16:15:37 |
| 3 | Co 228.616† | 19559.2 | 19171.5 | 499.04 ug/L | 499.04 ppb | 16:15:37 |
| 3 | Cr 267.716† | 38324.8 | 37393.8 | 487.87 ug/L | 487.87 ppb | 16:15:37 |
| 3 | Cu 324.752† | 159706.5 | 149870.0 | 485.95 ug/L | 485.95 ppb | 16:15:37 |
| 3 | Mn 257.610† | 376059.2 | 367403.8 | 482.35 ug/L | 482.35 ppb | 16:15:37 |
| 3 | Mo 202.031† | 5700.4 | 5561.8 | 489.44 ug/L | 489.44 ppb | 16:15:57 |
| 3 | Ni 231.604† | 16289.3 | 15840.3 | 494.31 ug/L | 494.31 ppb | 16:15:37 |
| 3 | P 214.914† | 3594.6 | 3348.0 | 2311.6 ug/L | 2311.6 ppb | 16:15:57 |
| 3 | Pb 220.353† | 3215.5 | 3204.1 | 484.45 ug/L | 484.45 ppb | 16:15:57 |
| 3 | S 181.975 Axial† | 597.9 | 560.5 | 981.44 ug/L | 981.44 ppb | 16:15:57 |
| 3 | Sb 206.836† | 1217.7 | 1164.5 | 512.32 ug/L | 512.32 ppb | 16:15:57 |
| 3 | Se 196.026† | 600.7 | 604.5 | 500.38 ug/L | 500.38 ppb | 16:15:57 |
| 3 | Si 251.611† | 67986.6 | 65978.2 | 2450.6 ug/L | 2450.6 ppb | 16:15:37 |
| 3 | Sn 189.927† | 2247.1 | 2195.0 | 486.76 ug/L | 486.76 ppb | 16:15:57 |
| 3 | Ti 334.940† | 288252.7 | 283048.3 | 486.84 ug/L | 486.84 ppb | 16:15:37 |
| 3 | Tl 190.801† | 1247.2 | 1245.1 | 484.63 ug/L | 484.63 ppb | 16:15:57 |
| 3 | U 409.014† | 15421.6 | 17120.4 | 502.08 ug/L | 502.08 ppb | 16:15:37 |
| 3 | V 292.402† | 63232.1 | 63280.3 | 494.35 ug/L | 494.35 ppb | 16:15:37 |
| 3 | Zn 213.857† | 42705.1 | 41167.1 | 484.48 ug/L | 484.48 ppb | 16:15:37 |
| 3 | SiO2† | 67876.5 | 65842.5 | 5247.2 ug/L | 5247.2 ppb | 16:16:13 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 851610.4 | 101.40 % | 0.838 | | | 0.83% |
| Sc Radial | 4037.7 | 100 % | 1.8 | | | 1.79% |
| Y 371.029 | 716564.6 | 100.07 % | 0.892 | | | 0.89% |
| Y RADIAL | 4414.0 | 97.70 % | 2.960 | | | 3.03% |
| Ag 328.068† | 99218.0 | 503.30 ug/L | 6.502 | 503.30 ppb | 6.502 | 1.29% |
| QC value within limits for Ag 328.068 Recovery = 100.66% | | | | | | |
| Al 396.153Radial† | 4619.7 | 4899.6 ug/L | 97.73 | 4899.6 ppb | 97.73 | 1.99% |
| QC value within limits for Al 396.153Radial Recovery = 97.99% | | | | | | |
| As 188.979† | 911.8 | 493.08 ug/L | 8.591 | 493.08 ppb | 8.591 | 1.74% |
| QC value within limits for As 188.979 Recovery = 98.62% | | | | | | |
| B 249.677† | 17545.3 | 480.00 ug/L | 8.134 | 480.00 ppb | 8.134 | 1.69% |
| QC value within limits for B 249.677 Recovery = 96.00% | | | | | | |
| Ba 233.527† | 52551.5 | 493.88 ug/L | 5.899 | 493.88 ppb | 5.899 | 1.19% |
| QC value within limits for Ba 233.527 Recovery = 98.78% | | | | | | |
| Be 313.107† | 1212286.3 | 493.31 ug/L | 0.682 | 493.31 ppb | 0.682 | 0.14% |
| QC value within limits for Be 313.107 Recovery = 98.66% | | | | | | |
| Ca 317.933Radial† | 2495.6 | 5070.5 ug/L | 79.83 | 5070.5 ppb | 79.83 | 1.57% |

QC value within limits for Ca 317.933 Radial Recovery = 101.41%

| | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502† | 35090.3 | 494.79 ug/L | 6.822 | 494.79 ppb | 6.822 | 1.38% |
| QC value within limits for Cd 226.502 Recovery = 98.96% | | | | | | |
| Co 228.616† | 19384.4 | 504.59 ug/L | 6.523 | 504.59 ppb | 6.523 | 1.29% |
| QC value within limits for Co 228.616 Recovery = 100.92% | | | | | | |
| Cr 267.716† | 37700.1 | 491.87 ug/L | 5.174 | 491.87 ppb | 5.174 | 1.05% |
| QC value within limits for Cr 267.716 Recovery = 98.37% | | | | | | |
| Cu 324.752† | 151409.4 | 490.94 ug/L | 7.343 | 490.94 ppb | 7.343 | 1.50% |
| QC value within limits for Cu 324.752 Recovery = 98.19% | | | | | | |
| Fe 238.204 Radial† | 411.4 | 5159.8 ug/L | 71.22 | 5159.8 ppb | 71.22 | 1.38% |
| QC value within limits for Fe 238.204 Radial Recovery = 103.20% | | | | | | |
| K 766.490 Radial† | 24162.6 | 4817.3 ug/L | 80.29 | 4817.3 ppb | 80.29 | 1.67% |
| QC value within limits for K 766.490 Radial Recovery = 96.35% | | | | | | |
| Mg 279.077 IEC† | 118.9 | 5194.3 ug/L | 103.92 | 5194.3 ppb | 103.92 | 2.00% |
| QC value within limits for Mg 279.077 IEC Recovery = 103.89% | | | | | | |
| Mn 257.610† | 370734.1 | 486.72 ug/L | 5.792 | 486.72 ppb | 5.792 | 1.19% |
| QC value within limits for Mn 257.610 Recovery = 97.34% | | | | | | |
| Mo 202.031† | 5613.2 | 493.95 ug/L | 4.424 | 493.95 ppb | 4.424 | 0.90% |
| QC value within limits for Mo 202.031 Recovery = 98.79% | | | | | | |
| Na 589.592 Radial† | 25123.9 | 9866.5 ug/L | 130.03 | 9866.5 ppb | 130.03 | 1.32% |
| QC value within limits for Na 589.592 Radial Recovery = 98.67% | | | | | | |
| Ni 231.604† | 15986.7 | 498.88 ug/L | 6.063 | 498.88 ppb | 6.063 | 1.22% |
| QC value within limits for Ni 231.604 Recovery = 99.78% | | | | | | |
| P 214.914† | 3405.5 | 2352.0 ug/L | 34.97 | 2352.0 ppb | 34.97 | 1.49% |
| QC value within limits for P 214.914 Recovery = 94.08% | | | | | | |
| Pb 220.353† | 3229.6 | 488.28 ug/L | 4.303 | 488.28 ppb | 4.303 | 0.88% |
| QC value within limits for Pb 220.353 Recovery = 97.66% | | | | | | |
| S 181.975 Axial† | 567.8 | 994.38 ug/L | 17.328 | 994.38 ppb | 17.328 | 1.74% |
| QC value within limits for S 181.975 Axial Recovery = 99.44% | | | | | | |
| Sb 206.836† | 1179.9 | 519.05 ug/L | 5.955 | 519.05 ppb | 5.955 | 1.15% |
| QC value within limits for Sb 206.836 Recovery = 103.81% | | | | | | |
| Se 196.026† | 618.1 | 511.21 ug/L | 9.477 | 511.21 ppb | 9.477 | 1.85% |
| QC value within limits for Se 196.026 Recovery = 102.24% | | | | | | |
| Si 251.611† | 66733.1 | 2478.6 ug/L | 35.28 | 2478.6 ppb | 35.28 | 1.42% |
| QC value within limits for Si 251.611 Recovery = 99.14% | | | | | | |
| Sn 189.927† | 2219.7 | 492.22 ug/L | 4.738 | 492.22 ppb | 4.738 | 0.96% |
| QC value within limits for Sn 189.927 Recovery = 98.44% | | | | | | |
| Sr 421.552† | 56638.7 | 482.27 ug/L | 9.013 | 482.27 ppb | 9.013 | 1.87% |
| QC value within limits for Sr 421.552 Recovery = 96.45% | | | | | | |
| Ti 334.940† | 285745.2 | 491.48 ug/L | 6.250 | 491.48 ppb | 6.250 | 1.27% |
| QC value within limits for Ti 334.940 Recovery = 98.30% | | | | | | |
| Tl 190.801† | 1252.2 | 487.40 ug/L | 2.403 | 487.40 ppb | 2.403 | 0.49% |
| QC value within limits for Tl 190.801 Recovery = 97.48% | | | | | | |
| U 409.014† | 17281.7 | 506.82 ug/L | 7.961 | 506.82 ppb | 7.961 | 1.57% |
| QC value within limits for U 409.014 Recovery = 101.36% | | | | | | |
| V 292.402† | 63838.3 | 498.72 ug/L | 5.475 | 498.72 ppb | 5.475 | 1.10% |
| QC value within limits for V 292.402 Recovery = 99.74% | | | | | | |
| Zn 213.857† | 41607.8 | 489.68 ug/L | 6.148 | 489.68 ppb | 6.148 | 1.26% |
| QC value within limits for Zn 213.857 Recovery = 97.94% | | | | | | |
| SiO2† | 66548.6 | 5303.5 ug/L | 60.47 | 5303.5 ppb | 60.47 | 1.14% |
| QC value within limits for SiO2 Recovery = 99.18% | | | | | | |

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 16:18:23

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 | 4034.0 | 4034.0 | 100 % | | | 16:20:36 |
| 1 | Y RADIAL | 4423.4 | 4423.4 | 97.91 % | | | 16:20:16 |
| 1 | Al 396.153Radial† | -68.7 | 10.9 | 11.674 ug/L | | 11.674 ppb | 16:20:36 |
| 1 | Ca 317.933Radial† | 38.4 | 21.2 | 43.119 ug/L | | 43.119 ppb | 16:20:36 |
| 1 | Fe 238.204 Radial† | 15.8 | 6.8 | 85.359 ug/L | | 85.359 ppb | 16:20:36 |
| 1 | K 766.490 Radial† | 2850.4 | 47.1 | 9.3727 ug/L | | 9.3727 ppb | 16:20:16 |
| 1 | Mg 279.077 IEC† | 1.7 | 1.0 | 44.231 ug/L | | 44.231 ppb | 16:20:36 |
| 1 | Na 589.592 Radial† | -417.9 | 43.0 | 16.904 ug/L | | 16.904 ppb | 16:20:16 |
| 1 | Sr 421.552† | 85.5 | 15.5 | 0.1313 ug/L | | 0.1313 ppb | 16:20:16 |
| 1 | Sc 361.383 | 837863.7 | 837863.7 | 99.763 % | | | 16:21:33 |
| 1 | Y 371.029 | 714441.1 | 714441.1 | 99.772 % | | | 16:21:33 |
| 1 | Ag 328.068† | 222.0 | -30.8 | -0.1304 ug/L | | -0.1304 ppb | 16:21:33 |
| 1 | As 188.979† | -15.9 | 4.9 | 2.6600 ug/L | | 2.6600 ppb | 16:21:53 |
| 1 | B 249.677† | -373.7 | -124.5 | -3.4343 ug/L | | -3.4343 ppb | 16:21:53 |
| 1 | Ba 233.527† | 39.8 | 21.4 | 0.2041 ug/L | | 0.2041 ppb | 16:21:53 |
| 1 | Be 313.107† | -4371.5 | -119.2 | -0.0481 ug/L | | -0.0481 ppb | 16:21:33 |
| 1 | Cd 226.502† | -171.5 | -5.5 | -0.0857 ug/L | | -0.0857 ppb | 16:21:53 |
| 1 | Co 228.616† | -52.4 | -13.6 | -0.3563 ug/L | | -0.3563 ppb | 16:21:53 |
| 1 | Cr 267.716† | 87.8 | -6.9 | -0.0818 ug/L | | -0.0818 ppb | 16:21:53 |
| 1 | Cu 324.752† | 6502.8 | 165.5 | 0.5389 ug/L | | 0.5389 ppb | 16:21:33 |
| 1 | Mn 257.610† | 923.0 | 472.8 | 0.6270 ug/L | | 0.6270 ppb | 16:21:53 |
| 1 | Mo 202.031† | 8.0 | -6.2 | -0.5352 ug/L | | -0.5352 ppb | 16:21:53 |
| 1 | Ni 231.604† | 88.5 | -4.9 | -0.1535 ug/L | | -0.1535 ppb | 16:21:53 |
| 1 | P 214.914† | 192.4 | 24.6 | 17.512 ug/L | | 17.512 ppb | 16:21:53 |
| 1 | Pb 220.353† | -51.0 | 7.7 | 1.1461 ug/L | | 1.1461 ppb | 16:21:53 |
| 1 | S 181.975 Axial† | 35.2 | 10.9 | 19.063 ug/L | | 19.063 ppb | 16:21:53 |
| 1 | Sb 206.836† | 26.3 | -0.3 | -0.1289 ug/L | | -0.1289 ppb | 16:21:53 |
| 1 | Se 196.026† | -24.6 | -7.8 | -5.9250 ug/L | | -5.9250 ppb | 16:21:53 |
| 1 | Si 251.611† | 624.0 | 100.0 | 3.7310 ug/L | | 3.7310 ppb | 16:21:53 |
| 1 | Sn 189.927† | 5.0 | 1.9 | 0.4222 ug/L | | 0.4222 ppb | 16:21:53 |
| 1 | Ti 334.940† | -1010.4 | 70.5 | 0.1218 ug/L | | 0.1218 ppb | 16:21:33 |
| 1 | Tl 190.801† | -17.4 | 7.6 | 2.9417 ug/L | | 2.9417 ppb | 16:21:53 |
| 1 | U 409.014† | -1900.7 | 130.0 | 3.8150 ug/L | | 3.8150 ppb | 16:21:33 |
| 1 | V 292.402† | -1348.8 | 75.5 | 0.5701 ug/L | | 0.5701 ppb | 16:21:33 |
| 1 | Zn 213.857† | 761.9 | 157.3 | 1.8564 ug/L | | 1.8564 ppb | 16:21:53 |
| 1 | SiO2† | 646.4 | 94.6 | 7.5745 ug/L | | 7.5745 ppb | 16:23:04 |
| 2 | Sc Radial | 4069.2 | 4069.2 | 101 % | | | 16:21:01 |
| 2 | Y RADIAL | 4631.5 | 4631.5 | 102.5 % | | | 16:20:41 |
| 2 | Al 396.153Radial† | -71.6 | 8.7 | 9.2599 ug/L | | 9.2599 ppb | 16:21:01 |
| 2 | Ca 317.933Radial† | 34.5 | 17.0 | 34.535 ug/L | | 34.535 ppb | 16:21:01 |
| 2 | Fe 238.204 Radial† | 15.4 | 6.3 | 78.660 ug/L | | 78.660 ppb | 16:21:01 |
| 2 | K 766.490 Radial† | 2721.4 | -105.4 | -21.076 ug/L | | -21.076 ppb | 16:20:41 |
| 2 | Mg 279.077 IEC† | 2.2 | 1.5 | 64.836 ug/L | | 64.836 ppb | 16:21:01 |
| 2 | Na 589.592 Radial† | -373.0 | 91.1 | 35.769 ug/L | | 35.769 ppb | 16:20:41 |
| 2 | Sr 421.552† | 74.2 | 3.5 | 0.0300 ug/L | | 0.0300 ppb | 16:20:41 |
| 2 | Sc 361.383 | 834943.8 | 834943.8 | 99.415 % | | | 16:21:58 |
| 2 | Y 371.029 | 711436.5 | 711436.5 | 99.352 % | | | 16:21:58 |
| 2 | Ag 328.068† | 40.5 | -212.7 | -1.0497 ug/L | | -1.0497 ppb | 16:21:58 |
| 2 | As 188.979† | -19.1 | 1.6 | 0.8816 ug/L | | 0.8816 ppb | 16:22:18 |
| 2 | B 249.677† | -359.9 | -111.8 | -3.0865 ug/L | | -3.0865 ppb | 16:22:18 |
| 2 | Ba 233.527† | 77.3 | 59.3 | 0.5575 ug/L | | 0.5575 ppb | 16:22:18 |
| 2 | Be 313.107† | -4383.7 | -146.8 | -0.0594 ug/L | | -0.0594 ppb | 16:21:58 |
| 2 | Cd 226.502† | -152.6 | 12.9 | 0.1732 ug/L | | 0.1732 ppb | 16:22:18 |
| 2 | Co 228.616† | -42.5 | -3.9 | -0.1030 ug/L | | -0.1030 ppb | 16:22:18 |
| 2 | Cr 267.716† | 110.7 | 16.4 | 0.2210 ug/L | | 0.2210 ppb | 16:22:18 |
| 2 | Cu 324.752† | 6563.6 | 249.4 | 0.8127 ug/L | | 0.8127 ppb | 16:21:58 |
| 2 | Mn 257.610† | 1114.6 | 668.7 | 0.8825 ug/L | | 0.8825 ppb | 16:22:18 |
| 2 | Mo 202.031† | 8.9 | -5.2 | -0.4509 ug/L | | -0.4509 ppb | 16:22:18 |
| 2 | Ni 231.604† | 77.9 | -15.3 | -0.4763 ug/L | | -0.4763 ppb | 16:22:18 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 190.8 | 23.7 | 16.848 ug/L | 16.848 ppb | 16:22:18 |
| 2 | Pb 220.353† | -50.7 | 7.9 | 1.1736 ug/L | 1.1736 ppb | 16:22:18 |
| 2 | S 181.975 Axial† | 31.4 | 7.2 | 12.654 ug/L | 12.654 ppb | 16:22:18 |
| 2 | Sb 206.836† | 27.2 | 0.7 | 0.3279 ug/L | 0.3279 ppb | 16:22:18 |
| 2 | Se 196.026† | -23.1 | -6.3 | -4.8086 ug/L | -4.8086 ppb | 16:22:18 |
| 2 | Si 251.611† | 711.8 | 190.6 | 7.1007 ug/L | 7.1007 ppb | 16:22:18 |
| 2 | Sn 189.927† | 10.6 | 7.6 | 1.6830 ug/L | 1.6830 ppb | 16:22:18 |
| 2 | Ti 334.940† | -1034.0 | 43.3 | 0.0735 ug/L | 0.0735 ppb | 16:21:58 |
| 2 | Tl 190.801† | -30.2 | -5.3 | -2.0420 ug/L | -2.0420 ppb | 16:22:18 |
| 2 | U 409.014† | -2007.1 | 16.3 | 0.4701 ug/L | 0.4701 ppb | 16:21:58 |
| 2 | V 292.402† | -1446.3 | -27.3 | -0.2264 ug/L | -0.2264 ppb | 16:21:58 |
| 2 | Zn 213.857† | 783.6 | 181.8 | 2.1495 ug/L | 2.1495 ppb | 16:22:18 |
| 2 | SiO2† | 697.1 | 147.8 | 11.824 ug/L | 11.824 ppb | 16:23:24 |
| 3 | Sc Radial | 4035.2 | 4035.2 | 100 % | | 16:21:26 |
| 3 | Y RADIAL | 4587.6 | 4587.6 | 101.5 % | | 16:21:06 |
| 3 | Al 396.153Radial† | -63.3 | 16.3 | 17.375 ug/L | 17.375 ppb | 16:21:26 |
| 3 | Ca 317.933Radial† | 32.1 | 14.9 | 30.228 ug/L | 30.228 ppb | 16:21:26 |
| 3 | Fe 238.204 Radial† | 13.6 | 4.6 | 57.741 ug/L | 57.741 ppb | 16:21:26 |
| 3 | K 766.490 Radial† | 2709.5 | -94.6 | -18.905 ug/L | -18.905 ppb | 16:21:06 |
| 3 | Mg 279.077 IEC† | 4.6 | 3.8 | 167.85 ug/L | 167.85 ppb | 16:21:26 |
| 3 | Na 589.592 Radial† | -418.0 | 43.1 | 16.910 ug/L | 16.910 ppb | 16:21:06 |
| 3 | Sr 421.552† | 81.4 | 11.3 | 0.0959 ug/L | 0.0959 ppb | 16:21:06 |
| 3 | Sc 361.383 | 832588.3 | 832588.3 | 99.135 % | | 16:22:23 |
| 3 | Y 371.029 | 710157.9 | 710157.9 | 99.174 % | | 16:22:23 |
| 3 | Ag 328.068† | 102.1 | -150.4 | -0.7370 ug/L | -0.7370 ppb | 16:22:23 |
| 3 | As 188.979† | -24.7 | -4.1 | -2.1845 ug/L | -2.1845 ppb | 16:22:43 |
| 3 | B 249.677† | -355.5 | -108.4 | -2.9886 ug/L | -2.9886 ppb | 16:22:43 |
| 3 | Ba 233.527† | 67.0 | 49.1 | 0.4637 ug/L | 0.4637 ppb | 16:22:43 |
| 3 | Be 313.107† | -4339.9 | -115.0 | -0.0462 ug/L | -0.0462 ppb | 16:22:23 |
| 3 | Cd 226.502† | -171.8 | -6.9 | -0.1036 ug/L | -0.1036 ppb | 16:22:43 |
| 3 | Co 228.616† | -47.5 | -9.0 | -0.2331 ug/L | -0.2331 ppb | 16:22:43 |
| 3 | Cr 267.716† | 114.2 | 20.3 | 0.2715 ug/L | 0.2715 ppb | 16:22:43 |
| 3 | Cu 324.752† | 6498.0 | 202.0 | 0.6585 ug/L | 0.6585 ppb | 16:22:23 |
| 3 | Mn 257.610† | 1312.8 | 871.9 | 1.1428 ug/L | 1.1428 ppb | 16:22:43 |
| 3 | Mo 202.031† | 22.8 | 8.8 | 0.7804 ug/L | 0.7804 ppb | 16:22:43 |
| 3 | Ni 231.604† | 95.9 | 3.1 | 0.0978 ug/L | 0.0978 ppb | 16:22:43 |
| 3 | P 214.914† | 190.0 | 23.4 | 16.677 ug/L | 16.677 ppb | 16:22:43 |
| 3 | Pb 220.353† | -47.4 | 11.0 | 1.6588 ug/L | 1.6588 ppb | 16:22:43 |
| 3 | S 181.975 Axial† | 28.9 | 4.8 | 8.4107 ug/L | 8.4107 ppb | 16:22:43 |
| 3 | Sb 206.836† | 24.0 | -2.4 | -1.0090 ug/L | -1.0090 ppb | 16:22:43 |
| 3 | Se 196.026† | -17.5 | -0.7 | -0.3445 ug/L | -0.3445 ppb | 16:22:43 |
| 3 | Si 251.611† | 703.6 | 184.3 | 6.8530 ug/L | 6.8530 ppb | 16:22:43 |
| 3 | Sn 189.927† | 3.2 | 0.1 | 0.0284 ug/L | 0.0284 ppb | 16:22:43 |
| 3 | Ti 334.940† | -940.7 | 134.4 | 0.2220 ug/L | 0.2220 ppb | 16:22:23 |
| 3 | Tl 190.801† | -23.2 | 1.6 | 0.6411 ug/L | 0.6411 ppb | 16:22:43 |
| 3 | U 409.014† | -2053.8 | -36.6 | -1.0830 ug/L | -1.0830 ppb | 16:22:23 |
| 3 | V 292.402† | -1316.7 | 99.3 | 0.7688 ug/L | 0.7688 ppb | 16:22:23 |
| 3 | Zn 213.857† | 771.3 | 171.6 | 2.0287 ug/L | 2.0287 ppb | 16:22:43 |
| 3 | SiO2† | 633.4 | 85.6 | 6.8185 ug/L | 6.8185 ppb | 16:23:44 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 835132.0 | 99.438 % | | 0.3147 | | | 0.32% |
| Sc Radial | 4046.1 | 100 % | | 0.5 | | | 0.49% |
| Y 371.029 | 712011.8 | 99.433 % | | 0.3071 | | | 0.31% |
| Y RADIAL | 4547.5 | 100.7 % | | 2.43 | | | 2.41% |
| Ag 328.068† | -131.3 | -0.6390 ug/L | | 0.46738 | -0.6390 ppb | 0.46738 | 73.14% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 12.0 | 12.770 ug/L | | 4.1671 | 12.770 ppb | 4.1671 | 32.63% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | 0.8 | 0.4524 ug/L | | 2.45063 | 0.4524 ppb | 2.45063 | 541.75% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | -114.9 | -3.1698 ug/L | | 0.23425 | -3.1698 ppb | 0.23425 | 7.39% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 43.2 | 0.4084 ug/L | | 0.18305 | 0.4084 ppb | 0.18305 | 44.82% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -127.0 | -0.0512 ug/L | | 0.00716 | -0.0512 ppb | 0.00716 | 13.97% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 17.7 | 35.960 ug/L | | 6.5627 | 35.960 ppb | 6.5627 | 18.25% |

| | | | | | | |
|--|-------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | 0.2 | -0.0054 ug/L | 0.15488 | -0.0054 ppb | 0.15488 | >999.9% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -8.8 | -0.2308 ug/L | 0.12667 | -0.2308 ppb | 0.12667 | 54.89% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 9.9 | 0.1369 ug/L | 0.19105 | 0.1369 ppb | 0.19105 | 139.55% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 205.6 | 0.6700 ug/L | 0.13724 | 0.6700 ppb | 0.13724 | 20.48% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 5.9 | 73.920 ug/L | 14.4062 | 73.920 ppb | 14.4062 | 19.49% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -51.0 | -10.203 ug/L | 16.9875 | -10.203 ppb | 16.9875 | 166.50% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 2.1 | 92.305 ug/L | 66.2294 | 92.305 ppb | 66.2294 | 71.75% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 671.1 | 0.8841 ug/L | 0.25790 | 0.8841 ppb | 0.25790 | 29.17% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -0.9 | -0.0686 ug/L | 0.73642 | -0.0686 ppb | 0.73642 | >999.9% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 59.1 | 23.194 ug/L | 10.8902 | 23.194 ppb | 10.8902 | 46.95% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -5.7 | -0.1773 ug/L | 0.28778 | -0.1773 ppb | 0.28778 | 162.27% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 23.9 | 17.013 ug/L | 0.4412 | 17.013 ppb | 0.4412 | 2.59% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 8.8 | 1.3261 ug/L | 0.28842 | 1.3261 ppb | 0.28842 | 21.75% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 7.6 | 13.376 ug/L | 5.3629 | 13.376 ppb | 5.3629 | 40.09% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | -0.7 | -0.2700 ug/L | 0.67950 | -0.2700 ppb | 0.67950 | 251.67% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -4.9 | -3.6927 ug/L | 2.95287 | -3.6927 ppb | 2.95287 | 79.97% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 158.3 | 5.8949 ug/L | 1.87809 | 5.8949 ppb | 1.87809 | 31.86% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 3.2 | 0.7112 ug/L | 0.86435 | 0.7112 ppb | 0.86435 | 121.54% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | 10.1 | 0.0857 ug/L | 0.05143 | 0.0857 ppb | 0.05143 | 60.00% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 82.7 | 0.1391 ug/L | 0.07574 | 0.1391 ppb | 0.07574 | 54.45% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 1.3 | 0.5136 ug/L | 2.49430 | 0.5136 ppb | 2.49430 | 485.64% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 36.6 | 1.0674 ug/L | 2.50300 | 1.0674 ppb | 2.50300 | 234.50% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 49.2 | 0.3708 ug/L | 0.52671 | 0.3708 ppb | 0.52671 | 142.03% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 170.2 | 2.0115 ug/L | 0.14732 | 2.0115 ppb | 0.14732 | 7.32% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 109.4 | 8.7389 ug/L | 2.69826 | 8.7389 ppb | 2.69826 | 30.88% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/25/2010 16:32:43

Plasma On Time: 3/22/2010 06:16:18

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\032510.sif

Batch ID:

Results Data Set: 032510A

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/25/2010 16:32:44

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 | 4027.7 | 4027.7 | 99.8 % | | 16:34:56 |
| 1 | Y RADIAL | 4324.2 | 4324.2 | 95.71 % | | 16:34:36 |
| 1 | Al 396.153Radial† | 4671.4 | 4758.1 | 5047.0 ug/L | 5047.0 ppb | 16:34:36 |
| 1 | Ca 317.933Radial† | 2476.5 | 2463.1 | 5004.3 ug/L | 5004.3 ppb | 16:34:56 |
| 1 | Fe 238.204 Radial† | 411.3 | 402.9 | 5053.7 ug/L | 5053.7 ppb | 16:34:56 |
| 1 | K 766.490 Radial† | 27394.6 | 24632.9 | 4911.1 ug/L | 4911.1 ppb | 16:34:36 |
| 1 | Mg 279.077 IEC† | 118.8 | 118.3 | 5166.7 ug/L | 5166.7 ppb | 16:34:56 |
| 1 | Na 589.592 Radial† | 25413.0 | 25912.3 | 10176 ug/L | 10176 ppb | 16:34:36 |
| 1 | Sr 421.552† | 58364.4 | 58382.7 | 497.12 ug/L | 497.12 ppb | 16:34:36 |
| 1 | Sc 361.383 | 839614.0 | 839614.0 | 99.971 % | | 16:35:53 |
| 1 | Y 371.029 | 707105.6 | 707105.6 | 98.747 % | | 16:35:53 |
| 1 | Ag 328.068† | 100202.1 | 99977.5 | 507.10 ug/L | 507.10 ppb | 16:35:59 |
| 1 | As 188.979† | 901.7 | 922.8 | 498.97 ug/L | 498.97 ppb | 16:36:19 |
| 1 | B 249.677† | 17403.4 | 17658.5 | 483.13 ug/L | 483.13 ppb | 16:35:59 |
| 1 | Ba 233.527† | 52722.9 | 52719.6 | 495.46 ug/L | 495.46 ppb | 16:35:59 |
| 1 | Be 313.107† | 1204619.2 | 1209228.3 | 492.07 ug/L | 492.07 ppb | 16:35:53 |
| 1 | Cd 226.502† | 35046.3 | 35222.7 | 496.67 ug/L | 496.67 ppb | 16:35:59 |
| 1 | Co 228.616† | 19401.8 | 19446.3 | 506.20 ug/L | 506.20 ppb | 16:35:59 |
| 1 | Cr 267.716† | 37956.5 | 37872.4 | 494.10 ug/L | 494.10 ppb | 16:35:59 |
| 1 | Cu 324.752† | 158811.1 | 152504.1 | 494.48 ug/L | 494.48 ppb | 16:35:59 |
| 1 | Mn 257.610† | 372566.4 | 372221.1 | 488.66 ug/L | 488.66 ppb | 16:35:59 |
| 1 | Mo 202.031† | 5649.6 | 5637.0 | 496.04 ug/L | 496.04 ppb | 16:36:19 |
| 1 | Ni 231.604† | 16151.2 | 16062.3 | 501.24 ug/L | 501.24 ppb | 16:35:59 |
| 1 | P 214.914† | 3585.3 | 3418.1 | 2360.5 ug/L | 2360.5 ppb | 16:36:19 |
| 1 | Pb 220.353† | 3191.6 | 3251.4 | 491.61 ug/L | 491.61 ppb | 16:36:19 |
| 1 | S 181.975 Axial† | 588.6 | 564.4 | 988.37 ug/L | 988.37 ppb | 16:36:19 |
| 1 | Sb 206.836† | 1208.3 | 1182.0 | 520.01 ug/L | 520.01 ppb | 16:36:19 |
| 1 | Se 196.026† | 609.6 | 626.8 | 517.87 ug/L | 517.87 ppb | 16:36:19 |
| 1 | Si 251.611† | 67480.6 | 66974.6 | 2487.6 ug/L | 2487.6 ppb | 16:35:59 |
| 1 | Sn 189.927† | 2234.1 | 2231.7 | 494.88 ug/L | 494.88 ppb | 16:36:19 |
| 1 | Ti 334.940† | 285988.1 | 287153.7 | 493.89 ug/L | 493.89 ppb | 16:35:59 |
| 1 | Tl 190.801† | 1229.5 | 1254.9 | 488.50 ug/L | 488.50 ppb | 16:36:19 |
| 1 | U 409.014† | 15625.5 | 17665.2 | 518.11 ug/L | 518.11 ppb | 16:35:59 |
| 1 | V 292.402† | 62666.0 | 64111.5 | 500.89 ug/L | 500.89 ppb | 16:35:59 |
| 1 | Zn 213.857† | 42415.7 | 41821.5 | 492.21 ug/L | 492.21 ppb | 16:35:59 |
| 1 | SiO2† | 66150.2 | 65615.8 | 5228.9 ug/L | 5228.9 ppb | 16:37:26 |
| 2 | Sc Radial | 4035.2 | 4035.2 | 100 % | | 16:35:21 |
| 2 | Y RADIAL | 4496.7 | 4496.7 | 99.53 % | | 16:35:01 |
| 2 | Al 396.153Radial† | 4564.5 | 4642.6 | 4923.9 ug/L | 4923.9 ppb | 16:35:01 |
| 2 | Ca 317.933Radial† | 2473.2 | 2455.2 | 4988.4 ug/L | 4988.4 ppb | 16:35:21 |
| 2 | Fe 238.204 Radial† | 411.2 | 402.1 | 5043.1 ug/L | 5043.1 ppb | 16:35:21 |
| 2 | K 766.490 Radial† | 27054.3 | 24242.2 | 4833.2 ug/L | 4833.2 ppb | 16:35:01 |
| 2 | Mg 279.077 IEC† | 116.1 | 115.4 | 5039.8 ug/L | 5039.8 ppb | 16:35:21 |
| 2 | Na 589.592 Radial† | 24748.6 | 25201.3 | 9896.9 ug/L | 9896.9 ppb | 16:35:01 |
| 2 | Sr 421.552† | 56872.0 | 56783.2 | 483.50 ug/L | 483.50 ppb | 16:35:01 |
| 2 | Sc 361.383 | 838991.4 | 838991.4 | 99.897 % | | 16:36:24 |
| 2 | Y 371.029 | 706721.3 | 706721.3 | 98.694 % | | 16:36:24 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | Ag 328.068† | 100015.6 | 99865.3 | 506.54 ug/L | 506.54 ppb | 16:36:29 |
| 2 | As 188.979† | 887.7 | 909.4 | 491.81 ug/L | 491.81 ppb | 16:36:49 |
| 2 | B 249.677† | 17415.6 | 17683.7 | 483.82 ug/L | 483.82 ppb | 16:36:29 |
| 2 | Ba 233.527† | 52644.6 | 52680.3 | 495.09 ug/L | 495.09 ppb | 16:36:29 |
| 2 | Be 313.107† | 1203310.0 | 1208811.9 | 491.90 ug/L | 491.90 ppb | 16:36:24 |
| 2 | Cd 226.502† | 34867.1 | 35069.4 | 494.51 ug/L | 494.51 ppb | 16:36:29 |
| 2 | Co 228.616† | 19427.3 | 19486.2 | 507.24 ug/L | 507.24 ppb | 16:36:29 |
| 2 | Cr 267.716† | 38010.4 | 37954.6 | 495.17 ug/L | 495.17 ppb | 16:36:29 |
| 2 | Cu 324.752† | 158824.5 | 152635.3 | 494.91 ug/L | 494.91 ppb | 16:36:29 |
| 2 | Mn 257.610† | 372011.2 | 371941.9 | 488.30 ug/L | 488.30 ppb | 16:36:29 |
| 2 | Mo 202.031† | 5644.8 | 5636.4 | 495.98 ug/L | 495.98 ppb | 16:36:49 |
| 2 | Ni 231.604† | 16134.6 | 16057.6 | 501.09 ug/L | 501.09 ppb | 16:36:29 |
| 2 | P 214.914† | 3561.6 | 3397.0 | 2345.2 ug/L | 2345.2 ppb | 16:36:49 |
| 2 | Pb 220.353† | 3186.5 | 3248.6 | 491.17 ug/L | 491.17 ppb | 16:36:49 |
| 2 | S 181.975 Axial† | 577.2 | 553.4 | 969.16 ug/L | 969.16 ppb | 16:36:49 |
| 2 | Sb 206.836† | 1201.4 | 1176.0 | 517.45 ug/L | 517.45 ppb | 16:36:49 |
| 2 | Se 196.026† | 600.3 | 617.8 | 510.67 ug/L | 510.67 ppb | 16:36:49 |
| 2 | Si 251.611† | 67392.8 | 66936.7 | 2486.2 ug/L | 2486.2 ppb | 16:36:29 |
| 2 | Sn 189.927† | 2221.6 | 2220.8 | 492.45 ug/L | 492.45 ppb | 16:36:49 |
| 2 | Ti 334.940† | 285941.3 | 287319.1 | 494.19 ug/L | 494.19 ppb | 16:36:29 |
| 2 | Tl 190.801† | 1223.6 | 1249.9 | 486.54 ug/L | 486.54 ppb | 16:36:49 |
| 2 | U 409.014† | 15370.6 | 17421.6 | 510.94 ug/L | 510.94 ppb | 16:36:29 |
| 2 | V 292.402† | 62811.9 | 64304.1 | 502.36 ug/L | 502.36 ppb | 16:36:29 |
| 2 | Zn 213.857† | 42281.7 | 41718.8 | 491.00 ug/L | 491.00 ppb | 16:36:29 |
| 2 | SiO2† | 67025.4 | 66541.1 | 5302.8 ug/L | 5302.8 ppb | 16:37:31 |
| 3 | Sc Radial | 4008.5 | 4008.5 | 99.4 % | | 16:35:46 |
| 3 | Y RADIAL | 4420.3 | 4420.3 | 97.84 % | | 16:35:26 |
| 3 | Al 396.153Radial† | 4530.9 | 4639.2 | 4920.4 ug/L | 4920.4 ppb | 16:35:26 |
| 3 | Ca 317.933Radial† | 2463.0 | 2461.4 | 5001.0 ug/L | 5001.0 ppb | 16:35:46 |
| 3 | Fe 238.204 Radial† | 412.3 | 405.9 | 5091.0 ug/L | 5091.0 ppb | 16:35:46 |
| 3 | K 766.490 Radial† | 26934.9 | 24302.1 | 4845.1 ug/L | 4845.1 ppb | 16:35:26 |
| 3 | Mg 279.077 IEC† | 116.1 | 116.1 | 5073.1 ug/L | 5073.1 ppb | 16:35:46 |
| 3 | Na 589.592 Radial† | 24744.3 | 25361.7 | 9959.9 ug/L | 9959.9 ppb | 16:35:26 |
| 3 | Sr 421.552† | 56494.9 | 56782.2 | 483.49 ug/L | 483.49 ppb | 16:35:26 |
| 3 | Sc 361.383 | 846528.6 | 846528.6 | 100.79 % | | 16:36:55 |
| 3 | Y 371.029 | 712343.0 | 712343.0 | 99.479 % | | 16:36:55 |
| 3 | Ag 328.068† | 99596.3 | 98557.8 | 499.95 ug/L | 499.95 ppb | 16:37:00 |
| 3 | As 188.979† | 882.8 | 896.7 | 484.93 ug/L | 484.93 ppb | 16:37:20 |
| 3 | B 249.677† | 17368.4 | 17481.7 | 478.28 ug/L | 478.28 ppb | 16:37:00 |
| 3 | Ba 233.527† | 52479.0 | 52046.8 | 489.15 ug/L | 489.15 ppb | 16:37:00 |
| 3 | Be 313.107† | 1211952.6 | 1206661.4 | 491.02 ug/L | 491.02 ppb | 16:36:55 |
| 3 | Cd 226.502† | 34777.3 | 34669.5 | 488.86 ug/L | 488.86 ppb | 16:37:00 |
| 3 | Co 228.616† | 19307.7 | 19194.4 | 499.64 ug/L | 499.64 ppb | 16:37:00 |
| 3 | Cr 267.716† | 37887.7 | 37494.1 | 489.18 ug/L | 489.18 ppb | 16:37:00 |
| 3 | Cu 324.752† | 158442.8 | 150841.0 | 489.10 ug/L | 489.10 ppb | 16:37:00 |
| 3 | Mn 257.610† | 371275.6 | 367896.4 | 482.99 ug/L | 482.99 ppb | 16:37:00 |
| 3 | Mo 202.031† | 5653.1 | 5594.3 | 492.29 ug/L | 492.29 ppb | 16:37:20 |
| 3 | Ni 231.604† | 16120.2 | 15899.5 | 496.16 ug/L | 496.16 ppb | 16:37:00 |
| 3 | P 214.914† | 3583.1 | 3386.6 | 2338.9 ug/L | 2338.9 ppb | 16:37:20 |
| 3 | Pb 220.353† | 3201.5 | 3235.1 | 489.11 ug/L | 489.11 ppb | 16:37:20 |
| 3 | S 181.975 Axial† | 588.5 | 559.5 | 979.71 ug/L | 979.71 ppb | 16:37:20 |
| 3 | Sb 206.836† | 1217.0 | 1180.8 | 519.43 ug/L | 519.43 ppb | 16:37:20 |
| 3 | Se 196.026† | 597.6 | 609.8 | 504.43 ug/L | 504.43 ppb | 16:37:20 |
| 3 | Si 251.611† | 67219.9 | 66164.6 | 2457.5 ug/L | 2457.5 ppb | 16:37:00 |
| 3 | Sn 189.927† | 2248.4 | 2227.6 | 493.96 ug/L | 493.96 ppb | 16:37:20 |
| 3 | Ti 334.940† | 284939.3 | 283776.5 | 488.10 ug/L | 488.10 ppb | 16:37:00 |
| 3 | Tl 190.801† | 1230.5 | 1245.9 | 484.95 ug/L | 484.95 ppb | 16:37:20 |
| 3 | U 409.014† | 15157.7 | 17073.4 | 500.70 ug/L | 500.70 ppb | 16:37:00 |
| 3 | V 292.402† | 62637.3 | 63571.1 | 496.64 ug/L | 496.64 ppb | 16:37:00 |
| 3 | Zn 213.857† | 42215.1 | 41275.9 | 485.77 ug/L | 485.77 ppb | 16:37:00 |
| 3 | SiO2† | 67486.1 | 66400.8 | 5291.7 ug/L | 5291.7 ppb | 16:37:36 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|-------------|--------------|----------|--------------------|----------|-------|
| Sc 361.383 | 841711.3 | 100.22 % | | 0.498 | | | 0.50% |
| Sc Radial | 4023.8 | 99.8 % | | 0.34 | | | 0.34% |
| Y 371.029 | 708723.3 | 98.973 % | | 0.4386 | | | 0.44% |
| Y RADIAL | 4413.7 | 97.69 % | | 1.913 | | | 1.96% |
| Ag 328.068† | 99466.9 | 504.53 ug/L | | 3.976 | 504.53 ppb | 3.976 | 0.79% |

| | | | | | | | |
|---|-----------|-------------|-------|------------|-------|-------|--|
| QC value within limits for Ag 328.068 Recovery = 100.91% | | | | | | | |
| Al 396.153Radial† | 4680.0 | 4963.7 ug/L | 72.09 | 4963.7 ppb | 72.09 | 1.45% | |
| QC value within limits for Al 396.153Radial Recovery = 99.27% | | | | | | | |
| As 188.979† | 909.6 | 491.90 ug/L | 7.023 | 491.90 ppb | 7.023 | 1.43% | |
| QC value within limits for As 188.979 Recovery = 98.38% | | | | | | | |
| B 249.677† | 17608.0 | 481.74 ug/L | 3.019 | 481.74 ppb | 3.019 | 0.63% | |
| QC value within limits for B 249.677 Recovery = 96.35% | | | | | | | |
| Ba 233.527† | 52482.2 | 493.23 ug/L | 3.545 | 493.23 ppb | 3.545 | 0.72% | |
| QC value within limits for Ba 233.527 Recovery = 98.65% | | | | | | | |
| Be 313.107† | 1208233.9 | 491.66 ug/L | 0.567 | 491.66 ppb | 0.567 | 0.12% | |
| QC value within limits for Be 313.107 Recovery = 98.33% | | | | | | | |
| Ca 317.933Radial† | 2459.9 | 4997.9 ug/L | 8.42 | 4997.9 ppb | 8.42 | 0.17% | |
| QC value within limits for Ca 317.933Radial Recovery = 99.96% | | | | | | | |
| Cd 226.502† | 34987.2 | 493.35 ug/L | 4.034 | 493.35 ppb | 4.034 | 0.82% | |
| QC value within limits for Cd 226.502 Recovery = 98.67% | | | | | | | |
| Co 228.616† | 19375.6 | 504.36 ug/L | 4.117 | 504.36 ppb | 4.117 | 0.82% | |
| QC value within limits for Co 228.616 Recovery = 100.87% | | | | | | | |
| Cr 267.716† | 37773.7 | 492.81 ug/L | 3.196 | 492.81 ppb | 3.196 | 0.65% | |
| QC value within limits for Cr 267.716 Recovery = 98.56% | | | | | | | |
| Cu 324.752† | 151993.5 | 492.83 ug/L | 3.238 | 492.83 ppb | 3.238 | 0.66% | |
| QC value within limits for Cu 324.752 Recovery = 98.57% | | | | | | | |
| Fe 238.204 Radial† | 403.7 | 5062.6 ug/L | 25.16 | 5062.6 ppb | 25.16 | 0.50% | |
| QC value within limits for Fe 238.204 Radial Recovery = 101.25% | | | | | | | |
| K 766.490 Radial† | 24392.4 | 4863.1 ug/L | 41.94 | 4863.1 ppb | 41.94 | 0.86% | |
| QC value within limits for K 766.490 Radial Recovery = 97.26% | | | | | | | |
| Mg 279.077 IEC† | 116.6 | 5093.2 ug/L | 65.83 | 5093.2 ppb | 65.83 | 1.29% | |
| QC value within limits for Mg 279.077 IEC Recovery = 101.86% | | | | | | | |
| Mn 257.610† | 370686.5 | 486.65 ug/L | 3.172 | 486.65 ppb | 3.172 | 0.65% | |
| QC value within limits for Mn 257.610 Recovery = 97.33% | | | | | | | |
| Mo 202.031† | 5622.6 | 494.77 ug/L | 2.151 | 494.77 ppb | 2.151 | 0.43% | |
| QC value within limits for Mo 202.031 Recovery = 98.95% | | | | | | | |
| Na 589.592 Radial† | 25491.8 | 10011 ug/L | 146.5 | 10011 ppb | 146.5 | 1.46% | |
| QC value within limits for Na 589.592 Radial Recovery = 100.11% | | | | | | | |
| Ni 231.604† | 16006.5 | 499.50 ug/L | 2.890 | 499.50 ppb | 2.890 | 0.58% | |
| QC value within limits for Ni 231.604 Recovery = 99.90% | | | | | | | |
| P 214.914† | 3400.6 | 2348.2 ug/L | 11.10 | 2348.2 ppb | 11.10 | 0.47% | |
| QC value within limits for P 214.914 Recovery = 93.93% | | | | | | | |
| Pb 220.353† | 3245.0 | 490.63 ug/L | 1.334 | 490.63 ppb | 1.334 | 0.27% | |
| QC value within limits for Pb 220.353 Recovery = 98.13% | | | | | | | |
| S 181.975 Axial† | 559.1 | 979.08 ug/L | 9.619 | 979.08 ppb | 9.619 | 0.98% | |
| QC value within limits for S 181.975 Axial Recovery = 97.91% | | | | | | | |
| Sb 206.836† | 1179.6 | 518.97 ug/L | 1.342 | 518.97 ppb | 1.342 | 0.26% | |
| QC value within limits for Sb 206.836 Recovery = 103.79% | | | | | | | |
| Se 196.026† | 618.1 | 510.99 ug/L | 6.723 | 510.99 ppb | 6.723 | 1.32% | |
| QC value within limits for Se 196.026 Recovery = 102.20% | | | | | | | |
| Si 251.611† | 66691.9 | 2477.1 ug/L | 16.99 | 2477.1 ppb | 16.99 | 0.69% | |
| QC value within limits for Si 251.611 Recovery = 99.08% | | | | | | | |
| Sn 189.927† | 2226.7 | 493.76 ug/L | 1.223 | 493.76 ppb | 1.223 | 0.25% | |
| QC value within limits for Sn 189.927 Recovery = 98.75% | | | | | | | |
| Sr 421.552† | 57316.0 | 488.04 ug/L | 7.866 | 488.04 ppb | 7.866 | 1.61% | |
| QC value within limits for Sr 421.552 Recovery = 97.61% | | | | | | | |
| Ti 334.940† | 286083.1 | 492.06 ug/L | 3.434 | 492.06 ppb | 3.434 | 0.70% | |
| QC value within limits for Ti 334.940 Recovery = 98.41% | | | | | | | |
| Tl 190.801† | 1250.2 | 486.66 ug/L | 1.776 | 486.66 ppb | 1.776 | 0.36% | |
| QC value within limits for Tl 190.801 Recovery = 97.33% | | | | | | | |
| U 409.014† | 17386.7 | 509.92 ug/L | 8.748 | 509.92 ppb | 8.748 | 1.72% | |
| QC value within limits for U 409.014 Recovery = 101.98% | | | | | | | |
| V 292.402† | 63995.6 | 499.96 ug/L | 2.971 | 499.96 ppb | 2.971 | 0.59% | |
| QC value within limits for V 292.402 Recovery = 99.99% | | | | | | | |
| Zn 213.857† | 41605.4 | 489.66 ug/L | 3.426 | 489.66 ppb | 3.426 | 0.70% | |
| QC value within limits for Zn 213.857 Recovery = 97.93% | | | | | | | |
| SiO2† | 66185.9 | 5274.5 ug/L | 39.86 | 5274.5 ppb | 39.86 | 0.76% | |
| QC value within limits for SiO2 Recovery = 98.63% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 16:39:46

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 | 4048.7 | 4048.7 | 100 % | | 16:41:59 |
| 1 | Y RADIAL | 4446.2 | 4446.2 | 98.41 % | | 16:41:39 |
| 1 | Al 396.153Radial† | -68.9 | 11.0 | 11.707 ug/L | 11.707 ppb | 16:41:59 |
| 1 | Ca 317.933Radial† | 30.2 | 12.9 | 26.158 ug/L | 26.158 ppb | 16:41:59 |
| 1 | Fe 238.204 Radial† | 11.6 | 2.6 | 32.184 ug/L | 32.184 ppb | 16:41:59 |
| 1 | K 766.490 Radial† | 2563.9 | -248.8 | -49.683 ug/L | -49.683 ppb | 16:41:39 |
| 1 | Mg 279.077 IEC† | 0.8 | 0.1 | 6.1513 ug/L | 6.1513 ppb | 16:41:59 |
| 1 | Na 589.592 Radial† | -406.8 | 55.6 | 21.826 ug/L | 21.826 ppb | 16:41:39 |
| 1 | Sr 421.552† | 59.1 | -11.1 | -0.0948 ug/L | -0.0948 ppb | 16:41:39 |
| 1 | Sc 361.383 | 820604.6 | 820604.6 | 97.708 % | | 16:42:56 |
| 1 | Y 371.029 | 702828.4 | 702828.4 | 98.150 % | | 16:42:56 |
| 1 | Ag 328.068† | 215.9 | -32.4 | -0.1580 ug/L | -0.1580 ppb | 16:42:56 |
| 1 | As 188.979† | -25.5 | -5.3 | -2.8321 ug/L | -2.8321 ppb | 16:43:16 |
| 1 | B 249.677† | -291.0 | -47.7 | -1.3163 ug/L | -1.3163 ppb | 16:43:16 |
| 1 | Ba 233.527† | 35.7 | 18.0 | 0.1702 ug/L | 0.1702 ppb | 16:43:16 |
| 1 | Be 313.107† | -4312.5 | -151.0 | -0.0613 ug/L | -0.0613 ppb | 16:42:56 |
| 1 | Cd 226.502† | -164.5 | -1.9 | -0.0296 ug/L | -0.0296 ppb | 16:43:16 |
| 1 | Co 228.616† | -44.2 | -6.3 | -0.1656 ug/L | -0.1656 ppb | 16:43:16 |
| 1 | Cr 267.716† | 97.4 | 4.7 | 0.0627 ug/L | 0.0627 ppb | 16:43:16 |
| 1 | Cu 324.752† | 6445.8 | 244.2 | 0.7909 ug/L | 0.7909 ppb | 16:42:56 |
| 1 | Mn 257.610† | 932.0 | 501.4 | 0.6608 ug/L | 0.6608 ppb | 16:43:16 |
| 1 | Mo 202.031† | 13.8 | -0.1 | -0.0048 ug/L | -0.0048 ppb | 16:43:16 |
| 1 | Ni 231.604† | 103.1 | 11.9 | 0.3720 ug/L | 0.3720 ppb | 16:43:16 |
| 1 | P 214.914† | 182.5 | 18.6 | 13.171 ug/L | 13.171 ppb | 16:43:16 |
| 1 | Pb 220.353† | -65.9 | -8.7 | -1.3109 ug/L | -1.3109 ppb | 16:43:16 |
| 1 | S 181.975 Axial† | 30.6 | 7.0 | 12.207 ug/L | 12.207 ppb | 16:43:16 |
| 1 | Sb 206.836† | 28.7 | 2.7 | 1.1609 ug/L | 1.1609 ppb | 16:43:16 |
| 1 | Se 196.026† | -21.9 | -5.5 | -4.2466 ug/L | -4.2466 ppb | 16:43:16 |
| 1 | Si 251.611† | 575.6 | 63.7 | 2.3707 ug/L | 2.3707 ppb | 16:43:16 |
| 1 | Sn 189.927† | 5.8 | 2.9 | 0.6417 ug/L | 0.6417 ppb | 16:43:16 |
| 1 | Ti 334.940† | -1050.9 | 7.8 | 0.0142 ug/L | 0.0142 ppb | 16:42:56 |
| 1 | Tl 190.801† | -26.3 | -1.8 | -0.6967 ug/L | -0.6967 ppb | 16:43:16 |
| 1 | U 409.014† | -1823.5 | 168.9 | 4.9661 ug/L | 4.9661 ppb | 16:42:56 |
| 1 | V 292.402† | -1394.6 | 0.2 | 0.0065 ug/L | 0.0065 ppb | 16:42:56 |
| 1 | Zn 213.857† | 753.3 | 164.5 | 1.9462 ug/L | 1.9462 ppb | 16:43:16 |
| 1 | SiO2† | 594.5 | 55.1 | 4.4020 ug/L | 4.4020 ppb | 16:44:27 |
| 2 | Sc Radial | 4050.8 | 4050.8 | 100 % | | 16:42:24 |
| 2 | Y RADIAL | 4500.9 | 4500.9 | 99.62 % | | 16:42:04 |
| 2 | Al 396.153Radial† | -69.5 | 10.5 | 11.162 ug/L | 11.162 ppb | 16:42:24 |
| 2 | Ca 317.933Radial† | 26.5 | 9.2 | 18.711 ug/L | 18.711 ppb | 16:42:24 |
| 2 | Fe 238.204 Radial† | 8.9 | -0.1 | -1.7483 ug/L | -1.7483 ppb | 16:42:24 |
| 2 | K 766.490 Radial† | 2663.9 | -150.5 | -30.070 ug/L | -30.070 ppb | 16:42:04 |
| 2 | Mg 279.077 IEC† | 2.4 | 1.7 | 73.595 ug/L | 73.595 ppb | 16:42:24 |
| 2 | Na 589.592 Radial† | -391.5 | 71.0 | 27.877 ug/L | 27.877 ppb | 16:42:04 |
| 2 | Sr 421.552† | 35.4 | -34.8 | -0.2962 ug/L | -0.2962 ppb | 16:42:04 |
| 2 | Sc 361.383 | 821641.3 | 821641.3 | 97.831 % | | 16:43:21 |
| 2 | Y 371.029 | 705970.9 | 705970.9 | 98.589 % | | 16:43:21 |
| 2 | Ag 328.068† | 281.2 | 34.0 | 0.1672 ug/L | 0.1672 ppb | 16:43:21 |
| 2 | As 188.979† | -19.3 | 1.1 | 0.5990 ug/L | 0.5990 ppb | 16:43:41 |
| 2 | B 249.677† | -305.5 | -62.1 | -1.7059 ug/L | -1.7059 ppb | 16:43:41 |
| 2 | Ba 233.527† | 45.9 | 28.4 | 0.2659 ug/L | 0.2659 ppb | 16:43:41 |
| 2 | Be 313.107† | -4408.7 | -243.7 | -0.0986 ug/L | -0.0986 ppb | 16:43:21 |
| 2 | Cd 226.502† | -166.4 | -3.6 | -0.0509 ug/L | -0.0509 ppb | 16:43:41 |
| 2 | Co 228.616† | -40.6 | -2.6 | -0.0678 ug/L | -0.0678 ppb | 16:43:41 |
| 2 | Cr 267.716† | 100.6 | 7.9 | 0.1012 ug/L | 0.1012 ppb | 16:43:41 |
| 2 | Cu 324.752† | 6523.3 | 315.1 | 1.0199 ug/L | 1.0199 ppb | 16:43:21 |
| 2 | Mn 257.610† | 795.1 | 360.3 | 0.4695 ug/L | 0.4695 ppb | 16:43:41 |
| 2 | Mo 202.031† | 11.4 | -2.6 | -0.2264 ug/L | -0.2264 ppb | 16:43:41 |
| 2 | Ni 231.604† | 81.5 | -10.3 | -0.3224 ug/L | -0.3224 ppb | 16:43:41 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 195.9 | 32.1 | 22.848 ug/L | 22.848 ppb | 16:43:41 |
| 2 | Pb 220.353† | -55.6 | 2.0 | 0.3082 ug/L | 0.3082 ppb | 16:43:41 |
| 2 | S 181.975 Axial† | 34.2 | 10.6 | 18.494 ug/L | 18.494 ppb | 16:43:41 |
| 2 | Sb 206.836† | 35.5 | 9.7 | 4.1229 ug/L | 4.1229 ppb | 16:43:41 |
| 2 | Se 196.026† | -24.0 | -7.6 | -6.0590 ug/L | -6.0590 ppb | 16:43:41 |
| 2 | Si 251.611† | 580.5 | 68.0 | 2.5333 ug/L | 2.5333 ppb | 16:43:41 |
| 2 | Sn 189.927† | 7.0 | 4.1 | 0.9110 ug/L | 0.9110 ppb | 16:43:41 |
| 2 | Ti 334.940† | -974.3 | 87.5 | 0.1456 ug/L | 0.1456 ppb | 16:43:21 |
| 2 | Tl 190.801† | -28.2 | -3.8 | -1.4554 ug/L | -1.4554 ppb | 16:43:41 |
| 2 | U 409.014† | -1882.9 | 110.5 | 3.2523 ug/L | 3.2523 ppb | 16:43:21 |
| 2 | V 292.402† | -1427.1 | -31.2 | -0.2357 ug/L | -0.2357 ppb | 16:43:21 |
| 2 | Zn 213.857† | 738.4 | 148.4 | 1.7634 ug/L | 1.7634 ppb | 16:43:41 |
| 2 | SiO2† | 609.4 | 69.5 | 5.5606 ug/L | 5.5606 ppb | 16:44:47 |
| 3 | Sc Radial | 4029.5 | 4029.5 | 99.9 % | | 16:42:49 |
| 3 | Y RADIAL | 4454.8 | 4454.8 | 98.60 % | | 16:42:29 |
| 3 | Al 396.153Radial† | -60.8 | 18.8 | 19.976 ug/L | 19.976 ppb | 16:42:49 |
| 3 | Ca 317.933Radial† | 38.4 | 21.3 | 43.281 ug/L | 43.281 ppb | 16:42:49 |
| 3 | Fe 238.204 Radial† | 13.6 | 4.6 | 57.391 ug/L | 57.391 ppb | 16:42:49 |
| 3 | K 766.490 Radial† | 2705.7 | -94.6 | -18.921 ug/L | -18.921 ppb | 16:42:29 |
| 3 | Mg 279.077 IEC† | 0.9 | 0.2 | 7.8408 ug/L | 7.8408 ppb | 16:42:49 |
| 3 | Na 589.592 Radial† | -362.9 | 97.6 | 38.320 ug/L | 38.320 ppb | 16:42:29 |
| 3 | Sr 421.552† | 81.6 | 11.7 | 0.0991 ug/L | 0.0991 ppb | 16:42:29 |
| 3 | Sc 361.383 | 825226.5 | 825226.5 | 98.258 % | | 16:43:46 |
| 3 | Y 371.029 | 710011.7 | 710011.7 | 99.153 % | | 16:43:46 |
| 3 | Ag 328.068† | 195.0 | -55.0 | -0.2596 ug/L | -0.2596 ppb | 16:43:46 |
| 3 | As 188.979† | -21.6 | -1.2 | -0.6057 ug/L | -0.6057 ppb | 16:44:07 |
| 3 | B 249.677† | -333.5 | -89.3 | -2.4632 ug/L | -2.4632 ppb | 16:44:07 |
| 3 | Ba 233.527† | 36.6 | 18.8 | 0.1777 ug/L | 0.1777 ppb | 16:44:07 |
| 3 | Be 313.107† | -4304.3 | -117.9 | -0.0479 ug/L | -0.0479 ppb | 16:43:46 |
| 3 | Cd 226.502† | -171.0 | -7.7 | -0.1140 ug/L | -0.1140 ppb | 16:44:07 |
| 3 | Co 228.616† | -35.0 | 3.3 | 0.0855 ug/L | 0.0855 ppb | 16:44:07 |
| 3 | Cr 267.716† | 93.7 | 0.4 | 0.0113 ug/L | 0.0113 ppb | 16:44:07 |
| 3 | Cu 324.752† | 6566.9 | 330.6 | 1.0750 ug/L | 1.0750 ppb | 16:43:46 |
| 3 | Mn 257.610† | 923.3 | 487.3 | 0.6447 ug/L | 0.6447 ppb | 16:44:07 |
| 3 | Mo 202.031† | 16.3 | 2.4 | 0.2199 ug/L | 0.2199 ppb | 16:44:07 |
| 3 | Ni 231.604† | 84.0 | -8.1 | -0.2535 ug/L | -0.2535 ppb | 16:44:07 |
| 3 | P 214.914† | 186.1 | 21.2 | 14.968 ug/L | 14.968 ppb | 16:44:07 |
| 3 | Pb 220.353† | -53.2 | 4.7 | 0.7018 ug/L | 0.7018 ppb | 16:44:07 |
| 3 | S 181.975 Axial† | 25.0 | 1.1 | 1.8790 ug/L | 1.8790 ppb | 16:44:07 |
| 3 | Sb 206.836† | 27.2 | 1.0 | 0.4687 ug/L | 0.4687 ppb | 16:44:07 |
| 3 | Se 196.026† | -23.2 | -6.6 | -5.1192 ug/L | -5.1192 ppb | 16:44:07 |
| 3 | Si 251.611† | 579.8 | 64.6 | 2.4025 ug/L | 2.4025 ppb | 16:44:07 |
| 3 | Sn 189.927† | 9.0 | 6.1 | 1.3453 ug/L | 1.3453 ppb | 16:44:07 |
| 3 | Ti 334.940† | -1069.4 | -5.0 | -0.0034 ug/L | -0.0034 ppb | 16:43:46 |
| 3 | Tl 190.801† | -27.0 | -2.4 | -0.9308 ug/L | -0.9308 ppb | 16:44:07 |
| 3 | U 409.014† | -2005.5 | -5.9 | -0.1805 ug/L | -0.1805 ppb | 16:43:46 |
| 3 | V 292.402† | -1394.4 | 8.4 | 0.0590 ug/L | 0.0590 ppb | 16:43:46 |
| 3 | Zn 213.857† | 756.4 | 163.3 | 1.9320 ug/L | 1.9320 ppb | 16:44:07 |
| 3 | SiO2† | 604.2 | 61.5 | 4.9112 ug/L | 4.9112 ppb | 16:45:07 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 822490.8 | 97.932 % | 0.2888 | | | 0.29% |
| Sc Radial | 4043.0 | 100 % | 0.3 | | | 0.29% |
| Y 371.029 | 706270.3 | 98.631 % | 0.5029 | | | 0.51% |
| Y RADIAL | 4467.3 | 98.88 % | 0.651 | | | 0.66% |
| Ag 328.068† | -17.8 | -0.0835 ug/L | 0.22295 | -0.0835 ppb | 0.22295 | 267.07% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 13.4 | 14.282 ug/L | 4.9388 | 14.282 ppb | 4.9388 | 34.58% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | |
| As 188.979† | -1.8 | -0.9463 ug/L | 1.74070 | -0.9463 ppb | 1.74070 | 183.95% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | -66.4 | -1.8285 ug/L | 0.58316 | -1.8285 ppb | 0.58316 | 31.89% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 21.7 | 0.2046 ug/L | 0.05323 | 0.2046 ppb | 0.05323 | 26.01% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | -170.9 | -0.0693 ug/L | 0.02629 | -0.0693 ppb | 0.02629 | 37.97% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933Radial† | 14.5 | 29.383 ug/L | 12.5986 | 29.383 ppb | 12.5986 | 42.88% |

| | | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | | |
| Cd 226.502† | -4.4 | -0.0648 ug/L | 0.04392 | -0.0648 ppb | 0.04392 | 67.75% | |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | | |
| Co 228.616† | -1.9 | -0.0493 ug/L | 0.12656 | -0.0493 ppb | 0.12656 | 256.57% | |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | 4.3 | 0.0584 ug/L | 0.04508 | 0.0584 ppb | 0.04508 | 77.19% | |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | 296.6 | 0.9619 ug/L | 0.15064 | 0.9619 ppb | 0.15064 | 15.66% | |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204 Radial† | 2.3 | 29.276 ug/L | 29.6769 | 29.276 ppb | 29.6769 | 101.37% | |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | | |
| K 766.490 Radial† | -164.7 | -32.891 ug/L | 15.5738 | -32.891 ppb | 15.5738 | 47.35% | |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | | |
| Mg 279.077 IEC† | 0.7 | 29.196 ug/L | 38.4603 | 29.196 ppb | 38.4603 | 131.73% | |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 449.6 | 0.5917 ug/L | 0.10609 | 0.5917 ppb | 0.10609 | 17.93% | |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | -0.1 | -0.0038 ug/L | 0.22316 | -0.0038 ppb | 0.22316 | >999.9% | |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 589.592 Radial† | 74.7 | 29.341 ug/L | 8.3443 | 29.341 ppb | 8.3443 | 28.44% | |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | | |
| Ni 231.604† | -2.2 | -0.0680 ug/L | 0.38258 | -0.0680 ppb | 0.38258 | 562.96% | |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | | |
| P 214.914† | 23.9 | 16.996 ug/L | 5.1474 | 16.996 ppb | 5.1474 | 30.29% | |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | -0.7 | -0.1003 ug/L | 1.06670 | -0.1003 ppb | 1.06670 | >999.9% | |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| S 181.975 Axial† | 6.2 | 10.860 ug/L | 8.3890 | 10.860 ppb | 8.3890 | 77.25% | |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | | |
| Sb 206.836† | 4.5 | 1.9175 ug/L | 1.94104 | 1.9175 ppb | 1.94104 | 101.23% | |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se 196.026† | -6.6 | -5.1416 ug/L | 0.90639 | -5.1416 ppb | 0.90639 | 17.63% | |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Si 251.611† | 65.4 | 2.4355 ug/L | 0.08616 | 2.4355 ppb | 0.08616 | 3.54% | |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |
| Sn 189.927† | 4.3 | 0.9660 ug/L | 0.35500 | 0.9660 ppb | 0.35500 | 36.75% | |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | | |
| Sr 421.552† | -11.4 | -0.0973 ug/L | 0.19769 | -0.0973 ppb | 0.19769 | 203.17% | |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | | |
| Ti 334.940† | 30.1 | 0.0521 ug/L | 0.08142 | 0.0521 ppb | 0.08142 | 156.31% | |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | | |
| Tl 190.801† | -2.7 | -1.0276 ug/L | 0.38851 | -1.0276 ppb | 0.38851 | 37.81% | |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| U 409.014† | 91.2 | 2.6793 ug/L | 2.62072 | 2.6793 ppb | 2.62072 | 97.81% | |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | | |
| V 292.402† | -7.5 | -0.0567 ug/L | 0.15720 | -0.0567 ppb | 0.15720 | 277.26% | |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn 213.857† | 158.7 | 1.8805 ug/L | 0.10169 | 1.8805 ppb | 0.10169 | 5.41% | |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| SiO2† | 62.1 | 4.9580 ug/L | 0.58072 | 4.9580 ppb | 0.58072 | 11.71% | |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 17:36:03
 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 | 4033.0 | 4033.0 | 100.0 % | | 17:38:15 |
| 1 | Y RADIAL | 4441.3 | 4441.3 | 98.30 % | | 17:37:55 |
| 1 | Al 396.153Radial† | 4555.2 | 4635.8 | 4916.6 ug/L | 4916.6 ppb | 17:37:55 |
| 1 | Ca 317.933Radial† | 2429.8 | 2413.1 | 4902.8 ug/L | 4902.8 ppb | 17:38:15 |
| 1 | Fe 238.204 Radial† | 406.4 | 397.5 | 4986.0 ug/L | 4986.0 ppb | 17:38:15 |
| 1 | K 766.490 Radial† | 26937.7 | 24139.9 | 4812.9 ug/L | 4812.9 ppb | 17:37:55 |
| 1 | Mg 279.077 IEC† | 115.1 | 114.4 | 4997.5 ug/L | 4997.5 ppb | 17:38:15 |
| 1 | Na 589.592 Radial† | 23985.5 | 24451.3 | 9602.4 ug/L | 9602.4 ppb | 17:37:55 |
| 1 | Sr 421.552† | 56029.2 | 55970.4 | 476.58 ug/L | 476.58 ppb | 17:37:55 |
| 1 | Sc 361.383 | 840981.1 | 840981.1 | 100.13 % | | 17:39:12 |
| 1 | Y 371.029 | 707499.5 | 707499.5 | 98.802 % | | 17:39:12 |
| 1 | Ag 328.068† | 100055.1 | 99667.8 | 505.52 ug/L | 505.52 ppb | 17:39:17 |
| 1 | As 188.979† | 884.0 | 903.6 | 488.68 ug/L | 488.68 ppb | 17:39:37 |
| 1 | B 249.677† | 17513.2 | 17739.9 | 485.37 ug/L | 485.37 ppb | 17:39:17 |
| 1 | Ba 233.527† | 52852.3 | 52763.0 | 495.87 ug/L | 495.87 ppb | 17:39:17 |
| 1 | Be 313.107† | 1226799.3 | 1229419.9 | 500.27 ug/L | 500.27 ppb | 17:39:12 |
| 1 | Cd 226.502† | 35069.2 | 35188.7 | 496.20 ug/L | 496.20 ppb | 17:39:17 |
| 1 | Co 228.616† | 19464.0 | 19476.9 | 506.99 ug/L | 506.99 ppb | 17:39:17 |
| 1 | Cr 267.716† | 37940.8 | 37795.0 | 493.08 ug/L | 493.08 ppb | 17:39:17 |
| 1 | Cu 324.752† | 158815.2 | 152249.9 | 493.65 ug/L | 493.65 ppb | 17:39:17 |
| 1 | Mn 257.610† | 373829.1 | 372876.3 | 489.52 ug/L | 489.52 ppb | 17:39:17 |
| 1 | Mo 202.031† | 5650.0 | 5628.3 | 495.26 ug/L | 495.26 ppb | 17:39:37 |
| 1 | Ni 231.604† | 16234.4 | 16119.0 | 503.01 ug/L | 503.01 ppb | 17:39:17 |
| 1 | P 214.914† | 3567.1 | 3394.1 | 2343.4 ug/L | 2343.4 ppb | 17:39:37 |
| 1 | Pb 220.353† | 3171.6 | 3226.1 | 487.78 ug/L | 487.78 ppb | 17:39:37 |
| 1 | S 181.975 Axial† | 590.2 | 565.1 | 989.54 ug/L | 989.54 ppb | 17:39:37 |
| 1 | Sb 206.836† | 1205.9 | 1177.6 | 518.13 ug/L | 518.13 ppb | 17:39:37 |
| 1 | Se 196.026† | 606.6 | 622.8 | 514.44 ug/L | 514.44 ppb | 17:39:37 |
| 1 | Si 251.611† | 68225.6 | 67608.8 | 2511.2 ug/L | 2511.2 ppb | 17:39:17 |
| 1 | Sn 189.927† | 2232.4 | 2226.4 | 493.68 ug/L | 493.68 ppb | 17:39:37 |
| 1 | Ti 334.940† | 286829.3 | 287528.7 | 494.54 ug/L | 494.54 ppb | 17:39:17 |
| 1 | Tl 190.801† | 1235.2 | 1258.7 | 489.94 ug/L | 489.94 ppb | 17:39:37 |
| 1 | U 409.014† | 15631.8 | 17646.0 | 517.56 ug/L | 517.56 ppb | 17:39:17 |
| 1 | V 292.402† | 62776.9 | 64120.4 | 500.95 ug/L | 500.95 ppb | 17:39:17 |
| 1 | Zn 213.857† | 42402.4 | 41739.2 | 491.24 ug/L | 491.24 ppb | 17:39:17 |
| 1 | SiO2† | 67200.5 | 66557.2 | 5304.1 ug/L | 5304.1 ppb | 17:40:44 |
| 2 | Sc Radial | 4067.7 | 4067.7 | 101 % | | 17:38:40 |
| 2 | Y RADIAL | 4575.8 | 4575.8 | 101.3 % | | 17:38:20 |
| 2 | Al 396.153Radial† | 4636.8 | 4677.9 | 4961.5 ug/L | 4961.5 ppb | 17:38:20 |
| 2 | Ca 317.933Radial† | 2479.9 | 2442.1 | 4961.7 ug/L | 4961.7 ppb | 17:38:40 |
| 2 | Fe 238.204 Radial† | 412.6 | 400.1 | 5018.4 ug/L | 5018.4 ppb | 17:38:40 |
| 2 | K 766.490 Radial† | 27540.7 | 24508.0 | 4886.4 ug/L | 4886.4 ppb | 17:38:20 |
| 2 | Mg 279.077 IEC† | 115.8 | 114.2 | 4987.6 ug/L | 4987.6 ppb | 17:38:40 |
| 2 | Na 589.592 Radial† | 24388.9 | 24646.6 | 9679.1 ug/L | 9679.1 ppb | 17:38:20 |
| 2 | Sr 421.552† | 56981.5 | 56436.8 | 480.55 ug/L | 480.55 ppb | 17:38:20 |
| 2 | Sc 361.383 | 845346.1 | 845346.1 | 100.65 % | | 17:39:43 |
| 2 | Y 371.029 | 712188.1 | 712188.1 | 99.457 % | | 17:39:43 |
| 2 | Ag 328.068† | 99514.6 | 98614.8 | 500.20 ug/L | 500.20 ppb | 17:39:48 |
| 2 | As 188.979† | 888.8 | 903.9 | 488.79 ug/L | 488.79 ppb | 17:40:08 |
| 2 | B 249.677† | 17446.8 | 17583.6 | 481.09 ug/L | 481.09 ppb | 17:39:48 |
| 2 | Ba 233.527† | 52461.7 | 52102.4 | 489.66 ug/L | 489.66 ppb | 17:39:48 |
| 2 | Be 313.107† | 1210088.6 | 1206491.5 | 490.95 ug/L | 490.95 ppb | 17:39:43 |
| 2 | Cd 226.502† | 34836.1 | 34776.2 | 490.37 ug/L | 490.37 ppb | 17:39:48 |
| 2 | Co 228.616† | 19328.8 | 19242.2 | 500.90 ug/L | 500.90 ppb | 17:39:48 |
| 2 | Cr 267.716† | 37792.4 | 37451.9 | 488.61 ug/L | 488.61 ppb | 17:39:48 |
| 2 | Cu 324.752† | 157810.2 | 150432.5 | 487.77 ug/L | 487.77 ppb | 17:39:48 |
| 2 | Mn 257.610† | 371016.9 | 368154.6 | 483.33 ug/L | 483.33 ppb | 17:39:48 |
| 2 | Mo 202.031† | 5671.6 | 5620.6 | 494.59 ug/L | 494.59 ppb | 17:40:08 |
| 2 | Ni 231.604† | 16143.8 | 15945.4 | 497.59 ug/L | 497.59 ppb | 17:39:48 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3586.4 | 3394.8 | 2345.1 ug/L | 2345.1 ppb | 17:40:08 |
| 2 | Pb 220.353† | 3187.2 | 3225.3 | 487.67 ug/L | 487.67 ppb | 17:40:08 |
| 2 | S 181.975 Axial† | 594.8 | 566.5 | 992.06 ug/L | 992.06 ppb | 17:40:08 |
| 2 | Sb 206.836† | 1218.1 | 1183.6 | 520.67 ug/L | 520.67 ppb | 17:40:08 |
| 2 | Se 196.026† | 595.1 | 608.1 | 502.89 ug/L | 502.89 ppb | 17:40:08 |
| 2 | Si 251.611† | 67389.9 | 66426.8 | 2467.2 ug/L | 2467.2 ppb | 17:39:48 |
| 2 | Sn 189.927† | 2246.2 | 2228.6 | 494.18 ug/L | 494.18 ppb | 17:40:08 |
| 2 | Ti 334.940† | 284304.2 | 283540.9 | 487.69 ug/L | 487.69 ppb | 17:39:48 |
| 2 | Tl 190.801† | 1228.5 | 1245.6 | 484.86 ug/L | 484.86 ppb | 17:40:08 |
| 2 | U 409.014† | 15402.1 | 17337.2 | 508.48 ug/L | 508.48 ppb | 17:39:48 |
| 2 | V 292.402† | 62258.4 | 63281.6 | 494.46 ug/L | 494.46 ppb | 17:39:48 |
| 2 | Zn 213.857† | 42238.1 | 41357.3 | 486.74 ug/L | 486.74 ppb | 17:39:48 |
| 2 | SiO2† | 67324.2 | 66333.5 | 5286.3 ug/L | 5286.3 ppb | 17:40:49 |
| 3 | Sc Radial | 3787.1 | 3787.1 | 93.9 % | | 17:39:05 |
| 3 | Y RADIAL | 4487.4 | 4487.4 | 99.32 % | | 17:38:45 |
| 3 | Al 396.153Radial† | 4575.5 | 4953.2 | 5254.7 ug/L | 5254.7 ppb | 17:38:45 |
| 3 | Ca 317.933Radial† | 2498.4 | 2643.9 | 5371.7 ug/L | 5371.7 ppb | 17:39:05 |
| 3 | Fe 238.204 Radial† | 414.9 | 432.9 | 5428.6 ug/L | 5428.6 ppb | 17:39:05 |
| 3 | K 766.490 Radial† | 27165.0 | 26131.2 | 5210.0 ug/L | 5210.0 ppb | 17:38:45 |
| 3 | Mg 279.077 IEC† | 116.7 | 123.6 | 5399.1 ug/L | 5399.1 ppb | 17:39:05 |
| 3 | Na 589.592 Radial† | 24107.2 | 26138.3 | 10265 ug/L | 10265 ppb | 17:38:45 |
| 3 | Sr 421.552† | 56377.5 | 59979.7 | 510.72 ug/L | 510.72 ppb | 17:38:45 |
| 3 | Sc 361.383 | 840090.3 | 840090.3 | 100.03 % | | 17:40:14 |
| 3 | Y 371.029 | 707454.1 | 707454.1 | 98.796 % | | 17:40:14 |
| 3 | Ag 328.068† | 100053.4 | 99772.0 | 506.18 ug/L | 506.18 ppb | 17:40:19 |
| 3 | As 188.979† | 894.0 | 914.5 | 494.62 ug/L | 494.62 ppb | 17:40:39 |
| 3 | B 249.677† | 17502.6 | 17747.9 | 485.52 ug/L | 485.52 ppb | 17:40:19 |
| 3 | Ba 233.527† | 52708.0 | 52674.7 | 495.05 ug/L | 495.05 ppb | 17:40:19 |
| 3 | Be 313.107† | 1204992.4 | 1208918.1 | 491.94 ug/L | 491.94 ppb | 17:40:14 |
| 3 | Cd 226.502† | 35071.7 | 35228.3 | 496.71 ug/L | 496.71 ppb | 17:40:19 |
| 3 | Co 228.616† | 19468.7 | 19502.2 | 507.66 ug/L | 507.66 ppb | 17:40:19 |
| 3 | Cr 267.716† | 37935.9 | 37830.3 | 493.59 ug/L | 493.59 ppb | 17:40:19 |
| 3 | Cu 324.752† | 158620.9 | 152223.7 | 493.60 ug/L | 493.60 ppb | 17:40:19 |
| 3 | Mn 257.610† | 372941.5 | 372384.8 | 488.90 ug/L | 488.90 ppb | 17:40:19 |
| 3 | Mo 202.031† | 5687.7 | 5671.9 | 499.14 ug/L | 499.14 ppb | 17:40:39 |
| 3 | Ni 231.604† | 16164.6 | 16066.5 | 501.37 ug/L | 501.37 ppb | 17:40:19 |
| 3 | P 214.914† | 3606.2 | 3436.9 | 2374.0 ug/L | 2374.0 ppb | 17:40:39 |
| 3 | Pb 220.353† | 3207.1 | 3265.0 | 493.67 ug/L | 493.67 ppb | 17:40:39 |
| 3 | S 181.975 Axial† | 597.2 | 572.6 | 1002.7 ug/L | 1002.7 ppb | 17:40:39 |
| 3 | Sb 206.836† | 1226.3 | 1199.3 | 527.46 ug/L | 527.46 ppb | 17:40:39 |
| 3 | Se 196.026† | 599.6 | 616.4 | 510.80 ug/L | 510.80 ppb | 17:40:39 |
| 3 | Si 251.611† | 67678.9 | 67134.5 | 2493.5 ug/L | 2493.5 ppb | 17:40:19 |
| 3 | Sn 189.927† | 2242.7 | 2239.0 | 496.53 ug/L | 496.53 ppb | 17:40:39 |
| 3 | Ti 334.940† | 285416.7 | 286420.2 | 492.67 ug/L | 492.67 ppb | 17:40:19 |
| 3 | Tl 190.801† | 1241.4 | 1266.1 | 492.79 ug/L | 492.79 ppb | 17:40:39 |
| 3 | U 409.014† | 15236.7 | 17267.6 | 506.37 ug/L | 506.37 ppb | 17:40:19 |
| 3 | V 292.402† | 62576.9 | 63987.0 | 499.90 ug/L | 499.90 ppb | 17:40:19 |
| 3 | Zn 213.857† | 42389.9 | 41771.6 | 491.57 ug/L | 491.57 ppb | 17:40:19 |
| 3 | SiO2† | 67507.1 | 66934.8 | 5334.2 ug/L | 5334.2 ppb | 17:40:54 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 842139.2 | 100.27 % | 0.335 | | | 0.33% |
| Sc Radial | 3962.6 | 98.2 % | 3.79 | | | 3.86% |
| Y 371.029 | 709047.3 | 99.019 % | 0.3799 | | | 0.38% |
| Y RADIAL | 4501.5 | 99.63 % | 1.512 | | | 1.52% |
| Ag 328.068† | 99351.5 | 503.97 ug/L | 3.278 | 503.97 ppb | 3.278 | 0.65% |
| QC value within limits for Ag 328.068 Recovery = 100.79% | | | | | | |
| Al 396.153Radial† | 4755.6 | 5044.3 ug/L | 183.64 | 5044.3 ppb | 183.64 | 3.64% |
| QC value within limits for Al 396.153Radial Recovery = 100.89% | | | | | | |
| As 188.979† | 907.4 | 490.70 ug/L | 3.399 | 490.70 ppb | 3.399 | 0.69% |
| QC value within limits for As 188.979 Recovery = 98.14% | | | | | | |
| B 249.677† | 17690.5 | 483.99 ug/L | 2.516 | 483.99 ppb | 2.516 | 0.52% |
| QC value within limits for B 249.677 Recovery = 96.80% | | | | | | |
| Ba 233.527† | 52513.4 | 493.53 ug/L | 3.372 | 493.53 ppb | 3.372 | 0.68% |
| QC value within limits for Ba 233.527 Recovery = 98.71% | | | | | | |
| Be 313.107† | 1214943.2 | 494.39 ug/L | 5.120 | 494.39 ppb | 5.120 | 1.04% |
| QC value within limits for Be 313.107 Recovery = 98.88% | | | | | | |
| Ca 317.933Radial† | 2499.7 | 5078.7 ug/L | 255.47 | 5078.7 ppb | 255.47 | 5.03% |

| | | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 101.57% | | | | | | | |
| Cd 226.502† | 35064.4 | 494.43 ug/L | 3.520 | 494.43 ppb | 3.520 | 0.71% | |
| QC value within limits for Cd 226.502 Recovery = 98.89% | | | | | | | |
| Co 228.616† | 19407.1 | 505.18 ug/L | 3.727 | 505.18 ppb | 3.727 | 0.74% | |
| QC value within limits for Co 228.616 Recovery = 101.04% | | | | | | | |
| Cr 267.716† | 37692.4 | 491.76 ug/L | 2.739 | 491.76 ppb | 2.739 | 0.56% | |
| QC value within limits for Cr 267.716 Recovery = 98.35% | | | | | | | |
| Cu 324.752† | 151635.4 | 491.67 ug/L | 3.383 | 491.67 ppb | 3.383 | 0.69% | |
| QC value within limits for Cu 324.752 Recovery = 98.33% | | | | | | | |
| Fe 238.204 Radial† | 410.2 | 5144.3 ug/L | 246.73 | 5144.3 ppb | 246.73 | 4.80% | |
| QC value within limits for Fe 238.204 Radial Recovery = 102.89% | | | | | | | |
| K 766.490 Radial† | 24926.4 | 4969.8 ug/L | 211.28 | 4969.8 ppb | 211.28 | 4.25% | |
| QC value within limits for K 766.490 Radial Recovery = 99.40% | | | | | | | |
| Mg 279.077 IEC† | 117.4 | 5128.1 ug/L | 234.76 | 5128.1 ppb | 234.76 | 4.58% | |
| QC value within limits for Mg 279.077 IEC Recovery = 102.56% | | | | | | | |
| Mn 257.610† | 371138.6 | 487.25 ug/L | 3.410 | 487.25 ppb | 3.410 | 0.70% | |
| QC value within limits for Mn 257.610 Recovery = 97.45% | | | | | | | |
| Mo 202.031† | 5640.3 | 496.33 ug/L | 2.454 | 496.33 ppb | 2.454 | 0.49% | |
| QC value within limits for Mo 202.031 Recovery = 99.27% | | | | | | | |
| Na 589.592 Radial† | 25078.7 | 9848.8 ug/L | 362.40 | 9848.8 ppb | 362.40 | 3.68% | |
| QC value within limits for Na 589.592 Radial Recovery = 98.49% | | | | | | | |
| Ni 231.604† | 16043.6 | 500.66 ug/L | 2.779 | 500.66 ppb | 2.779 | 0.56% | |
| QC value within limits for Ni 231.604 Recovery = 100.13% | | | | | | | |
| P 214.914† | 3408.6 | 2354.1 ug/L | 17.18 | 2354.1 ppb | 17.18 | 0.73% | |
| QC value within limits for P 214.914 Recovery = 94.17% | | | | | | | |
| Pb 220.353† | 3238.8 | 489.71 ug/L | 3.436 | 489.71 ppb | 3.436 | 0.70% | |
| QC value within limits for Pb 220.353 Recovery = 97.94% | | | | | | | |
| S 181.975 Axial† | 568.1 | 994.77 ug/L | 6.992 | 994.77 ppb | 6.992 | 0.70% | |
| QC value within limits for S 181.975 Axial Recovery = 99.48% | | | | | | | |
| Sb 206.836† | 1186.8 | 522.08 ug/L | 4.822 | 522.08 ppb | 4.822 | 0.92% | |
| QC value within limits for Sb 206.836 Recovery = 104.42% | | | | | | | |
| Se 196.026† | 615.8 | 509.38 ug/L | 5.906 | 509.38 ppb | 5.906 | 1.16% | |
| QC value within limits for Se 196.026 Recovery = 101.88% | | | | | | | |
| Si 251.611† | 67056.7 | 2490.6 ug/L | 22.14 | 2490.6 ppb | 22.14 | 0.89% | |
| QC value within limits for Si 251.611 Recovery = 99.63% | | | | | | | |
| Sn 189.927† | 2231.3 | 494.80 ug/L | 1.519 | 494.80 ppb | 1.519 | 0.31% | |
| QC value within limits for Sn 189.927 Recovery = 98.96% | | | | | | | |
| Sr 421.552† | 57462.3 | 489.29 ug/L | 18.669 | 489.29 ppb | 18.669 | 3.82% | |
| QC value within limits for Sr 421.552 Recovery = 97.86% | | | | | | | |
| Ti 334.940† | 285829.9 | 491.63 ug/L | 3.538 | 491.63 ppb | 3.538 | 0.72% | |
| QC value within limits for Ti 334.940 Recovery = 98.33% | | | | | | | |
| Tl 190.801† | 1256.8 | 489.20 ug/L | 4.019 | 489.20 ppb | 4.019 | 0.82% | |
| QC value within limits for Tl 190.801 Recovery = 97.84% | | | | | | | |
| U 409.014† | 17416.9 | 510.80 ug/L | 5.945 | 510.80 ppb | 5.945 | 1.16% | |
| QC value within limits for U 409.014 Recovery = 102.16% | | | | | | | |
| V 292.402† | 63796.3 | 498.44 ug/L | 3.483 | 498.44 ppb | 3.483 | 0.70% | |
| QC value within limits for V 292.402 Recovery = 99.69% | | | | | | | |
| Zn 213.857† | 41622.7 | 489.85 ug/L | 2.698 | 489.85 ppb | 2.698 | 0.55% | |
| QC value within limits for Zn 213.857 Recovery = 97.97% | | | | | | | |
| SiO2† | 66608.5 | 5308.2 ug/L | 24.22 | 5308.2 ppb | 24.22 | 0.46% | |
| QC value within limits for SiO2 Recovery = 99.26% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/25/2010 17:43:04
 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 | 4154.6 | 4154.6 | 103 % | | 17:45:16 |
| 1 | Y RADIAL | 3846.2 | 3846.2 | 85.13 % | | 17:44:56 |
| 1 | Al 396.153Radial† | -69.9 | 11.8 | 12.554 ug/L | 12.554 ppb | 17:45:16 |
| 1 | Ca 317.933Radial† | 29.1 | 11.1 | 22.580 ug/L | 22.580 ppb | 17:45:16 |
| 1 | Fe 238.204 Radial† | 16.6 | 7.1 | 88.484 ug/L | 88.484 ppb | 17:45:16 |
| 1 | K 766.490 Radial† | 2558.2 | -319.4 | -63.778 ug/L | -63.778 ppb | 17:44:56 |
| 1 | Mg 279.077 IEC† | 3.6 | 2.8 | 120.35 ug/L | 120.35 ppb | 17:45:16 |
| 1 | Na 589.592 Radial† | -447.0 | 26.9 | 10.562 ug/L | 10.562 ppb | 17:44:56 |
| 1 | Sr 421.552† | 65.4 | -6.6 | -0.0562 ug/L | -0.0562 ppb | 17:44:56 |
| 1 | Sc 361.383 | 828696.3 | 828696.3 | 98.671 % | | 17:46:13 |
| 1 | Y 371.029 | 706635.0 | 706635.0 | 98.682 % | | 17:46:13 |
| 1 | Ag 328.068† | 139.3 | -112.2 | -0.5386 ug/L | -0.5386 ppb | 17:46:13 |
| 1 | As 188.979† | -28.5 | -8.0 | -4.2848 ug/L | -4.2848 ppb | 17:46:33 |
| 1 | B 249.677† | -189.6 | 58.0 | 1.5794 ug/L | 1.5794 ppb | 17:46:33 |
| 1 | Ba 233.527† | 34.0 | 15.9 | 0.1537 ug/L | 0.1537 ppb | 17:46:33 |
| 1 | Be 313.107† | -4380.6 | -176.9 | -0.0715 ug/L | -0.0715 ppb | 17:46:13 |
| 1 | Cd 226.502† | -151.2 | 13.2 | 0.1769 ug/L | 0.1769 ppb | 17:46:33 |
| 1 | Co 228.616† | -35.0 | 3.5 | 0.0897 ug/L | 0.0897 ppb | 17:46:33 |
| 1 | Cr 267.716† | 109.3 | 15.8 | 0.2141 ug/L | 0.2141 ppb | 17:46:33 |
| 1 | Cu 324.752† | 6494.6 | 229.3 | 0.7461 ug/L | 0.7461 ppb | 17:46:13 |
| 1 | Mn 257.610† | 1159.9 | 723.1 | 0.9526 ug/L | 0.9526 ppb | 17:46:33 |
| 1 | Mo 202.031† | 17.7 | 3.7 | 0.3359 ug/L | 0.3359 ppb | 17:46:33 |
| 1 | Ni 231.604† | 79.8 | -12.7 | -0.3973 ug/L | -0.3973 ppb | 17:46:33 |
| 1 | P 214.914† | 177.4 | 11.6 | 8.1196 ug/L | 8.1196 ppb | 17:46:33 |
| 1 | Pb 220.353† | -47.8 | 10.4 | 1.5538 ug/L | 1.5538 ppb | 17:46:33 |
| 1 | S 181.975 Axial† | 34.2 | 10.3 | 17.995 ug/L | 17.995 ppb | 17:46:33 |
| 1 | Sb 206.836† | 32.1 | 5.9 | 2.5141 ug/L | 2.5141 ppb | 17:46:33 |
| 1 | Se 196.026† | -22.1 | -5.5 | -4.1039 ug/L | -4.1039 ppb | 17:46:33 |
| 1 | Si 251.611† | 653.2 | 136.6 | 5.0812 ug/L | 5.0812 ppb | 17:46:33 |
| 1 | Sn 189.927† | -0.6 | -3.7 | -0.8219 ug/L | -0.8219 ppb | 17:46:33 |
| 1 | Ti 334.940† | -1004.3 | 65.5 | 0.1043 ug/L | 0.1043 ppb | 17:46:13 |
| 1 | Tl 190.801† | -26.9 | -2.2 | -0.8303 ug/L | -0.8303 ppb | 17:46:33 |
| 1 | U 409.014† | -1889.2 | 120.6 | 3.5366 ug/L | 3.5366 ppb | 17:46:13 |
| 1 | V 292.402† | -1317.2 | 92.6 | 0.7144 ug/L | 0.7144 ppb | 17:46:13 |
| 1 | Zn 213.857† | 700.9 | 103.9 | 1.2230 ug/L | 1.2230 ppb | 17:46:33 |
| 1 | SiO2† | 628.6 | 83.7 | 6.6796 ug/L | 6.6796 ppb | 17:47:29 |
| 2 | Sc Radial | 4059.2 | 4059.2 | 101 % | | 17:45:41 |
| 2 | Y RADIAL | 4462.0 | 4462.0 | 98.76 % | | 17:45:21 |
| 2 | Al 396.153Radial† | -75.0 | 5.1 | 5.4775 ug/L | 5.4775 ppb | 17:45:41 |
| 2 | Ca 317.933Radial† | 22.0 | 4.7 | 9.5820 ug/L | 9.5820 ppb | 17:45:41 |
| 2 | Fe 238.204 Radial† | 11.8 | 2.7 | 34.167 ug/L | 34.167 ppb | 17:45:41 |
| 2 | K 766.490 Radial† | 2542.1 | -277.0 | -55.311 ug/L | -55.311 ppb | 17:45:21 |
| 2 | Mg 279.077 IEC† | 4.2 | 3.5 | 152.14 ug/L | 152.14 ppb | 17:45:41 |
| 2 | Na 589.592 Radial† | -434.1 | 29.5 | 11.576 ug/L | 11.576 ppb | 17:45:21 |
| 2 | Sr 421.552† | 58.1 | -12.3 | -0.1052 ug/L | -0.1052 ppb | 17:45:21 |
| 2 | Sc 361.383 | 834294.9 | 834294.9 | 99.338 % | | 17:46:38 |
| 2 | Y 371.029 | 712534.1 | 712534.1 | 99.506 % | | 17:46:38 |
| 2 | Ag 328.068† | 183.4 | -68.8 | -0.3343 ug/L | -0.3343 ppb | 17:46:38 |
| 2 | As 188.979† | -24.2 | -3.5 | -1.8866 ug/L | -1.8866 ppb | 17:46:58 |
| 2 | B 249.677† | -230.6 | 18.0 | 0.4903 ug/L | 0.4903 ppb | 17:46:58 |
| 2 | Ba 233.527† | 15.0 | -3.4 | -0.0298 ug/L | -0.0298 ppb | 17:46:58 |
| 2 | Be 313.107† | -4253.4 | -19.0 | -0.0074 ug/L | -0.0074 ppb | 17:46:38 |
| 2 | Cd 226.502† | -162.1 | 3.2 | 0.0410 ug/L | 0.0410 ppb | 17:46:58 |
| 2 | Co 228.616† | -42.0 | -3.4 | -0.0886 ug/L | -0.0886 ppb | 17:46:58 |
| 2 | Cr 267.716† | 111.2 | 17.0 | 0.2252 ug/L | 0.2252 ppb | 17:46:58 |
| 2 | Cu 324.752† | 6451.9 | 142.1 | 0.4631 ug/L | 0.4631 ppb | 17:46:38 |
| 2 | Mn 257.610† | 995.1 | 549.3 | 0.7178 ug/L | 0.7178 ppb | 17:46:58 |
| 2 | Mo 202.031† | 15.9 | 1.9 | 0.1662 ug/L | 0.1662 ppb | 17:46:58 |
| 2 | Ni 231.604† | 83.0 | -10.1 | -0.3149 ug/L | -0.3149 ppb | 17:46:58 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 183.9 | 16.9 | 12.073 ug/L | 12.073 ppb | 17:46:58 |
| 2 | Pb 220.353† | -47.4 | 11.1 | 1.6640 ug/L | 1.6640 ppb | 17:46:58 |
| 2 | S 181.975 Axial† | 29.2 | 5.0 | 8.8097 ug/L | 8.8097 ppb | 17:46:58 |
| 2 | Sb 206.836† | 30.0 | 3.6 | 1.5637 ug/L | 1.5637 ppb | 17:46:58 |
| 2 | Se 196.026† | -17.3 | -0.4 | -0.2294 ug/L | -0.2294 ppb | 17:46:58 |
| 2 | Si 251.611† | 650.5 | 129.4 | 4.8155 ug/L | 4.8155 ppb | 17:46:58 |
| 2 | Sn 189.927† | 11.5 | 8.5 | 1.8809 ug/L | 1.8809 ppb | 17:46:58 |
| 2 | Ti 334.940† | -995.8 | 80.9 | 0.1282 ug/L | 0.1282 ppb | 17:46:38 |
| 2 | Tl 190.801† | -26.6 | -1.7 | -0.6520 ug/L | -0.6520 ppb | 17:46:58 |
| 2 | U 409.014† | -2041.9 | -20.3 | -0.6028 ug/L | -0.6028 ppb | 17:46:38 |
| 2 | V 292.402† | -1363.7 | 54.8 | 0.4211 ug/L | 0.4211 ppb | 17:46:38 |
| 2 | Zn 213.857† | 691.4 | 89.5 | 1.0601 ug/L | 1.0601 ppb | 17:46:58 |
| 2 | SiO2† | 642.2 | 93.2 | 7.4389 ug/L | 7.4389 ppb | 17:47:34 |
| 3 | Sc Radial | 3994.4 | 3994.4 | 99.0 % | | 17:46:06 |
| 3 | Y RADIAL | 4401.2 | 4401.2 | 97.41 % | | 17:45:46 |
| 3 | Al 396.153Radial† | -74.7 | 4.2 | 4.5215 ug/L | 4.5215 ppb | 17:46:06 |
| 3 | Ca 317.933Radial† | 23.8 | 6.9 | 13.924 ug/L | 13.924 ppb | 17:46:06 |
| 3 | Fe 238.204 Radial† | 17.0 | 8.2 | 102.31 ug/L | 102.31 ppb | 17:46:06 |
| 3 | K 766.490 Radial† | 2714.5 | -62.0 | -12.371 ug/L | -12.371 ppb | 17:45:46 |
| 3 | Mg 279.077 IEC† | -0.1 | -0.8 | -35.813 ug/L | -35.813 ppb | 17:46:06 |
| 3 | Na 589.592 Radial† | -487.1 | -31.1 | -12.198 ug/L | -12.198 ppb | 17:45:46 |
| 3 | Sr 421.552† | 67.4 | -2.0 | -0.0169 ug/L | -0.0169 ppb | 17:45:46 |
| 3 | Sc 361.383 | 827403.3 | 827403.3 | 98.517 % | | 17:47:03 |
| 3 | Y 371.029 | 706139.4 | 706139.4 | 98.613 % | | 17:47:03 |
| 3 | Ag 328.068† | 125.2 | -126.3 | -0.6056 ug/L | -0.6056 ppb | 17:47:03 |
| 3 | As 188.979† | -19.1 | 1.5 | 0.8040 ug/L | 0.8040 ppb | 17:47:23 |
| 3 | B 249.677† | -221.3 | 25.5 | 0.6846 ug/L | 0.6846 ppb | 17:47:23 |
| 3 | Ba 233.527† | 33.0 | 15.0 | 0.1447 ug/L | 0.1447 ppb | 17:47:23 |
| 3 | Be 313.107† | -4175.4 | 24.5 | 0.0104 ug/L | 0.0104 ppb | 17:47:03 |
| 3 | Cd 226.502† | -171.1 | -7.2 | -0.1118 ug/L | -0.1118 ppb | 17:47:23 |
| 3 | Co 228.616† | -30.2 | 8.2 | 0.2120 ug/L | 0.2120 ppb | 17:47:23 |
| 3 | Cr 267.716† | 115.2 | 22.0 | 0.2965 ug/L | 0.2965 ppb | 17:47:23 |
| 3 | Cu 324.752† | 6507.6 | 252.7 | 0.8230 ug/L | 0.8230 ppb | 17:47:03 |
| 3 | Mn 257.610† | 1102.9 | 667.0 | 0.8867 ug/L | 0.8867 ppb | 17:47:23 |
| 3 | Mo 202.031† | 10.6 | -3.5 | -0.2954 ug/L | -0.2954 ppb | 17:47:23 |
| 3 | Ni 231.604† | 91.3 | -0.9 | -0.0293 ug/L | -0.0293 ppb | 17:47:23 |
| 3 | P 214.914† | 174.9 | 9.3 | 6.4761 ug/L | 6.4761 ppb | 17:47:23 |
| 3 | Pb 220.353† | -63.1 | -5.2 | -0.8027 ug/L | -0.8027 ppb | 17:47:23 |
| 3 | S 181.975 Axial† | 27.1 | 3.2 | 5.5635 ug/L | 5.5635 ppb | 17:47:23 |
| 3 | Sb 206.836† | 19.7 | -6.6 | -2.7901 ug/L | -2.7901 ppb | 17:47:23 |
| 3 | Se 196.026† | -16.5 | 0.2 | 0.4630 ug/L | 0.4630 ppb | 17:47:23 |
| 3 | Si 251.611† | 639.9 | 124.1 | 4.6227 ug/L | 4.6227 ppb | 17:47:23 |
| 3 | Sn 189.927† | 10.2 | 7.3 | 1.6105 ug/L | 1.6105 ppb | 17:47:23 |
| 3 | Ti 334.940† | -940.7 | 128.4 | 0.2241 ug/L | 0.2241 ppb | 17:47:03 |
| 3 | Tl 190.801† | -31.3 | -6.7 | -2.5876 ug/L | -2.5876 ppb | 17:47:23 |
| 3 | U 409.014† | -1888.8 | 117.9 | 3.4574 ug/L | 3.4574 ppb | 17:47:03 |
| 3 | V 292.402† | -1326.5 | 81.1 | 0.6118 ug/L | 0.6118 ppb | 17:47:03 |
| 3 | Zn 213.857† | 701.2 | 105.4 | 1.2356 ug/L | 1.2356 ppb | 17:47:23 |
| 3 | SiO2† | 678.8 | 135.6 | 10.843 ug/L | 10.843 ppb | 17:47:39 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 830131.5 | 98.842 % | | 0.4362 | | | 0.44% |
| Sc Radial | 4069.4 | 101 % | | 2.0 | | | 1.98% |
| Y 371.029 | 708436.2 | 98.933 % | | 0.4968 | | | 0.50% |
| Y RADIAL | 4236.5 | 93.77 % | | 7.510 | | | 8.01% |
| Ag 328.068† | -102.4 | -0.4928 ug/L | | 0.14132 | -0.4928 ppb | 0.14132 | 28.68% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 7.1 | 7.5176 ug/L | | 4.38764 | 7.5176 ppb | 4.38764 | 58.36% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -3.4 | -1.7892 ug/L | | 2.54578 | -1.7892 ppb | 2.54578 | 142.29% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | 33.9 | 0.9181 ug/L | | 0.58087 | 0.9181 ppb | 0.58087 | 63.27% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 9.2 | 0.0895 ug/L | | 0.10345 | 0.0895 ppb | 0.10345 | 115.54% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -57.1 | -0.0228 ug/L | | 0.04312 | -0.0228 ppb | 0.04312 | 188.79% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 7.6 | 15.362 ug/L | | 6.6172 | 15.362 ppb | 6.6172 | 43.07% |

| | | | | | | | |
|--|--------|--------------|----------|-------------|----------|---------|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | | |
| Cd 226.502† | 3.0 | 0.0354 ug/L | 0.14444 | 0.0354 ppb | 0.14444 | 408.44% | |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | | |
| Co 228.616† | 2.8 | 0.0711 ug/L | 0.15115 | 0.0711 ppb | 0.15115 | 212.69% | |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | 18.2 | 0.2453 ug/L | 0.04470 | 0.2453 ppb | 0.04470 | 18.23% | |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | 208.0 | 0.6774 ug/L | 0.18956 | 0.6774 ppb | 0.18956 | 27.98% | |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204 Radial† | 6.0 | 74.986 ug/L | 36.0199 | 74.986 ppb | 36.0199 | 48.04% | |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | | |
| K 766.490 Radial† | -219.5 | -43.820 ug/L | 27.5624 | -43.820 ppb | 27.5624 | 62.90% | |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | | |
| Mg 279.077 IEC† | 1.8 | 78.895 ug/L | 100.6027 | 78.895 ppb | 100.6027 | 127.52% | |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 646.5 | 0.8524 ug/L | 0.12108 | 0.8524 ppb | 0.12108 | 14.21% | |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | 0.7 | 0.0689 ug/L | 0.32666 | 0.0689 ppb | 0.32666 | 474.18% | |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 589.592 Radial† | 8.4 | 3.3135 ug/L | 13.44259 | 3.3135 ppb | 13.44259 | 405.69% | |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | | |
| Ni 231.604† | -7.9 | -0.2472 ug/L | 0.19312 | -0.2472 ppb | 0.19312 | 78.14% | |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | | |
| P 214.914† | 12.6 | 8.8896 ug/L | 2.87673 | 8.8896 ppb | 2.87673 | 32.36% | |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | 5.4 | 0.8050 ug/L | 1.39346 | 0.8050 ppb | 1.39346 | 173.09% | |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| S 181.975 Axial† | 6.2 | 10.789 ug/L | 6.4479 | 10.789 ppb | 6.4479 | 59.76% | |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | | |
| Sb 206.836† | 1.0 | 0.4292 ug/L | 2.82825 | 0.4292 ppb | 2.82825 | 658.90% | |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se 196.026† | -1.9 | -1.2901 ug/L | 2.46129 | -1.2901 ppb | 2.46129 | 190.78% | |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Si 251.611† | 130.0 | 4.8398 ug/L | 0.23023 | 4.8398 ppb | 0.23023 | 4.76% | |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |
| Sn 189.927† | 4.0 | 0.8898 ug/L | 1.48859 | 0.8898 ppb | 1.48859 | 167.29% | |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | | |
| Sr 421.552† | -7.0 | -0.0594 ug/L | 0.04423 | -0.0594 ppb | 0.04423 | 74.42% | |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | | |
| Ti 334.940† | 91.6 | 0.1522 ug/L | 0.06340 | 0.1522 ppb | 0.06340 | 41.65% | |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | | |
| Tl 190.801† | -3.5 | -1.3567 ug/L | 1.06977 | -1.3567 ppb | 1.06977 | 78.85% | |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| U 409.014† | 72.7 | 2.1304 ug/L | 2.36736 | 2.1304 ppb | 2.36736 | 111.12% | |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | | |
| V 292.402† | 76.2 | 0.5824 ug/L | 0.14885 | 0.5824 ppb | 0.14885 | 25.56% | |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn 213.857† | 99.6 | 1.1729 ug/L | 0.09788 | 1.1729 ppb | 0.09788 | 8.35% | |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| SiO2† | 104.2 | 8.3206 ug/L | 2.21756 | 8.3206 ppb | 2.21756 | 26.65% | |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 18:45:58

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 | 4049.4 | 4049.4 | 100 % | | 18:48:10 |
| 1 | Y RADIAL | 4465.4 | 4465.4 | 98.84 % | | 18:47:50 |
| 1 | Al 396.153Radial† | 4598.2 | 4660.1 | 4942.3 ug/L | 4942.3 ppb | 18:47:50 |
| 1 | Ca 317.933Radial† | 2493.0 | 2466.2 | 5010.7 ug/L | 5010.7 ppb | 18:48:10 |
| 1 | Fe 238.204 Radial† | 418.3 | 407.7 | 5113.5 ug/L | 5113.5 ppb | 18:48:10 |
| 1 | K 766.490 Radial† | 27337.5 | 24428.9 | 4870.4 ug/L | 4870.4 ppb | 18:47:50 |
| 1 | Mg 279.077 IEC† | 117.1 | 116.0 | 5066.6 ug/L | 5066.6 ppb | 18:48:10 |
| 1 | Na 589.592 Radial† | 25329.3 | 25692.6 | 10090 ug/L | 10090 ppb | 18:47:50 |
| 1 | Sr 421.552† | 57920.8 | 57627.6 | 490.69 ug/L | 490.69 ppb | 18:47:50 |
| 1 | Sc 361.383 | 838446.9 | 838446.9 | 99.832 % | | 18:49:07 |
| 1 | Y 371.029 | 706173.4 | 706173.4 | 98.617 % | | 18:49:07 |
| 1 | Ag 328.068† | 100990.4 | 100906.6 | 511.83 ug/L | 511.83 ppb | 18:49:12 |
| 1 | As 188.979† | 900.3 | 922.6 | 498.94 ug/L | 498.94 ppb | 18:49:32 |
| 1 | B 249.677† | 17520.2 | 17799.8 | 486.98 ug/L | 486.98 ppb | 18:49:12 |
| 1 | Ba 233.527† | 53140.2 | 53211.0 | 500.08 ug/L | 500.08 ppb | 18:49:12 |
| 1 | Be 313.107† | 1214320.0 | 1220622.7 | 496.71 ug/L | 496.71 ppb | 18:49:07 |
| 1 | Cd 226.502† | 35279.0 | 35504.6 | 500.64 ug/L | 500.64 ppb | 18:49:12 |
| 1 | Co 228.616† | 19556.2 | 19628.0 | 510.92 ug/L | 510.92 ppb | 18:49:12 |
| 1 | Cr 267.716† | 38265.2 | 38234.5 | 498.83 ug/L | 498.83 ppb | 18:49:12 |
| 1 | Cu 324.752† | 160177.8 | 154094.2 | 499.64 ug/L | 499.64 ppb | 18:49:12 |
| 1 | Mn 257.610† | 375631.9 | 375810.5 | 493.38 ug/L | 493.38 ppb | 18:49:12 |
| 1 | Mo 202.031† | 5686.7 | 5682.1 | 500.00 ug/L | 500.00 ppb | 18:49:32 |
| 1 | Ni 231.604† | 16240.2 | 16173.9 | 504.72 ug/L | 504.72 ppb | 18:49:12 |
| 1 | P 214.914† | 3607.6 | 3445.5 | 2379.1 ug/L | 2379.1 ppb | 18:49:32 |
| 1 | Pb 220.353† | 3210.9 | 3275.1 | 495.17 ug/L | 495.17 ppb | 18:49:32 |
| 1 | S 181.975 Axial† | 596.4 | 573.0 | 1003.4 ug/L | 1003.4 ppb | 18:49:32 |
| 1 | Sb 206.836† | 1212.3 | 1187.7 | 522.55 ug/L | 522.55 ppb | 18:49:32 |
| 1 | Se 196.026† | 597.5 | 615.5 | 509.01 ug/L | 509.01 ppb | 18:49:32 |
| 1 | Si 251.611† | 68268.7 | 67858.0 | 2520.4 ug/L | 2520.4 ppb | 18:49:12 |
| 1 | Sn 189.927† | 2239.0 | 2239.7 | 496.63 ug/L | 496.63 ppb | 18:49:32 |
| 1 | Ti 334.940† | 288678.9 | 290247.2 | 499.22 ug/L | 499.22 ppb | 18:49:12 |
| 1 | Tl 190.801† | 1229.8 | 1257.0 | 489.32 ug/L | 489.32 ppb | 18:49:32 |
| 1 | U 409.014† | 15619.6 | 17681.0 | 518.56 ug/L | 518.56 ppb | 18:49:12 |
| 1 | V 292.402† | 63337.2 | 64871.2 | 506.78 ug/L | 506.78 ppb | 18:49:12 |
| 1 | Zn 213.857† | 42657.3 | 42122.6 | 495.75 ug/L | 495.75 ppb | 18:49:12 |
| 1 | SiO2† | 66918.3 | 66477.4 | 5297.6 ug/L | 5297.6 ppb | 18:50:39 |
| 2 | Sc Radial | 4034.6 | 4034.6 | 100 % | | 18:48:35 |
| 2 | Y RADIAL | 4342.5 | 4342.5 | 96.11 % | | 18:48:15 |
| 2 | Al 396.153Radial† | 4523.1 | 4601.8 | 4880.1 ug/L | 4880.1 ppb | 18:48:15 |
| 2 | Ca 317.933Radial† | 2498.9 | 2481.2 | 5041.2 ug/L | 5041.2 ppb | 18:48:35 |
| 2 | Fe 238.204 Radial† | 421.5 | 412.4 | 5171.6 ug/L | 5171.6 ppb | 18:48:35 |
| 2 | K 766.490 Radial† | 27010.7 | 24202.2 | 4825.2 ug/L | 4825.2 ppb | 18:48:15 |
| 2 | Mg 279.077 IEC† | 118.6 | 117.9 | 5148.1 ug/L | 5148.1 ppb | 18:48:35 |
| 2 | Na 589.592 Radial† | 24675.7 | 25131.8 | 9869.6 ug/L | 9869.6 ppb | 18:48:15 |
| 2 | Sr 421.552† | 56330.7 | 56249.7 | 478.96 ug/L | 478.96 ppb | 18:48:15 |
| 2 | Sc 361.383 | 844461.1 | 844461.1 | 100.55 % | | 18:49:38 |
| 2 | Y 371.029 | 711856.7 | 711856.7 | 99.411 % | | 18:49:38 |
| 2 | Ag 328.068† | 99385.3 | 98589.9 | 500.13 ug/L | 500.13 ppb | 18:49:43 |
| 2 | As 188.979† | 907.5 | 923.3 | 499.22 ug/L | 499.22 ppb | 18:50:03 |
| 2 | B 249.677† | 17213.6 | 17369.9 | 475.19 ug/L | 475.19 ppb | 18:49:43 |
| 2 | Ba 233.527† | 52317.2 | 52013.4 | 488.83 ug/L | 488.83 ppb | 18:49:43 |
| 2 | Be 313.107† | 1210389.9 | 1208051.1 | 491.58 ug/L | 491.58 ppb | 18:49:38 |
| 2 | Cd 226.502† | 34665.9 | 34643.2 | 488.48 ug/L | 488.48 ppb | 18:49:43 |
| 2 | Co 228.616† | 19261.5 | 19195.3 | 499.69 ug/L | 499.69 ppb | 18:49:43 |
| 2 | Cr 267.716† | 37650.2 | 37349.9 | 487.30 ug/L | 487.30 ppb | 18:49:43 |
| 2 | Cu 324.752† | 157626.4 | 150413.9 | 487.72 ug/L | 487.72 ppb | 18:49:43 |
| 2 | Mn 257.610† | 369718.5 | 367249.6 | 482.15 ug/L | 482.15 ppb | 18:49:43 |
| 2 | Mo 202.031† | 5752.1 | 5706.5 | 502.16 ug/L | 502.16 ppb | 18:50:03 |
| 2 | Ni 231.604† | 16027.3 | 15846.3 | 494.50 ug/L | 494.50 ppb | 18:49:43 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3614.3 | 3426.4 | 2367.7 ug/L | 2367.7 ppb | 18:50:03 |
| 2 | Pb 220.353† | 3240.4 | 3281.5 | 496.12 ug/L | 496.12 ppb | 18:50:03 |
| 2 | S 181.975 Axial† | 595.1 | 567.5 | 993.83 ug/L | 993.83 ppb | 18:50:03 |
| 2 | Sb 206.836† | 1239.9 | 1206.5 | 530.67 ug/L | 530.67 ppb | 18:50:03 |
| 2 | Se 196.026† | 626.7 | 640.2 | 528.89 ug/L | 528.89 ppb | 18:50:03 |
| 2 | Si 251.611† | 67167.9 | 66276.1 | 2461.5 ug/L | 2461.5 ppb | 18:49:43 |
| 2 | Sn 189.927† | 2272.5 | 2257.1 | 500.49 ug/L | 500.49 ppb | 18:50:03 |
| 2 | Ti 334.940† | 283933.7 | 283468.5 | 487.57 ug/L | 487.57 ppb | 18:49:43 |
| 2 | Tl 190.801† | 1253.0 | 1271.2 | 494.75 ug/L | 494.75 ppb | 18:50:03 |
| 2 | U 409.014† | 15246.4 | 17198.5 | 504.38 ug/L | 504.38 ppb | 18:49:43 |
| 2 | V 292.402† | 62232.1 | 63320.2 | 494.84 ug/L | 494.84 ppb | 18:49:43 |
| 2 | Zn 213.857† | 42062.4 | 41226.5 | 485.18 ug/L | 485.18 ppb | 18:49:43 |
| 2 | SiO2† | 68034.1 | 67109.7 | 5348.1 ug/L | 5348.1 ppb | 18:50:44 |
| 3 | Sc Radial | 4075.2 | 4075.2 | 101 % | | 18:49:00 |
| 3 | Y RADIAL | 4395.5 | 4395.5 | 97.29 % | | 18:48:40 |
| 3 | Al 396.153Radial† | 4514.5 | 4548.4 | 4823.5 ug/L | 4823.5 ppb | 18:48:40 |
| 3 | Ca 317.933Radial† | 2502.6 | 2460.0 | 4998.1 ug/L | 4998.1 ppb | 18:49:00 |
| 3 | Fe 238.204 Radial† | 417.0 | 403.8 | 5064.3 ug/L | 5064.3 ppb | 18:49:00 |
| 3 | K 766.490 Radial† | 26756.1 | 23681.4 | 4721.3 ug/L | 4721.3 ppb | 18:48:40 |
| 3 | Mg 279.077 IEC† | 119.5 | 117.6 | 5136.2 ug/L | 5136.2 ppb | 18:49:00 |
| 3 | Na 589.592 Radial† | 24735.1 | 24945.0 | 9796.2 ug/L | 9796.2 ppb | 18:48:40 |
| 3 | Sr 421.552† | 56348.3 | 55706.5 | 474.33 ug/L | 474.33 ppb | 18:48:40 |
| 3 | Sc 361.383 | 845724.4 | 845724.4 | 100.70 % | | 18:50:09 |
| 3 | Y 371.029 | 711950.6 | 711950.6 | 99.424 % | | 18:50:09 |
| 3 | Ag 328.068† | 100046.2 | 99098.5 | 502.67 ug/L | 502.67 ppb | 18:50:14 |
| 3 | As 188.979† | 894.9 | 909.5 | 491.83 ug/L | 491.83 ppb | 18:50:34 |
| 3 | B 249.677† | 17314.1 | 17444.1 | 477.24 ug/L | 477.24 ppb | 18:50:14 |
| 3 | Ba 233.527† | 52581.3 | 52197.9 | 490.56 ug/L | 490.56 ppb | 18:50:14 |
| 3 | Be 313.107† | 1212023.3 | 1207875.0 | 491.51 ug/L | 491.51 ppb | 18:50:09 |
| 3 | Cd 226.502† | 34920.4 | 34844.5 | 491.33 ug/L | 491.33 ppb | 18:50:14 |
| 3 | Co 228.616† | 19351.6 | 19256.2 | 501.26 ug/L | 501.26 ppb | 18:50:14 |
| 3 | Cr 267.716† | 37850.5 | 37492.9 | 489.16 ug/L | 489.16 ppb | 18:50:14 |
| 3 | Cu 324.752† | 158445.1 | 150992.8 | 489.59 ug/L | 489.59 ppb | 18:50:14 |
| 3 | Mn 257.610† | 371360.7 | 368331.1 | 483.56 ug/L | 483.56 ppb | 18:50:14 |
| 3 | Mo 202.031† | 5683.6 | 5629.9 | 495.42 ug/L | 495.42 ppb | 18:50:34 |
| 3 | Ni 231.604† | 16129.0 | 15923.5 | 496.91 ug/L | 496.91 ppb | 18:50:14 |
| 3 | P 214.914† | 3600.9 | 3407.7 | 2353.9 ug/L | 2353.9 ppb | 18:50:34 |
| 3 | Pb 220.353† | 3210.9 | 3247.4 | 490.96 ug/L | 490.96 ppb | 18:50:34 |
| 3 | S 181.975 Axial† | 586.8 | 558.3 | 977.70 ug/L | 977.70 ppb | 18:50:34 |
| 3 | Sb 206.836† | 1213.5 | 1178.5 | 518.51 ug/L | 518.51 ppb | 18:50:34 |
| 3 | Se 196.026† | 608.6 | 621.3 | 513.49 ug/L | 513.49 ppb | 18:50:34 |
| 3 | Si 251.611† | 67464.0 | 66470.4 | 2468.8 ug/L | 2468.8 ppb | 18:50:14 |
| 3 | Sn 189.927† | 2246.4 | 2227.7 | 493.99 ug/L | 493.99 ppb | 18:50:34 |
| 3 | Ti 334.940† | 285198.1 | 284302.2 | 489.00 ug/L | 489.00 ppb | 18:50:14 |
| 3 | Tl 190.801† | 1247.9 | 1264.3 | 492.07 ug/L | 492.07 ppb | 18:50:34 |
| 3 | U 409.014† | 15195.6 | 17125.3 | 502.24 ug/L | 502.24 ppb | 18:50:14 |
| 3 | V 292.402† | 62593.4 | 63586.6 | 496.81 ug/L | 496.81 ppb | 18:50:14 |
| 3 | Zn 213.857† | 42259.2 | 41359.5 | 486.76 ug/L | 486.76 ppb | 18:50:14 |
| 3 | SiO2† | 68591.0 | 67561.7 | 5384.4 ug/L | 5384.4 ppb | 18:50:49 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 842877.5 | 100.36 % | 0.463 | | | 0.46% |
| Sc Radial | 4053.1 | 100 % | 0.5 | | | 0.51% |
| Y 371.029 | 709993.6 | 99.151 % | 0.4621 | | | 0.47% |
| Y RADIAL | 4401.2 | 97.41 % | 1.365 | | | 1.40% |
| Ag 328.068† | 99531.7 | 504.87 ug/L | 6.153 | 504.87 ppb | 6.153 | 1.22% |
| QC value within limits for Ag 328.068 Recovery = 100.97% | | | | | | |
| Al 396.153Radial† | 4603.5 | 4882.0 ug/L | 59.46 | 4882.0 ppb | 59.46 | 1.22% |
| QC value within limits for Al 396.153Radial Recovery = 97.64% | | | | | | |
| As 188.979† | 918.5 | 496.67 ug/L | 4.186 | 496.67 ppb | 4.186 | 0.84% |
| QC value within limits for As 188.979 Recovery = 99.33% | | | | | | |
| B 249.677† | 17537.9 | 479.81 ug/L | 6.300 | 479.81 ppb | 6.300 | 1.31% |
| QC value within limits for B 249.677 Recovery = 95.96% | | | | | | |
| Ba 233.527† | 52474.1 | 493.16 ug/L | 6.059 | 493.16 ppb | 6.059 | 1.23% |
| QC value within limits for Ba 233.527 Recovery = 98.63% | | | | | | |
| Be 313.107† | 1212182.9 | 493.27 ug/L | 2.982 | 493.27 ppb | 2.982 | 0.60% |
| QC value within limits for Be 313.107 Recovery = 98.65% | | | | | | |
| Ca 317.933Radial† | 2469.1 | 5016.7 ug/L | 22.19 | 5016.7 ppb | 22.19 | 0.44% |

| | | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 100.33% | | | | | | | |
| Cd 226.502† | 34997.4 | 493.49 ug/L | 6.362 | 493.49 ppb | 6.362 | 1.29% | |
| QC value within limits for Cd 226.502 Recovery = 98.70% | | | | | | | |
| Co 228.616† | 19359.8 | 503.96 ug/L | 6.084 | 503.96 ppb | 6.084 | 1.21% | |
| QC value within limits for Co 228.616 Recovery = 100.79% | | | | | | | |
| Cr 267.716† | 37692.4 | 491.76 ug/L | 6.187 | 491.76 ppb | 6.187 | 1.26% | |
| QC value within limits for Cr 267.716 Recovery = 98.35% | | | | | | | |
| Cu 324.752† | 151833.6 | 492.32 ug/L | 6.412 | 492.32 ppb | 6.412 | 1.30% | |
| QC value within limits for Cu 324.752 Recovery = 98.46% | | | | | | | |
| Fe 238.204 Radial† | 408.0 | 5116.5 ug/L | 53.67 | 5116.5 ppb | 53.67 | 1.05% | |
| QC value within limits for Fe 238.204 Radial Recovery = 102.33% | | | | | | | |
| K 766.490 Radial† | 24104.2 | 4805.6 ug/L | 76.46 | 4805.6 ppb | 76.46 | 1.59% | |
| QC value within limits for K 766.490 Radial Recovery = 96.11% | | | | | | | |
| Mg 279.077 IEC† | 117.1 | 5117.0 ug/L | 44.03 | 5117.0 ppb | 44.03 | 0.86% | |
| QC value within limits for Mg 279.077 IEC Recovery = 102.34% | | | | | | | |
| Mn 257.610† | 370463.8 | 486.36 ug/L | 6.118 | 486.36 ppb | 6.118 | 1.26% | |
| QC value within limits for Mn 257.610 Recovery = 97.27% | | | | | | | |
| Mo 202.031† | 5672.8 | 499.19 ug/L | 3.444 | 499.19 ppb | 3.444 | 0.69% | |
| QC value within limits for Mo 202.031 Recovery = 99.84% | | | | | | | |
| Na 589.592 Radial† | 25256.4 | 9918.6 ug/L | 152.81 | 9918.6 ppb | 152.81 | 1.54% | |
| QC value within limits for Na 589.592 Radial Recovery = 99.19% | | | | | | | |
| Ni 231.604† | 15981.2 | 498.71 ug/L | 5.345 | 498.71 ppb | 5.345 | 1.07% | |
| QC value within limits for Ni 231.604 Recovery = 99.74% | | | | | | | |
| P 214.914† | 3426.5 | 2366.9 ug/L | 12.61 | 2366.9 ppb | 12.61 | 0.53% | |
| QC value within limits for P 214.914 Recovery = 94.67% | | | | | | | |
| Pb 220.353† | 3268.0 | 494.08 ug/L | 2.745 | 494.08 ppb | 2.745 | 0.56% | |
| QC value within limits for Pb 220.353 Recovery = 98.82% | | | | | | | |
| S 181.975 Axial† | 566.3 | 991.65 ug/L | 13.003 | 991.65 ppb | 13.003 | 1.31% | |
| QC value within limits for S 181.975 Axial Recovery = 99.17% | | | | | | | |
| Sb 206.836† | 1190.9 | 523.91 ug/L | 6.190 | 523.91 ppb | 6.190 | 1.18% | |
| QC value within limits for Sb 206.836 Recovery = 104.78% | | | | | | | |
| Se 196.026† | 625.7 | 517.13 ug/L | 10.425 | 517.13 ppb | 10.425 | 2.02% | |
| QC value within limits for Se 196.026 Recovery = 103.43% | | | | | | | |
| Si 251.611† | 66868.2 | 2483.6 ug/L | 32.12 | 2483.6 ppb | 32.12 | 1.29% | |
| QC value within limits for Si 251.611 Recovery = 99.34% | | | | | | | |
| Sn 189.927† | 2241.5 | 497.04 ug/L | 3.271 | 497.04 ppb | 3.271 | 0.66% | |
| QC value within limits for Sn 189.927 Recovery = 99.41% | | | | | | | |
| Sr 421.552† | 56527.9 | 481.33 ug/L | 8.433 | 481.33 ppb | 8.433 | 1.75% | |
| QC value within limits for Sr 421.552 Recovery = 96.27% | | | | | | | |
| Ti 334.940† | 286006.0 | 491.93 ug/L | 6.357 | 491.93 ppb | 6.357 | 1.29% | |
| QC value within limits for Ti 334.940 Recovery = 98.39% | | | | | | | |
| Tl 190.801† | 1264.2 | 492.05 ug/L | 2.717 | 492.05 ppb | 2.717 | 0.55% | |
| QC value within limits for Tl 190.801 Recovery = 98.41% | | | | | | | |
| U 409.014† | 17334.9 | 508.39 ug/L | 8.870 | 508.39 ppb | 8.870 | 1.74% | |
| QC value within limits for U 409.014 Recovery = 101.68% | | | | | | | |
| V 292.402† | 63926.0 | 499.48 ug/L | 6.403 | 499.48 ppb | 6.403 | 1.28% | |
| QC value within limits for V 292.402 Recovery = 99.90% | | | | | | | |
| Zn 213.857† | 41569.5 | 489.23 ug/L | 5.703 | 489.23 ppb | 5.703 | 1.17% | |
| QC value within limits for Zn 213.857 Recovery = 97.85% | | | | | | | |
| SiO2† | 67049.6 | 5343.3 ug/L | 43.57 | 5343.3 ppb | 43.57 | 0.82% | |
| QC value within limits for SiO2 Recovery = 99.92% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 18:52:59

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 | 4046.3 | 4046.3 | 100 % | | 18:55:11 |
| 1 | Y RADIAL | 4496.7 | 4496.7 | 99.53 % | | 18:54:51 |
| 1 | Al 396.153Radial† | -71.2 | 8.7 | 9.2224 ug/L | 9.2224 ppb | 18:55:11 |
| 1 | Ca 317.933Radial† | 23.0 | 5.8 | 11.746 ug/L | 11.746 ppb | 18:55:11 |
| 1 | Fe 238.204 Radial† | 10.5 | 1.4 | 17.735 ug/L | 17.735 ppb | 18:55:11 |
| 1 | K 766.490 Radial† | 2723.9 | -87.8 | -17.531 ug/L | -17.531 ppb | 18:54:51 |
| 1 | Mg 279.077 IEC† | 3.3 | 2.6 | 114.32 ug/L | 114.32 ppb | 18:55:11 |
| 1 | Na 589.592 Radial† | -461.2 | 1.1 | 0.4168 ug/L | 0.4168 ppb | 18:54:51 |
| 1 | Sr 421.552† | 61.2 | -9.0 | -0.0771 ug/L | -0.0771 ppb | 18:54:51 |
| 1 | Sc 361.383 | 825278.9 | 825278.9 | 98.264 % | | 18:56:08 |
| 1 | Y 371.029 | 707417.3 | 707417.3 | 98.791 % | | 18:56:08 |
| 1 | Ag 328.068† | 190.8 | -59.2 | -0.2864 ug/L | -0.2864 ppb | 18:56:08 |
| 1 | As 188.979† | -25.6 | -5.2 | -2.7857 ug/L | -2.7857 ppb | 18:56:28 |
| 1 | B 249.677† | -332.8 | -88.5 | -2.4346 ug/L | -2.4346 ppb | 18:56:28 |
| 1 | Ba 233.527† | 42.5 | 24.7 | 0.2340 ug/L | 0.2340 ppb | 18:56:28 |
| 1 | Be 313.107† | -4373.2 | -187.7 | -0.0758 ug/L | -0.0758 ppb | 18:56:08 |
| 1 | Cd 226.502† | -178.2 | -14.9 | -0.2134 ug/L | -0.2134 ppb | 18:56:28 |
| 1 | Co 228.616† | -40.2 | -2.0 | -0.0524 ug/L | -0.0524 ppb | 18:56:28 |
| 1 | Cr 267.716† | 88.3 | -5.1 | -0.0615 ug/L | -0.0615 ppb | 18:56:28 |
| 1 | Cu 324.752† | 6431.6 | 192.5 | 0.6271 ug/L | 0.6271 ppb | 18:56:08 |
| 1 | Mn 257.610† | 1246.0 | 815.6 | 1.0672 ug/L | 1.0672 ppb | 18:56:08 |
| 1 | Mo 202.031† | 17.1 | 3.3 | 0.2879 ug/L | 0.2879 ppb | 18:56:28 |
| 1 | Ni 231.604† | 74.2 | -18.1 | -0.5644 ug/L | -0.5644 ppb | 18:56:28 |
| 1 | P 214.914† | 190.4 | 25.5 | 18.234 ug/L | 18.234 ppb | 18:56:28 |
| 1 | Pb 220.353† | -61.8 | -4.1 | -0.6197 ug/L | -0.6197 ppb | 18:56:28 |
| 1 | S 181.975 Axial† | 27.2 | 3.3 | 5.7959 ug/L | 5.7959 ppb | 18:56:28 |
| 1 | Sb 206.836† | 21.4 | -4.8 | -2.0292 ug/L | -2.0292 ppb | 18:56:28 |
| 1 | Se 196.026† | -11.9 | 4.8 | 3.8739 ug/L | 3.8739 ppb | 18:56:28 |
| 1 | Si 251.611† | 574.3 | 59.0 | 2.1917 ug/L | 2.1917 ppb | 18:56:28 |
| 1 | Sn 189.927† | 8.4 | 5.5 | 1.2122 ug/L | 1.2122 ppb | 18:56:28 |
| 1 | Ti 334.940† | -961.3 | 105.0 | 0.1746 ug/L | 0.1746 ppb | 18:56:08 |
| 1 | Tl 190.801† | -28.7 | -4.2 | -1.6101 ug/L | -1.6101 ppb | 18:56:28 |
| 1 | U 409.014† | -2123.8 | -126.1 | -3.7120 ug/L | -3.7120 ppb | 18:56:08 |
| 1 | V 292.402† | -1288.5 | 116.2 | 0.8924 ug/L | 0.8924 ppb | 18:56:08 |
| 1 | Zn 213.857† | 691.0 | 96.8 | 1.1497 ug/L | 1.1497 ppb | 18:56:28 |
| 1 | SiO2† | 563.7 | 20.3 | 1.6112 ug/L | 1.6112 ppb | 18:57:39 |
| 2 | Sc Radial | 4058.5 | 4058.5 | 101 % | | 18:55:36 |
| 2 | Y RADIAL | 4484.1 | 4484.1 | 99.25 % | | 18:55:16 |
| 2 | Al 396.153Radial† | -67.5 | 12.6 | 13.365 ug/L | 13.365 ppb | 18:55:36 |
| 2 | Ca 317.933Radial† | 21.8 | 4.5 | 9.2036 ug/L | 9.2036 ppb | 18:55:36 |
| 2 | Fe 238.204 Radial† | 12.8 | 3.7 | 46.372 ug/L | 46.372 ppb | 18:55:36 |
| 2 | K 766.490 Radial† | 2461.3 | -356.9 | -71.258 ug/L | -71.258 ppb | 18:55:16 |
| 2 | Mg 279.077 IEC† | 2.1 | 1.4 | 61.898 ug/L | 61.898 ppb | 18:55:36 |
| 2 | Na 589.592 Radial† | -456.6 | 7.1 | 2.7826 ug/L | 2.7826 ppb | 18:55:16 |
| 2 | Sr 421.552† | 67.0 | -3.4 | -0.0290 ug/L | -0.0290 ppb | 18:55:16 |
| 2 | Sc 361.383 | 832797.8 | 832797.8 | 99.160 % | | 18:56:33 |
| 2 | Y 371.029 | 716108.5 | 716108.5 | 100.00 % | | 18:56:33 |
| 2 | Ag 328.068† | 206.3 | -45.3 | -0.2180 ug/L | -0.2180 ppb | 18:56:33 |
| 2 | As 188.979† | -26.2 | -5.6 | -2.9991 ug/L | -2.9991 ppb | 18:56:53 |
| 2 | B 249.677† | -333.9 | -86.6 | -2.3873 ug/L | -2.3873 ppb | 18:56:53 |
| 2 | Ba 233.527† | 42.4 | 24.3 | 0.2290 ug/L | 0.2290 ppb | 18:56:53 |
| 2 | Be 313.107† | -4400.0 | -174.6 | -0.0704 ug/L | -0.0704 ppb | 18:56:33 |
| 2 | Cd 226.502† | -155.0 | 10.1 | 0.1388 ug/L | 0.1388 ppb | 18:56:53 |
| 2 | Co 228.616† | -49.4 | -10.9 | -0.2842 ug/L | -0.2842 ppb | 18:56:53 |
| 2 | Cr 267.716† | 78.2 | -16.1 | -0.2062 ug/L | -0.2062 ppb | 18:56:53 |
| 2 | Cu 324.752† | 6559.7 | 262.5 | 0.8514 ug/L | 0.8514 ppb | 18:56:33 |
| 2 | Mn 257.610† | 834.2 | 388.8 | 0.5122 ug/L | 0.5122 ppb | 18:56:33 |
| 2 | Mo 202.031† | 19.7 | 5.7 | 0.5020 ug/L | 0.5020 ppb | 18:56:53 |
| 2 | Ni 231.604† | 84.8 | -8.0 | -0.2510 ug/L | -0.2510 ppb | 18:56:53 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 176.1 | 9.3 | 6.5257 ug/L | 6.5257 ppb | 18:56:53 |
| 2 | Pb 220.353† | -46.1 | 12.3 | 1.8576 ug/L | 1.8576 ppb | 18:56:53 |
| 2 | S 181.975 Axial† | 18.4 | -5.9 | -10.291 ug/L | -10.291 ppb | 18:56:53 |
| 2 | Sb 206.836† | 27.9 | 1.5 | 0.6537 ug/L | 0.6537 ppb | 18:56:53 |
| 2 | Se 196.026† | -20.0 | -3.2 | -2.4366 ug/L | -2.4366 ppb | 18:56:53 |
| 2 | Si 251.611† | 553.7 | 32.9 | 1.2189 ug/L | 1.2189 ppb | 18:56:53 |
| 2 | Sn 189.927† | 9.3 | 6.3 | 1.3913 ug/L | 1.3913 ppb | 18:56:53 |
| 2 | Ti 334.940† | -954.9 | 120.4 | 0.2015 ug/L | 0.2015 ppb | 18:56:33 |
| 2 | Tl 190.801† | -25.2 | -0.3 | -0.1240 ug/L | -0.1240 ppb | 18:56:53 |
| 2 | U 409.014† | -1879.3 | 139.9 | 4.1127 ug/L | 4.1127 ppb | 18:56:33 |
| 2 | V 292.402† | -1424.1 | -8.6 | -0.0572 ug/L | -0.0572 ppb | 18:56:33 |
| 2 | Zn 213.857† | 676.0 | 75.3 | 0.8879 ug/L | 0.8879 ppb | 18:56:53 |
| 2 | SiO2† | 589.1 | 40.7 | 3.2416 ug/L | 3.2416 ppb | 18:57:59 |
| 3 | Sc Radial | 4069.3 | 4069.3 | 101 % | | 18:56:01 |
| 3 | Y RADIAL | 4480.7 | 4480.7 | 99.17 % | | 18:55:41 |
| 3 | Al 396.153Radial† | -71.4 | 8.8 | 9.4368 ug/L | 9.4368 ppb | 18:56:01 |
| 3 | Ca 317.933Radial† | 27.9 | 10.5 | 21.304 ug/L | 21.304 ppb | 18:56:01 |
| 3 | Fe 238.204 Radial† | 12.9 | 3.7 | 46.857 ug/L | 46.857 ppb | 18:56:01 |
| 3 | K 766.490 Radial† | 2670.9 | -155.6 | -31.074 ug/L | -31.074 ppb | 18:55:41 |
| 3 | Mg 279.077 IEC† | 3.5 | 2.8 | 122.76 ug/L | 122.76 ppb | 18:56:01 |
| 3 | Na 589.592 Radial† | -411.5 | 53.0 | 20.804 ug/L | 20.804 ppb | 18:55:41 |
| 3 | Sr 421.552† | 42.7 | -27.7 | -0.2363 ug/L | -0.2363 ppb | 18:55:41 |
| 3 | Sc 361.383 | 829974.6 | 829974.6 | 98.824 % | | 18:56:59 |
| 3 | Y 371.029 | 714580.1 | 714580.1 | 99.791 % | | 18:56:59 |
| 3 | Ag 328.068† | 141.5 | -110.2 | -0.5410 ug/L | -0.5410 ppb | 18:56:59 |
| 3 | As 188.979† | -18.4 | 2.2 | 1.2122 ug/L | 1.2122 ppb | 18:57:19 |
| 3 | B 249.677† | -308.1 | -61.6 | -1.7004 ug/L | -1.7004 ppb | 18:57:19 |
| 3 | Ba 233.527† | 47.5 | 29.6 | 0.2795 ug/L | 0.2795 ppb | 18:57:19 |
| 3 | Be 313.107† | -4439.6 | -229.7 | -0.0929 ug/L | -0.0929 ppb | 18:56:59 |
| 3 | Cd 226.502† | -177.0 | -12.7 | -0.1848 ug/L | -0.1848 ppb | 18:57:19 |
| 3 | Co 228.616† | -42.6 | -4.2 | -0.1124 ug/L | -0.1124 ppb | 18:57:19 |
| 3 | Cr 267.716† | 88.4 | -5.5 | -0.0662 ug/L | -0.0662 ppb | 18:57:19 |
| 3 | Cu 324.752† | 6564.7 | 290.0 | 0.9424 ug/L | 0.9424 ppb | 18:56:59 |
| 3 | Mn 257.610† | 803.9 | 361.1 | 0.4734 ug/L | 0.4734 ppb | 18:56:59 |
| 3 | Mo 202.031† | 8.3 | -5.8 | -0.5032 ug/L | -0.5032 ppb | 18:57:19 |
| 3 | Ni 231.604† | 67.2 | -25.6 | -0.7981 ug/L | -0.7981 ppb | 18:57:19 |
| 3 | P 214.914† | 203.7 | 37.9 | 27.052 ug/L | 27.052 ppb | 18:57:19 |
| 3 | Pb 220.353† | -41.9 | 16.4 | 2.4614 ug/L | 2.4614 ppb | 18:57:19 |
| 3 | S 181.975 Axial† | 25.2 | 1.2 | 2.0362 ug/L | 2.0362 ppb | 18:57:19 |
| 3 | Sb 206.836† | 36.3 | 10.1 | 4.3057 ug/L | 4.3057 ppb | 18:57:19 |
| 3 | Se 196.026† | -12.5 | 4.3 | 3.5808 ug/L | 3.5808 ppb | 18:57:19 |
| 3 | Si 251.611† | 589.2 | 70.8 | 2.6410 ug/L | 2.6410 ppb | 18:57:19 |
| 3 | Sn 189.927† | 5.9 | 2.9 | 0.6463 ug/L | 0.6463 ppb | 18:57:19 |
| 3 | Ti 334.940† | -981.4 | 90.2 | 0.1477 ug/L | 0.1477 ppb | 18:56:59 |
| 3 | Tl 190.801† | -24.7 | 0.1 | 0.0519 ug/L | 0.0519 ppb | 18:57:19 |
| 3 | U 409.014† | -1978.2 | 33.4 | 0.9774 ug/L | 0.9774 ppb | 18:56:59 |
| 3 | V 292.402† | -1376.1 | 35.0 | 0.2602 ug/L | 0.2602 ppb | 18:56:59 |
| 3 | Zn 213.857† | 689.9 | 91.6 | 1.0855 ug/L | 1.0855 ppb | 18:57:19 |
| 3 | SiO2† | 564.9 | 18.2 | 1.4710 ug/L | 1.4710 ppb | 18:58:19 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 829350.4 | 98.749 % | | 0.4522 | | | 0.46% |
| Sc Radial | 4058.0 | 101 % | | 0.3 | | | 0.28% |
| Y 371.029 | 712702.0 | 99.529 % | | 0.6480 | | | 0.65% |
| Y RADIAL | 4487.2 | 99.32 % | | 0.187 | | | 0.19% |
| Ag 328.068† | -71.6 | -0.3485 ug/L | | 0.17020 | -0.3485 ppb | 0.17020 | 48.84% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 10.0 | 10.675 ug/L | | 2.3320 | 10.675 ppb | 2.3320 | 21.85% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -2.9 | -1.5242 ug/L | | 2.37220 | -1.5242 ppb | 2.37220 | 155.64% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | -78.9 | -2.1741 ug/L | | 0.41089 | -2.1741 ppb | 0.41089 | 18.90% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 26.2 | 0.2475 ug/L | | 0.02783 | 0.2475 ppb | 0.02783 | 11.24% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -197.3 | -0.0797 ug/L | | 0.01175 | -0.0797 ppb | 0.01175 | 14.74% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 6.9 | 14.085 ug/L | | 6.3799 | 14.085 ppb | 6.3799 | 45.30% |

| | | | | | | |
|--|--------|--------------|----------|-------------|----------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | -5.8 | -0.0865 ug/L | 0.19561 | -0.0865 ppb | 0.19561 | 226.24% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -5.7 | -0.1497 ug/L | 0.12034 | -0.1497 ppb | 0.12034 | 80.41% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | -8.9 | -0.1113 ug/L | 0.08220 | -0.1113 ppb | 0.08220 | 73.86% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 248.3 | 0.8070 ug/L | 0.16231 | 0.8070 ppb | 0.16231 | 20.11% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 3.0 | 36.988 ug/L | 16.6756 | 36.988 ppb | 16.6756 | 45.08% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -200.1 | -39.954 ug/L | 27.9429 | -39.954 ppb | 27.9429 | 69.94% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 2.3 | 99.660 ug/L | 32.9740 | 99.660 ppb | 32.9740 | 33.09% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 521.8 | 0.6843 ug/L | 0.33217 | 0.6843 ppb | 0.33217 | 48.55% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | 1.1 | 0.0956 ug/L | 0.52947 | 0.0956 ppb | 0.52947 | 554.10% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 20.4 | 8.0011 ug/L | 11.15044 | 8.0011 ppb | 11.15044 | 139.36% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -17.2 | -0.5378 ug/L | 0.27450 | -0.5378 ppb | 0.27450 | 51.04% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 24.3 | 17.270 ug/L | 10.2969 | 17.270 ppb | 10.2969 | 59.62% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 8.2 | 1.2331 ug/L | 1.63271 | 1.2331 ppb | 1.63271 | 132.41% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | -0.5 | -0.8198 ug/L | 8.41532 | -0.8198 ppb | 8.41532 | >999.9% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 2.3 | 0.9767 ug/L | 3.17981 | 0.9767 ppb | 3.17981 | 325.56% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | 2.0 | 1.6727 ug/L | 3.56178 | 1.6727 ppb | 3.56178 | 212.94% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 54.2 | 2.0172 ug/L | 0.72691 | 2.0172 ppb | 0.72691 | 36.04% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 4.9 | 1.0833 ug/L | 0.38891 | 1.0833 ppb | 0.38891 | 35.90% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -13.4 | -0.1141 ug/L | 0.10851 | -0.1141 ppb | 0.10851 | 95.07% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 105.2 | 0.1746 ug/L | 0.02693 | 0.1746 ppb | 0.02693 | 15.42% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | -1.5 | -0.5608 ug/L | 0.91302 | -0.5608 ppb | 0.91302 | 162.82% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 15.7 | 0.4594 ug/L | 3.93797 | 0.4594 ppb | 3.93797 | 857.25% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 47.6 | 0.3651 ug/L | 0.48342 | 0.3651 ppb | 0.48342 | 132.39% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 87.9 | 1.0411 ug/L | 0.13642 | 1.0411 ppb | 0.13642 | 13.10% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 26.4 | 2.1080 ug/L | 0.98431 | 2.1080 ppb | 0.98431 | 46.70% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 19:49:21

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 | 4025.6 | 4025.6 | 99.8 % | | 19:51:32 |
| 1 | Y RADIAL | 4465.7 | 4465.7 | 98.84 % | | 19:51:12 |
| 1 | Al 396.153Radial† | 4521.5 | 4610.4 | 4889.5 ug/L | 4889.5 ppb | 19:51:12 |
| 1 | Ca 317.933Radial† | 2460.4 | 2448.2 | 4974.1 ug/L | 4974.1 ppb | 19:51:32 |
| 1 | Fe 238.204 Radial† | 408.8 | 400.7 | 5025.3 ug/L | 5025.3 ppb | 19:51:32 |
| 1 | K 766.490 Radial† | 27102.4 | 24354.3 | 4855.7 ug/L | 4855.7 ppb | 19:51:12 |
| 1 | Mg 279.077 IEC† | 117.4 | 116.9 | 5106.8 ug/L | 5106.8 ppb | 19:51:32 |
| 1 | Na 589.592 Radial† | 24153.5 | 24663.5 | 9685.7 ug/L | 9685.7 ppb | 19:51:12 |
| 1 | Sr 421.552† | 55998.3 | 56042.3 | 477.19 ug/L | 477.19 ppb | 19:51:12 |
| 1 | Sc 361.383 | 844064.7 | 844064.7 | 100.50 % | | 19:52:30 |
| 1 | Y 371.029 | 711213.7 | 711213.7 | 99.321 % | | 19:52:30 |
| 1 | Ag 328.068† | 100290.4 | 99536.8 | 504.87 ug/L | 504.87 ppb | 19:52:35 |
| 1 | As 188.979† | 892.3 | 908.7 | 491.39 ug/L | 491.39 ppb | 19:52:55 |
| 1 | B 249.677† | 17545.1 | 17707.8 | 484.48 ug/L | 484.48 ppb | 19:52:35 |
| 1 | Ba 233.527† | 52866.8 | 52584.6 | 494.19 ug/L | 494.19 ppb | 19:52:35 |
| 1 | Be 313.107† | 1205628.0 | 1203878.3 | 489.89 ug/L | 489.89 ppb | 19:52:30 |
| 1 | Cd 226.502† | 35186.2 | 35177.2 | 496.03 ug/L | 496.03 ppb | 19:52:35 |
| 1 | Co 228.616† | 19529.6 | 19471.1 | 506.85 ug/L | 506.85 ppb | 19:52:35 |
| 1 | Cr 267.716† | 38146.4 | 37861.2 | 493.95 ug/L | 493.95 ppb | 19:52:35 |
| 1 | Cu 324.752† | 158780.5 | 151635.9 | 491.67 ug/L | 491.67 ppb | 19:52:35 |
| 1 | Mn 257.610† | 373761.1 | 371444.7 | 487.64 ug/L | 487.64 ppb | 19:52:35 |
| 1 | Mo 202.031† | 5687.0 | 5644.5 | 496.69 ug/L | 496.69 ppb | 19:52:55 |
| 1 | Ni 231.604† | 16225.8 | 16051.3 | 500.90 ug/L | 500.90 ppb | 19:52:35 |
| 1 | P 214.914† | 3620.0 | 3433.7 | 2372.2 ug/L | 2372.2 ppb | 19:52:55 |
| 1 | Pb 220.353† | 3220.2 | 3262.9 | 493.32 ug/L | 493.32 ppb | 19:52:55 |
| 1 | S 181.975 Axial† | 592.8 | 565.5 | 990.21 ug/L | 990.21 ppb | 19:52:55 |
| 1 | Sb 206.836† | 1219.7 | 1187.0 | 522.18 ug/L | 522.18 ppb | 19:52:55 |
| 1 | Se 196.026† | 617.5 | 631.3 | 521.36 ug/L | 521.36 ppb | 19:52:55 |
| 1 | Si 251.611† | 67948.6 | 67084.2 | 2491.6 ug/L | 2491.6 ppb | 19:52:35 |
| 1 | Sn 189.927† | 2244.6 | 2230.4 | 494.58 ug/L | 494.58 ppb | 19:52:55 |
| 1 | Ti 334.940† | 286376.9 | 286032.0 | 491.97 ug/L | 491.97 ppb | 19:52:35 |
| 1 | Tl 190.801† | 1244.0 | 1262.8 | 491.53 ug/L | 491.53 ppb | 19:52:55 |
| 1 | U 409.014† | 15473.6 | 17431.6 | 511.24 ug/L | 511.24 ppb | 19:52:35 |
| 1 | V 292.402† | 62775.8 | 63890.2 | 499.18 ug/L | 499.18 ppb | 19:52:35 |
| 1 | Zn 213.857† | 42545.4 | 41726.8 | 491.10 ug/L | 491.10 ppb | 19:52:35 |
| 1 | SiO2† | 67758.3 | 66867.0 | 5328.8 ug/L | 5328.8 ppb | 19:54:02 |
| 2 | Sc Radial | 3956.8 | 3956.8 | 98.1 % | | 19:51:58 |
| 2 | Y RADIAL | 4463.8 | 4463.8 | 98.80 % | | 19:51:37 |
| 2 | Al 396.153Radial† | 4519.3 | 4687.0 | 4971.8 ug/L | 4971.8 ppb | 19:51:37 |
| 2 | Ca 317.933Radial† | 2496.4 | 2527.8 | 5135.9 ug/L | 5135.9 ppb | 19:51:58 |
| 2 | Fe 238.204 Radial† | 410.2 | 409.2 | 5131.6 ug/L | 5131.6 ppb | 19:51:58 |
| 2 | K 766.490 Radial† | 27131.4 | 24856.5 | 4955.8 ug/L | 4955.8 ppb | 19:51:37 |
| 2 | Mg 279.077 IEC† | 119.2 | 120.8 | 5278.8 ug/L | 5278.8 ppb | 19:51:58 |
| 2 | Na 589.592 Radial† | 24431.8 | 25368.4 | 9962.6 ug/L | 9962.6 ppb | 19:51:37 |
| 2 | Sr 421.552† | 56267.3 | 57293.0 | 487.84 ug/L | 487.84 ppb | 19:51:37 |
| 2 | Sc 361.383 | 866025.0 | 866025.0 | 103.12 % | | 19:53:00 |
| 2 | Y 371.029 | 728876.2 | 728876.2 | 101.79 % | | 19:53:00 |
| 2 | Ag 328.068† | 99245.9 | 95993.5 | 486.99 ug/L | 486.99 ppb | 19:53:06 |
| 2 | As 188.979† | 884.0 | 878.1 | 474.90 ug/L | 474.90 ppb | 19:53:26 |
| 2 | B 249.677† | 17338.1 | 17064.3 | 466.83 ug/L | 466.83 ppb | 19:53:06 |
| 2 | Ba 233.527† | 52430.9 | 50828.0 | 477.69 ug/L | 477.69 ppb | 19:53:06 |
| 2 | Be 313.107† | 1228411.7 | 1195554.1 | 486.48 ug/L | 486.48 ppb | 19:53:00 |
| 2 | Cd 226.502† | 34989.7 | 34098.8 | 480.80 ug/L | 480.80 ppb | 19:53:06 |
| 2 | Co 228.616† | 19359.2 | 18813.1 | 489.73 ug/L | 489.73 ppb | 19:53:06 |
| 2 | Cr 267.716† | 37782.3 | 36545.6 | 476.82 ug/L | 476.82 ppb | 19:53:06 |
| 2 | Cu 324.752† | 157009.8 | 145912.5 | 473.13 ug/L | 473.13 ppb | 19:53:06 |
| 2 | Mn 257.610† | 370621.3 | 358969.4 | 471.28 ug/L | 471.28 ppb | 19:53:06 |
| 2 | Mo 202.031† | 5673.1 | 5487.5 | 482.90 ug/L | 482.90 ppb | 19:53:26 |
| 2 | Ni 231.604† | 16122.4 | 15541.6 | 484.99 ug/L | 484.99 ppb | 19:53:06 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3616.0 | 3338.6 | 2307.4 ug/L | 2307.4 ppb | 19:53:26 |
| 2 | Pb 220.353† | 3218.6 | 3180.2 | 480.83 ug/L | 480.83 ppb | 19:53:26 |
| 2 | S 181.975 Axial† | 603.1 | 560.5 | 981.54 ug/L | 981.54 ppb | 19:53:26 |
| 2 | Sb 206.836† | 1220.8 | 1157.3 | 509.09 ug/L | 509.09 ppb | 19:53:26 |
| 2 | Se 196.026† | 614.6 | 613.0 | 507.05 ug/L | 507.05 ppb | 19:53:26 |
| 2 | Si 251.611† | 67252.8 | 64695.1 | 2402.9 ug/L | 2402.9 ppb | 19:53:06 |
| 2 | Sn 189.927† | 2253.8 | 2182.6 | 484.02 ug/L | 484.02 ppb | 19:53:26 |
| 2 | Ti 334.940† | 283605.3 | 276118.6 | 474.93 ug/L | 474.93 ppb | 19:53:06 |
| 2 | Tl 190.801† | 1233.4 | 1221.2 | 475.32 ug/L | 475.32 ppb | 19:53:26 |
| 2 | U 409.014† | 15204.5 | 16780.2 | 492.10 ug/L | 492.10 ppb | 19:53:06 |
| 2 | V 292.402† | 62459.7 | 61999.9 | 484.39 ug/L | 484.39 ppb | 19:53:06 |
| 2 | Zn 213.857† | 42137.6 | 40257.9 | 473.76 ug/L | 473.76 ppb | 19:53:06 |
| 2 | SiO2† | 68153.7 | 65540.9 | 5223.3 ug/L | 5223.3 ppb | 19:54:07 |
| 3 | Sc Radial | 4045.1 | 4045.1 | 100 % | | 19:52:23 |
| 3 | Y RADIAL | 4422.5 | 4422.5 | 97.89 % | | 19:52:03 |
| 3 | Al 396.153Radial† | 4527.1 | 4594.2 | 4872.9 ug/L | 4872.9 ppb | 19:52:03 |
| 3 | Ca 317.933Radial† | 2485.0 | 2460.9 | 4999.9 ug/L | 4999.9 ppb | 19:52:23 |
| 3 | Fe 238.204 Radial† | 407.9 | 397.7 | 4988.0 ug/L | 4988.0 ppb | 19:52:23 |
| 3 | K 766.490 Radial† | 27012.0 | 24133.5 | 4811.7 ug/L | 4811.7 ppb | 19:52:03 |
| 3 | Mg 279.077 IEC† | 118.5 | 117.4 | 5130.0 ug/L | 5130.0 ppb | 19:52:23 |
| 3 | Na 589.592 Radial† | 23993.1 | 24387.1 | 9577.2 ug/L | 9577.2 ppb | 19:52:03 |
| 3 | Sr 421.552† | 55974.1 | 55748.2 | 474.69 ug/L | 474.69 ppb | 19:52:03 |
| 3 | Sc 361.383 | 874603.6 | 874603.6 | 104.14 % | | 19:53:31 |
| 3 | Y 371.029 | 735798.8 | 735798.8 | 102.75 % | | 19:53:31 |
| 3 | Ag 328.068† | 101148.6 | 96876.5 | 491.40 ug/L | 491.40 ppb | 19:53:36 |
| 3 | As 188.979† | 892.2 | 877.6 | 474.62 ug/L | 474.62 ppb | 19:53:56 |
| 3 | B 249.677† | 17792.8 | 17336.0 | 474.31 ug/L | 474.31 ppb | 19:53:36 |
| 3 | Ba 233.527† | 53280.9 | 51145.5 | 480.67 ug/L | 480.67 ppb | 19:53:36 |
| 3 | Be 313.107† | 1229737.7 | 1185142.6 | 482.26 ug/L | 482.26 ppb | 19:53:31 |
| 3 | Cd 226.502† | 35513.2 | 34268.7 | 483.21 ug/L | 483.21 ppb | 19:53:36 |
| 3 | Co 228.616† | 19699.2 | 18955.5 | 493.42 ug/L | 493.42 ppb | 19:53:36 |
| 3 | Cr 267.716† | 38398.1 | 36777.6 | 479.82 ug/L | 479.82 ppb | 19:53:36 |
| 3 | Cu 324.752† | 160639.6 | 147904.6 | 479.57 ug/L | 479.57 ppb | 19:53:36 |
| 3 | Mn 257.610† | 376546.1 | 361133.4 | 474.11 ug/L | 474.11 ppb | 19:53:36 |
| 3 | Mo 202.031† | 5715.3 | 5474.1 | 481.71 ug/L | 481.71 ppb | 19:53:56 |
| 3 | Ni 231.604† | 16331.3 | 15588.8 | 486.46 ug/L | 486.46 ppb | 19:53:36 |
| 3 | P 214.914† | 3612.1 | 3300.4 | 2278.7 ug/L | 2278.7 ppb | 19:53:56 |
| 3 | Pb 220.353† | 3229.1 | 3159.6 | 477.72 ug/L | 477.72 ppb | 19:53:56 |
| 3 | S 181.975 Axial† | 592.1 | 544.2 | 952.93 ug/L | 952.93 ppb | 19:53:56 |
| 3 | Sb 206.836† | 1223.4 | 1148.2 | 505.09 ug/L | 505.09 ppb | 19:53:56 |
| 3 | Se 196.026† | 616.8 | 609.3 | 503.64 ug/L | 503.64 ppb | 19:53:56 |
| 3 | Si 251.611† | 68388.2 | 65145.6 | 2419.7 ug/L | 2419.7 ppb | 19:53:36 |
| 3 | Sn 189.927† | 2244.1 | 2151.9 | 477.20 ug/L | 477.20 ppb | 19:53:56 |
| 3 | Ti 334.940† | 289186.9 | 278780.8 | 479.50 ug/L | 479.50 ppb | 19:53:36 |
| 3 | Tl 190.801† | 1251.8 | 1227.2 | 477.65 ug/L | 477.65 ppb | 19:53:56 |
| 3 | U 409.014† | 15725.7 | 17136.1 | 502.58 ug/L | 502.58 ppb | 19:53:36 |
| 3 | V 292.402† | 63442.7 | 62349.6 | 487.10 ug/L | 487.10 ppb | 19:53:36 |
| 3 | Zn 213.857† | 42861.0 | 40551.7 | 477.25 ug/L | 477.25 ppb | 19:53:36 |
| 3 | SiO2† | 66739.5 | 63534.6 | 5063.0 ug/L | 5063.0 ppb | 19:54:12 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383 | 861564.5 | 102.58 % | | 1.875 | | | 1.83% |
| Sc Radial | 4009.2 | 99.4 % | | 1.15 | | | 1.16% |
| Y 371.029 | 725296.2 | 101.29 % | | 1.770 | | | 1.75% |
| Y RADIAL | 4450.7 | 98.51 % | | 0.540 | | | 0.55% |
| Ag 328.068† | 97469.0 | 494.42 ug/L | | 9.312 | 494.42 ppb | 9.312 | 1.88% |
| QC value within limits for Ag 328.068 Recovery = 98.88% | | | | | | | |
| Al 396.153Radial† | 4630.5 | 4911.4 ug/L | | 52.96 | 4911.4 ppb | 52.96 | 1.08% |
| QC value within limits for Al 396.153Radial Recovery = 98.23% | | | | | | | |
| As 188.979† | 888.1 | 480.30 ug/L | | 9.603 | 480.30 ppb | 9.603 | 2.00% |
| QC value within limits for As 188.979 Recovery = 96.06% | | | | | | | |
| B 249.677† | 17369.4 | 475.20 ug/L | | 8.863 | 475.20 ppb | 8.863 | 1.86% |
| QC value within limits for B 249.677 Recovery = 95.04% | | | | | | | |
| Ba 233.527† | 51519.4 | 484.19 ug/L | | 8.792 | 484.19 ppb | 8.792 | 1.82% |
| QC value within limits for Ba 233.527 Recovery = 96.84% | | | | | | | |
| Be 313.107† | 1194858.4 | 486.21 ug/L | | 3.824 | 486.21 ppb | 3.824 | 0.79% |
| QC value within limits for Be 313.107 Recovery = 97.24% | | | | | | | |
| Ca 317.933Radial† | 2479.0 | 5036.6 ug/L | | 86.96 | 5036.6 ppb | 86.96 | 1.73% |

| | | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 100.73% | | | | | | | |
| Cd 226.502† | 34514.9 | 486.68 ug/L | 8.188 | 486.68 ppb | 8.188 | 1.68% | |
| QC value within limits for Cd 226.502 Recovery = 97.34% | | | | | | | |
| Co 228.616† | 19079.9 | 496.67 ug/L | 9.011 | 496.67 ppb | 9.011 | 1.81% | |
| QC value within limits for Co 228.616 Recovery = 99.33% | | | | | | | |
| Cr 267.716† | 37061.5 | 483.53 ug/L | 9.147 | 483.53 ppb | 9.147 | 1.89% | |
| QC value within limits for Cr 267.716 Recovery = 96.71% | | | | | | | |
| Cu 324.752† | 148484.3 | 481.45 ug/L | 9.413 | 481.45 ppb | 9.413 | 1.96% | |
| QC value within limits for Cu 324.752 Recovery = 96.29% | | | | | | | |
| Fe 238.204 Radial† | 402.5 | 5048.3 ug/L | 74.49 | 5048.3 ppb | 74.49 | 1.48% | |
| QC value within limits for Fe 238.204 Radial Recovery = 100.97% | | | | | | | |
| K 766.490 Radial† | 24448.1 | 4874.4 ug/L | 73.87 | 4874.4 ppb | 73.87 | 1.52% | |
| QC value within limits for K 766.490 Radial Recovery = 97.49% | | | | | | | |
| Mg 279.077 IEC† | 118.4 | 5171.9 ug/L | 93.32 | 5171.9 ppb | 93.32 | 1.80% | |
| QC value within limits for Mg 279.077 IEC Recovery = 103.44% | | | | | | | |
| Mn 257.610† | 363849.2 | 477.67 ug/L | 8.746 | 477.67 ppb | 8.746 | 1.83% | |
| QC value within limits for Mn 257.610 Recovery = 95.53% | | | | | | | |
| Mo 202.031† | 5535.3 | 487.10 ug/L | 8.330 | 487.10 ppb | 8.330 | 1.71% | |
| QC value within limits for Mo 202.031 Recovery = 97.42% | | | | | | | |
| Na 589.592 Radial† | 24806.4 | 9741.8 ug/L | 198.71 | 9741.8 ppb | 198.71 | 2.04% | |
| QC value within limits for Na 589.592 Radial Recovery = 97.42% | | | | | | | |
| Ni 231.604† | 15727.3 | 490.78 ug/L | 8.788 | 490.78 ppb | 8.788 | 1.79% | |
| QC value within limits for Ni 231.604 Recovery = 98.16% | | | | | | | |
| P 214.914† | 3357.6 | 2319.4 ug/L | 47.93 | 2319.4 ppb | 47.93 | 2.07% | |
| QC value within limits for P 214.914 Recovery = 92.78% | | | | | | | |
| Pb 220.353† | 3200.9 | 483.96 ug/L | 8.261 | 483.96 ppb | 8.261 | 1.71% | |
| QC value within limits for Pb 220.353 Recovery = 96.79% | | | | | | | |
| S 181.975 Axial† | 556.7 | 974.89 ug/L | 19.508 | 974.89 ppb | 19.508 | 2.00% | |
| QC value within limits for S 181.975 Axial Recovery = 97.49% | | | | | | | |
| Sb 206.836† | 1164.2 | 512.12 ug/L | 8.936 | 512.12 ppb | 8.936 | 1.74% | |
| QC value within limits for Sb 206.836 Recovery = 102.42% | | | | | | | |
| Se 196.026† | 617.9 | 510.68 ug/L | 9.404 | 510.68 ppb | 9.404 | 1.84% | |
| QC value within limits for Se 196.026 Recovery = 102.14% | | | | | | | |
| Si 251.611† | 65641.7 | 2438.1 ug/L | 47.17 | 2438.1 ppb | 47.17 | 1.93% | |
| QC value within limits for Si 251.611 Recovery = 97.52% | | | | | | | |
| Sn 189.927† | 2188.3 | 485.27 ug/L | 8.753 | 485.27 ppb | 8.753 | 1.80% | |
| QC value within limits for Sn 189.927 Recovery = 97.05% | | | | | | | |
| Sr 421.552† | 56361.2 | 479.91 ug/L | 6.984 | 479.91 ppb | 6.984 | 1.46% | |
| QC value within limits for Sr 421.552 Recovery = 95.98% | | | | | | | |
| Ti 334.940† | 280310.5 | 482.13 ug/L | 8.817 | 482.13 ppb | 8.817 | 1.83% | |
| QC value within limits for Ti 334.940 Recovery = 96.43% | | | | | | | |
| Tl 190.801† | 1237.1 | 481.50 ug/L | 8.761 | 481.50 ppb | 8.761 | 1.82% | |
| QC value within limits for Tl 190.801 Recovery = 96.30% | | | | | | | |
| U 409.014† | 17116.0 | 501.97 ug/L | 9.585 | 501.97 ppb | 9.585 | 1.91% | |
| QC value within limits for U 409.014 Recovery = 100.39% | | | | | | | |
| V 292.402† | 62746.6 | 490.23 ug/L | 7.875 | 490.23 ppb | 7.875 | 1.61% | |
| QC value within limits for V 292.402 Recovery = 98.05% | | | | | | | |
| Zn 213.857† | 40845.5 | 480.70 ug/L | 9.170 | 480.70 ppb | 9.170 | 1.91% | |
| QC value within limits for Zn 213.857 Recovery = 96.14% | | | | | | | |
| SiO2† | 65314.2 | 5205.0 ug/L | 133.85 | 5205.0 ppb | 133.85 | 2.57% | |
| QC value within limits for SiO2 Recovery = 97.34% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 19:56:23

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 | 4091.8 | 4091.8 | 101 % | | 19:58:34 |
| 1 | Y RADIAL | 4577.8 | 4577.8 | 101.3 % | | 19:58:14 |
| 1 | Al 396.153Radial† | -71.0 | 9.7 | 10.302 ug/L | 10.302 ppb | 19:58:34 |
| 1 | Ca 317.933Radial† | 20.3 | 2.8 | 5.7128 ug/L | 5.7128 ppb | 19:58:34 |
| 1 | Fe 238.204 Radial† | 11.0 | 1.9 | 23.297 ug/L | 23.297 ppb | 19:58:34 |
| 1 | K 766.490 Radial† | 2668.8 | -172.2 | -34.393 ug/L | -34.393 ppb | 19:58:14 |
| 1 | Mg 279.077 IEC† | 1.7 | 1.0 | 43.792 ug/L | 43.792 ppb | 19:58:34 |
| 1 | Na 589.592 Radial† | -403.4 | 63.2 | 24.811 ug/L | 24.811 ppb | 19:58:14 |
| 1 | Sr 421.552† | 21.1 | -49.2 | -0.4193 ug/L | -0.4193 ppb | 19:58:14 |
| 1 | Sc 361.383 | 834549.8 | 834549.8 | 99.368 % | | 19:59:31 |
| 1 | Y 371.029 | 713360.1 | 713360.1 | 99.621 % | | 19:59:31 |
| 1 | Ag 328.068† | 250.8 | -1.0 | 0.0007 ug/L | 0.0007 ppb | 19:59:31 |
| 1 | As 188.979† | -21.1 | -0.4 | -0.2174 ug/L | -0.2174 ppb | 19:59:51 |
| 1 | B 249.677† | -193.9 | 55.1 | 1.5096 ug/L | 1.5096 ppb | 19:59:51 |
| 1 | Ba 233.527† | 21.1 | 2.7 | 0.0290 ug/L | 0.0290 ppb | 19:59:51 |
| 1 | Be 313.107† | -4214.5 | 21.4 | 0.0114 ug/L | 0.0114 ppb | 19:59:31 |
| 1 | Cd 226.502† | -166.1 | -0.7 | -0.0110 ug/L | -0.0110 ppb | 19:59:51 |
| 1 | Co 228.616† | -41.9 | -3.2 | -0.0872 ug/L | -0.0872 ppb | 19:59:51 |
| 1 | Cr 267.716† | 96.9 | 2.5 | 0.0338 ug/L | 0.0338 ppb | 19:59:51 |
| 1 | Cu 324.752† | 6622.3 | 311.7 | 1.0075 ug/L | 1.0075 ppb | 19:59:31 |
| 1 | Mn 257.610† | 1022.0 | 576.1 | 0.7563 ug/L | 0.7563 ppb | 19:59:51 |
| 1 | Mo 202.031† | 14.8 | 0.7 | 0.0651 ug/L | 0.0651 ppb | 19:59:51 |
| 1 | Ni 231.604† | 90.9 | -2.1 | -0.0666 ug/L | -0.0666 ppb | 19:59:51 |
| 1 | P 214.914† | 186.8 | 19.8 | 14.012 ug/L | 14.012 ppb | 19:59:51 |
| 1 | Pb 220.353† | -38.3 | 20.3 | 3.0545 ug/L | 3.0545 ppb | 19:59:51 |
| 1 | S 181.975 Axial† | 27.5 | 3.3 | 5.7903 ug/L | 5.7903 ppb | 19:59:51 |
| 1 | Sb 206.836† | 30.5 | 4.1 | 1.7362 ug/L | 1.7362 ppb | 19:59:51 |
| 1 | Se 196.026† | -22.1 | -5.3 | -4.1589 ug/L | -4.1589 ppb | 19:59:51 |
| 1 | Si 251.611† | 723.7 | 202.8 | 7.5517 ug/L | 7.5517 ppb | 19:59:51 |
| 1 | Sn 189.927† | 2.2 | -0.9 | -0.2040 ug/L | -0.2040 ppb | 19:59:51 |
| 1 | Ti 334.940† | -397.0 | 683.8 | 1.1702 ug/L | 1.1702 ppb | 19:59:31 |
| 1 | Tl 190.801† | -31.8 | -6.9 | -2.6547 ug/L | -2.6547 ppb | 19:59:51 |
| 1 | U 409.014† | -1758.9 | 265.1 | 7.7985 ug/L | 7.7985 ppb | 19:59:31 |
| 1 | V 292.402† | -1267.0 | 152.5 | 1.1876 ug/L | 1.1876 ppb | 19:59:31 |
| 1 | Zn 213.857† | 707.2 | 105.2 | 1.2457 ug/L | 1.2457 ppb | 19:59:51 |
| 1 | SiO2† | 680.4 | 131.4 | 10.496 ug/L | 10.496 ppb | 20:00:47 |
| 2 | Sc Radial | 4062.2 | 4062.2 | 101 % | | 19:59:00 |
| 2 | Y RADIAL | 4477.9 | 4477.9 | 99.11 % | | 19:58:39 |
| 2 | Al 396.153Radial† | -71.8 | 8.3 | 8.8691 ug/L | 8.8691 ppb | 19:59:00 |
| 2 | Ca 317.933Radial† | 21.6 | 4.2 | 8.6013 ug/L | 8.6013 ppb | 19:59:00 |
| 2 | Fe 238.204 Radial† | 13.6 | 4.5 | 56.286 ug/L | 56.286 ppb | 19:59:00 |
| 2 | K 766.490 Radial† | 2711.9 | -110.3 | -22.033 ug/L | -22.033 ppb | 19:58:39 |
| 2 | Mg 279.077 IEC† | -0.1 | -0.9 | -37.269 ug/L | -37.269 ppb | 19:59:00 |
| 2 | Na 589.592 Radial† | -400.3 | 63.4 | 24.880 ug/L | 24.880 ppb | 19:58:39 |
| 2 | Sr 421.552† | 30.0 | -40.2 | -0.3425 ug/L | -0.3425 ppb | 19:58:39 |
| 2 | Sc 361.383 | 828972.9 | 828972.9 | 98.704 % | | 19:59:57 |
| 2 | Y 371.029 | 706404.9 | 706404.9 | 98.650 % | | 19:59:57 |
| 2 | Ag 328.068† | 140.0 | -111.5 | -0.5463 ug/L | -0.5463 ppb | 19:59:57 |
| 2 | As 188.979† | -20.5 | 0.1 | 0.0414 ug/L | 0.0414 ppb | 20:00:17 |
| 2 | B 249.677† | -189.1 | 58.6 | 1.6004 ug/L | 1.6004 ppb | 20:00:17 |
| 2 | Ba 233.527† | 45.7 | 27.7 | 0.2614 ug/L | 0.2614 ppb | 20:00:17 |
| 2 | Be 313.107† | -4458.5 | -254.3 | -0.1031 ug/L | -0.1031 ppb | 19:59:57 |
| 2 | Cd 226.502† | -169.2 | -5.0 | -0.0764 ug/L | -0.0764 ppb | 20:00:17 |
| 2 | Co 228.616† | -30.4 | 8.1 | 0.2093 ug/L | 0.2093 ppb | 20:00:17 |
| 2 | Cr 267.716† | 103.5 | 9.9 | 0.1344 ug/L | 0.1344 ppb | 20:00:17 |
| 2 | Cu 324.752† | 6533.4 | 266.4 | 0.8664 ug/L | 0.8664 ppb | 19:59:57 |
| 2 | Mn 257.610† | 1136.5 | 699.0 | 0.9242 ug/L | 0.9242 ppb | 20:00:17 |
| 2 | Mo 202.031† | 12.0 | -2.0 | -0.1749 ug/L | -0.1749 ppb | 20:00:17 |
| 2 | Ni 231.604† | 82.5 | -10.0 | -0.3131 ug/L | -0.3131 ppb | 20:00:17 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 192.0 | 26.3 | 18.675 ug/L | 18.675 ppb | 20:00:17 |
| 2 | Pb 220.353† | -48.5 | 9.7 | 1.4572 ug/L | 1.4572 ppb | 20:00:17 |
| 2 | S 181.975 Axial† | 33.7 | 9.8 | 17.117 ug/L | 17.117 ppb | 20:00:17 |
| 2 | Sb 206.836† | 31.4 | 5.2 | 2.1781 ug/L | 2.1781 ppb | 20:00:17 |
| 2 | Se 196.026† | -14.3 | 2.5 | 2.1601 ug/L | 2.1601 ppb | 20:00:17 |
| 2 | Si 251.611† | 650.4 | 133.5 | 4.9716 ug/L | 4.9716 ppb | 20:00:17 |
| 2 | Sn 189.927† | 1.5 | -1.6 | -0.3512 ug/L | -0.3512 ppb | 20:00:17 |
| 2 | Ti 334.940† | -1023.9 | 46.0 | 0.0830 ug/L | 0.0830 ppb | 19:59:57 |
| 2 | Tl 190.801† | -21.7 | 3.1 | 1.2143 ug/L | 1.2143 ppb | 20:00:17 |
| 2 | U 409.014† | -1982.6 | 26.6 | 0.7746 ug/L | 0.7746 ppb | 19:59:57 |
| 2 | V 292.402† | -1430.1 | -21.3 | -0.1743 ug/L | -0.1743 ppb | 19:59:57 |
| 2 | Zn 213.857† | 725.9 | 129.0 | 1.5249 ug/L | 1.5249 ppb | 20:00:17 |
| 2 | SiO2† | 623.4 | 78.2 | 6.2515 ug/L | 6.2515 ppb | 20:00:52 |
| 3 | Sc Radial | 4097.8 | 4097.8 | 102 % | | 19:59:25 |
| 3 | Y RADIAL | 4527.6 | 4527.6 | 100.2 % | | 19:59:05 |
| 3 | Al 396.153Radial† | -65.9 | 14.8 | 15.802 ug/L | 15.802 ppb | 19:59:25 |
| 3 | Ca 317.933Radial† | 23.8 | 6.2 | 12.696 ug/L | 12.696 ppb | 19:59:25 |
| 3 | Fe 238.204 Radial† | 14.1 | 4.9 | 60.903 ug/L | 60.903 ppb | 19:59:25 |
| 3 | K 766.490 Radial† | 2574.6 | -268.8 | -53.670 ug/L | -53.670 ppb | 19:59:05 |
| 3 | Mg 279.077 IEC† | 2.5 | 1.7 | 75.487 ug/L | 75.487 ppb | 19:59:25 |
| 3 | Na 589.592 Radial† | -477.4 | -9.1 | -3.5631 ug/L | -3.5631 ppb | 19:59:05 |
| 3 | Sr 421.552† | 42.6 | -28.1 | -0.2394 ug/L | -0.2394 ppb | 19:59:05 |
| 3 | Sc 361.383 | 837975.3 | 837975.3 | 99.776 % | | 20:00:22 |
| 3 | Y 371.029 | 714194.2 | 714194.2 | 99.737 % | | 20:00:22 |
| 3 | Ag 328.068† | 203.3 | -49.6 | -0.2327 ug/L | -0.2327 ppb | 20:00:22 |
| 3 | As 188.979† | -25.0 | -4.3 | -2.2716 ug/L | -2.2716 ppb | 20:00:42 |
| 3 | B 249.677† | -198.8 | 50.9 | 1.3908 ug/L | 1.3908 ppb | 20:00:42 |
| 3 | Ba 233.527† | 43.0 | 24.5 | 0.2341 ug/L | 0.2341 ppb | 20:00:42 |
| 3 | Be 313.107† | -4359.0 | -106.1 | -0.0423 ug/L | -0.0423 ppb | 20:00:22 |
| 3 | Cd 226.502† | -171.0 | -5.0 | -0.0759 ug/L | -0.0759 ppb | 20:00:42 |
| 3 | Co 228.616† | -44.9 | -6.0 | -0.1592 ug/L | -0.1592 ppb | 20:00:42 |
| 3 | Cr 267.716† | 113.4 | 18.7 | 0.2481 ug/L | 0.2481 ppb | 20:00:42 |
| 3 | Cu 324.752† | 6726.4 | 388.7 | 1.2601 ug/L | 1.2601 ppb | 20:00:22 |
| 3 | Mn 257.610† | 1113.1 | 663.2 | 0.8731 ug/L | 0.8731 ppb | 20:00:42 |
| 3 | Mo 202.031† | 11.8 | -2.3 | -0.1987 ug/L | -0.1987 ppb | 20:00:42 |
| 3 | Ni 231.604† | 95.4 | 2.0 | 0.0641 ug/L | 0.0641 ppb | 20:00:42 |
| 3 | P 214.914† | 189.6 | 21.8 | 15.395 ug/L | 15.395 ppb | 20:00:42 |
| 3 | Pb 220.353† | -59.6 | -0.9 | -0.1458 ug/L | -0.1458 ppb | 20:00:42 |
| 3 | S 181.975 Axial† | 29.1 | 4.8 | 8.3970 ug/L | 8.3970 ppb | 20:00:42 |
| 3 | Sb 206.836† | 35.8 | 9.3 | 3.9435 ug/L | 3.9435 ppb | 20:00:42 |
| 3 | Se 196.026† | -14.6 | 2.4 | 2.0652 ug/L | 2.0652 ppb | 20:00:42 |
| 3 | Si 251.611† | 645.6 | 121.6 | 4.5294 ug/L | 4.5294 ppb | 20:00:42 |
| 3 | Sn 189.927† | 3.5 | 0.4 | 0.0844 ug/L | 0.0844 ppb | 20:00:42 |
| 3 | Ti 334.940† | -889.5 | 191.8 | 0.3227 ug/L | 0.3227 ppb | 20:00:22 |
| 3 | Tl 190.801† | -22.0 | 3.0 | 1.1720 ug/L | 1.1720 ppb | 20:00:42 |
| 3 | U 409.014† | -1817.0 | 214.1 | 6.2915 ug/L | 6.2915 ppb | 20:00:22 |
| 3 | V 292.402† | -1301.5 | 123.1 | 0.9506 ug/L | 0.9506 ppb | 20:00:22 |
| 3 | Zn 213.857† | 724.0 | 119.1 | 1.4042 ug/L | 1.4042 ppb | 20:00:42 |
| 3 | SiO2† | 682.7 | 130.9 | 10.461 ug/L | 10.461 ppb | 20:00:57 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 833832.7 | 99.283 % | | 0.5410 | | | 0.54% |
| Sc Radial | 4083.9 | 101 % | | 0.5 | | | 0.47% |
| Y 371.029 | 711319.7 | 99.336 % | | 0.5973 | | | 0.60% |
| Y RADIAL | 4527.7 | 100.2 % | | 1.11 | | | 1.10% |
| Ag 328.068† | -54.0 | -0.2595 ug/L | | 0.27445 | -0.2595 ppb | 0.27445 | 105.78% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 10.9 | 11.658 ug/L | | 3.6602 | 11.658 ppb | 3.6602 | 31.40% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -1.6 | -0.8159 ug/L | | 1.26735 | -0.8159 ppb | 1.26735 | 155.34% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | 54.9 | 1.5003 ug/L | | 0.10513 | 1.5003 ppb | 0.10513 | 7.01% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 18.3 | 0.1748 ug/L | | 0.12702 | 0.1748 ppb | 0.12702 | 72.66% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -113.0 | -0.0447 ug/L | | 0.05725 | -0.0447 ppb | 0.05725 | 128.16% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 4.4 | 9.0035 ug/L | | 3.50915 | 9.0035 ppb | 3.50915 | 38.98% |

| | | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|--|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | | |
| Cd 226.502† | -3.6 | -0.0545 ug/L | 0.03761 | -0.0545 ppb | 0.03761 | 69.07% | |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | | |
| Co 228.616† | -0.4 | -0.0124 ug/L | 0.19531 | -0.0124 ppb | 0.19531 | >999.9% | |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | 10.4 | 0.1388 ug/L | 0.10725 | 0.1388 ppb | 0.10725 | 77.29% | |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | 322.3 | 1.0447 ug/L | 0.19948 | 1.0447 ppb | 0.19948 | 19.09% | |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204 Radial† | 3.7 | 46.829 ug/L | 20.5097 | 46.829 ppb | 20.5097 | 43.80% | |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | | |
| K 766.490 Radial† | -183.8 | -36.699 ug/L | 15.9437 | -36.699 ppb | 15.9437 | 43.44% | |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | | |
| Mg 279.077 IEC† | 0.6 | 27.337 ug/L | 58.1515 | 27.337 ppb | 58.1515 | 212.72% | |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 646.1 | 0.8512 ug/L | 0.08607 | 0.8512 ppb | 0.08607 | 10.11% | |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | -1.2 | -0.1028 ug/L | 0.14590 | -0.1028 ppb | 0.14590 | 141.88% | |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 589.592 Radial† | 39.2 | 15.376 ug/L | 16.4019 | 15.376 ppb | 16.4019 | 106.67% | |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | | |
| Ni 231.604† | -3.4 | -0.1052 ug/L | 0.19153 | -0.1052 ppb | 0.19153 | 182.04% | |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | | |
| P 214.914† | 22.6 | 16.027 ug/L | 2.3951 | 16.027 ppb | 2.3951 | 14.94% | |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | 9.7 | 1.4553 ug/L | 1.60012 | 1.4553 ppb | 1.60012 | 109.95% | |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| S 181.975 Axial† | 6.0 | 10.435 ug/L | 5.9322 | 10.435 ppb | 5.9322 | 56.85% | |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | | |
| Sb 206.836† | 6.2 | 2.6193 ug/L | 1.16788 | 2.6193 ppb | 1.16788 | 44.59% | |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se 196.026† | -0.2 | 0.0222 ug/L | 3.62118 | 0.0222 ppb | 3.62118 | >999.9% | |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Si 251.611† | 152.6 | 5.6842 ug/L | 1.63230 | 5.6842 ppb | 1.63230 | 28.72% | |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |
| Sn 189.927† | -0.7 | -0.1569 ug/L | 0.22159 | -0.1569 ppb | 0.22159 | 141.21% | |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | | |
| Sr 421.552† | -39.2 | -0.3338 ug/L | 0.09027 | -0.3338 ppb | 0.09027 | 27.05% | |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | | |
| Ti 334.940† | 307.2 | 0.5253 ug/L | 0.57122 | 0.5253 ppb | 0.57122 | 108.74% | |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | | |
| Tl 190.801† | -0.3 | -0.0894 ug/L | 2.22166 | -0.0894 ppb | 2.22166 | >999.9% | |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| U 409.014† | 168.6 | 4.9549 ug/L | 3.69780 | 4.9549 ppb | 3.69780 | 74.63% | |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | | |
| V 292.402† | 84.8 | 0.6546 ug/L | 0.72758 | 0.6546 ppb | 0.72758 | 111.15% | |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn 213.857† | 117.8 | 1.3916 ug/L | 0.14005 | 1.3916 ppb | 0.14005 | 10.06% | |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| SiO2† | 113.5 | 9.0696 ug/L | 2.44054 | 9.0696 ppb | 2.44054 | 26.91% | |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 37

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 20:45:36

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 | 4010.1 | 4010.1 | 99.4 % | | 20:47:48 |
| 1 | Y RADIAL | 4487.8 | 4487.8 | 99.33 % | | 20:47:28 |
| 1 | Al 396.153Radial† | 4512.8 | 4619.2 | 4898.6 ug/L | 4898.6 ppb | 20:47:28 |
| 1 | Ca 317.933Radial† | 2447.7 | 2445.0 | 4967.7 ug/L | 4967.7 ppb | 20:47:48 |
| 1 | Fe 238.204 Radial† | 416.3 | 409.8 | 5139.8 ug/L | 5139.8 ppb | 20:47:48 |
| 1 | K 766.490 Radial† | 27183.1 | 24541.1 | 4892.7 ug/L | 4892.7 ppb | 20:47:28 |
| 1 | Mg 279.077 IEC† | 114.7 | 114.6 | 5008.1 ug/L | 5008.1 ppb | 20:47:48 |
| 1 | Na 589.592 Radial† | 25889.2 | 26503.6 | 10408 ug/L | 10408 ppb | 20:47:28 |
| 1 | Sr 421.552† | 57966.3 | 58240.1 | 495.91 ug/L | 495.91 ppb | 20:47:28 |
| 1 | Sc 361.383 | 832477.2 | 832477.2 | 99.121 % | | 20:48:45 |
| 1 | Y 371.029 | 700928.7 | 700928.7 | 97.885 % | | 20:48:45 |
| 1 | Ag 328.068† | 99965.3 | 100597.9 | 510.27 ug/L | 510.27 ppb | 20:48:50 |
| 1 | As 188.979† | 881.0 | 909.7 | 491.97 ug/L | 491.97 ppb | 20:49:10 |
| 1 | B 249.677† | 17314.9 | 17718.5 | 484.75 ug/L | 484.75 ppb | 20:48:50 |
| 1 | Ba 233.527† | 52494.2 | 52940.9 | 497.55 ug/L | 497.55 ppb | 20:48:50 |
| 1 | Be 313.107† | 1195358.7 | 1210215.9 | 492.48 ug/L | 492.48 ppb | 20:48:45 |
| 1 | Cd 226.502† | 34924.6 | 35400.6 | 499.17 ug/L | 499.17 ppb | 20:48:50 |
| 1 | Co 228.616† | 19337.1 | 19547.4 | 508.84 ug/L | 508.84 ppb | 20:48:50 |
| 1 | Cr 267.716† | 37851.9 | 38092.5 | 496.97 ug/L | 496.97 ppb | 20:48:50 |
| 1 | Cu 324.752† | 158325.1 | 153375.6 | 497.31 ug/L | 497.31 ppb | 20:48:50 |
| 1 | Mn 257.610† | 371424.8 | 374264.3 | 491.36 ug/L | 491.36 ppb | 20:48:50 |
| 1 | Mo 202.031† | 5673.8 | 5709.9 | 502.46 ug/L | 502.46 ppb | 20:49:10 |
| 1 | Ni 231.604† | 16101.4 | 16150.5 | 503.99 ug/L | 503.99 ppb | 20:48:50 |
| 1 | P 214.914† | 3591.2 | 3454.8 | 2386.2 ug/L | 2386.2 ppb | 20:49:10 |
| 1 | Pb 220.353† | 3179.1 | 3266.1 | 493.80 ug/L | 493.80 ppb | 20:49:10 |
| 1 | S 181.975 Axial† | 599.5 | 580.4 | 1016.4 ug/L | 1016.4 ppb | 20:49:10 |
| 1 | Sb 206.836† | 1219.0 | 1203.1 | 529.23 ug/L | 529.23 ppb | 20:49:10 |
| 1 | Se 196.026† | 603.0 | 625.3 | 516.90 ug/L | 516.90 ppb | 20:49:10 |
| 1 | Si 251.611† | 67462.2 | 67534.7 | 2508.3 ug/L | 2508.3 ppb | 20:48:50 |
| 1 | Sn 189.927† | 2242.2 | 2259.0 | 500.90 ug/L | 500.90 ppb | 20:49:10 |
| 1 | Ti 334.940† | 285270.9 | 288882.6 | 496.87 ug/L | 496.87 ppb | 20:48:50 |
| 1 | Tl 190.801† | 1227.2 | 1263.2 | 491.70 ug/L | 491.70 ppb | 20:49:10 |
| 1 | U 409.014† | 15597.1 | 17770.5 | 521.19 ug/L | 521.19 ppb | 20:48:50 |
| 1 | V 292.402† | 62535.4 | 64517.2 | 504.09 ug/L | 504.09 ppb | 20:48:50 |
| 1 | Zn 213.857† | 42211.6 | 41979.3 | 494.06 ug/L | 494.06 ppb | 20:48:50 |
| 1 | SiO2† | 67748.2 | 67795.3 | 5402.8 ug/L | 5402.8 ppb | 20:50:17 |
| 2 | Sc Radial | 4065.5 | 4065.5 | 101 % | | 20:48:13 |
| 2 | Y RADIAL | 4426.7 | 4426.7 | 97.98 % | | 20:47:53 |
| 2 | Al 396.153Radial† | 4476.6 | 4521.4 | 4794.9 ug/L | 4794.9 ppb | 20:47:53 |
| 2 | Ca 317.933Radial† | 2496.4 | 2459.7 | 4997.6 ug/L | 4997.6 ppb | 20:48:13 |
| 2 | Fe 238.204 Radial† | 421.1 | 408.8 | 5127.6 ug/L | 5127.6 ppb | 20:48:13 |
| 2 | K 766.490 Radial† | 26736.2 | 23724.5 | 4729.8 ug/L | 4729.8 ppb | 20:47:53 |
| 2 | Mg 279.077 IEC† | 119.3 | 117.6 | 5138.1 ug/L | 5138.1 ppb | 20:48:13 |
| 2 | Na 589.592 Radial† | 25166.4 | 25431.1 | 9987.2 ug/L | 9987.2 ppb | 20:47:53 |
| 2 | Sr 421.552† | 56760.1 | 56247.5 | 478.94 ug/L | 478.94 ppb | 20:47:53 |
| 2 | Sc 361.383 | 844704.9 | 844704.9 | 100.58 % | | 20:49:16 |
| 2 | Y 371.029 | 711741.2 | 711741.2 | 99.395 % | | 20:49:16 |
| 2 | Ag 328.068† | 101128.4 | 100294.4 | 508.73 ug/L | 508.73 ppb | 20:49:21 |
| 2 | As 188.979† | 885.3 | 901.0 | 487.35 ug/L | 487.35 ppb | 20:49:41 |
| 2 | B 249.677† | 17519.3 | 17668.9 | 483.39 ug/L | 483.39 ppb | 20:49:21 |
| 2 | Ba 233.527† | 53009.8 | 52687.0 | 495.16 ug/L | 495.16 ppb | 20:49:21 |
| 2 | Be 313.107† | 1210831.6 | 1208142.8 | 491.63 ug/L | 491.63 ppb | 20:49:16 |
| 2 | Cd 226.502† | 35263.3 | 35227.3 | 496.73 ug/L | 496.73 ppb | 20:49:21 |
| 2 | Co 228.616† | 19557.4 | 19484.0 | 507.16 ug/L | 507.16 ppb | 20:49:21 |
| 2 | Cr 267.716† | 38253.5 | 37939.0 | 494.97 ug/L | 494.97 ppb | 20:49:21 |
| 2 | Cu 324.752† | 160421.1 | 153147.4 | 496.57 ug/L | 496.57 ppb | 20:49:21 |
| 2 | Mn 257.610† | 375433.6 | 372825.8 | 489.46 ug/L | 489.46 ppb | 20:49:21 |
| 2 | Mo 202.031† | 5629.7 | 5583.2 | 491.31 ug/L | 491.31 ppb | 20:49:41 |
| 2 | Ni 231.604† | 16279.1 | 16092.0 | 502.17 ug/L | 502.17 ppb | 20:49:21 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3566.6 | 3377.9 | 2331.0 ug/L | 2331.0 ppb | 20:49:41 |
| 2 | Pb 220.353† | 3172.2 | 3212.8 | 485.72 ug/L | 485.72 ppb | 20:49:41 |
| 2 | S 181.975 Axial† | 585.8 | 558.1 | 977.30 ug/L | 977.30 ppb | 20:49:41 |
| 2 | Sb 206.836† | 1204.0 | 1170.4 | 514.95 ug/L | 514.95 ppb | 20:49:41 |
| 2 | Se 196.026† | 608.1 | 621.6 | 513.84 ug/L | 513.84 ppb | 20:49:41 |
| 2 | Si 251.611† | 68067.3 | 67151.1 | 2494.2 ug/L | 2494.2 ppb | 20:49:21 |
| 2 | Sn 189.927† | 2227.8 | 2212.0 | 490.50 ug/L | 490.50 ppb | 20:49:41 |
| 2 | Ti 334.940† | 288842.7 | 288267.8 | 495.81 ug/L | 495.81 ppb | 20:49:21 |
| 2 | Tl 190.801† | 1234.8 | 1252.8 | 487.67 ug/L | 487.67 ppb | 20:49:41 |
| 2 | U 409.014† | 15757.0 | 17701.7 | 519.18 ug/L | 519.18 ppb | 20:49:21 |
| 2 | V 292.402† | 63402.4 | 64465.9 | 503.54 ug/L | 503.54 ppb | 20:49:21 |
| 2 | Zn 213.857† | 42667.7 | 41816.3 | 492.13 ug/L | 492.13 ppb | 20:49:21 |
| 2 | SiO2† | 67622.6 | 66681.0 | 5314.1 ug/L | 5314.1 ppb | 20:50:22 |
| 3 | Sc Radial | 4048.9 | 4048.9 | 100 % | | 20:48:38 |
| 3 | Y RADIAL | 4473.2 | 4473.2 | 99.01 % | | 20:48:18 |
| 3 | Al 396.153Radial† | 4557.4 | 4620.1 | 4899.9 ug/L | 4899.9 ppb | 20:48:18 |
| 3 | Ca 317.933Radial† | 2479.8 | 2453.4 | 4984.6 ug/L | 4984.6 ppb | 20:48:38 |
| 3 | Fe 238.204 Radial† | 417.1 | 406.6 | 5099.1 ug/L | 5099.1 ppb | 20:48:38 |
| 3 | K 766.490 Radial† | 27241.0 | 24336.5 | 4851.9 ug/L | 4851.9 ppb | 20:48:18 |
| 3 | Mg 279.077 IEC† | 116.1 | 115.0 | 5021.8 ug/L | 5021.8 ppb | 20:48:38 |
| 3 | Na 589.592 Radial† | 25608.5 | 25974.2 | 10200 ug/L | 10200 ppb | 20:48:18 |
| 3 | Sr 421.552† | 57925.0 | 57639.6 | 490.80 ug/L | 490.80 ppb | 20:48:18 |
| 3 | Sc 361.383 | 843560.3 | 843560.3 | 100.44 % | | 20:49:47 |
| 3 | Y 371.029 | 711600.2 | 711600.2 | 99.375 % | | 20:49:47 |
| 3 | Ag 328.068† | 100796.4 | 100100.3 | 507.74 ug/L | 507.74 ppb | 20:49:52 |
| 3 | As 188.979† | 895.1 | 912.0 | 493.23 ug/L | 493.23 ppb | 20:50:12 |
| 3 | B 249.677† | 17491.2 | 17664.5 | 483.28 ug/L | 483.28 ppb | 20:49:52 |
| 3 | Ba 233.527† | 52994.8 | 52743.5 | 495.69 ug/L | 495.69 ppb | 20:49:52 |
| 3 | Be 313.107† | 1210168.3 | 1209115.9 | 492.03 ug/L | 492.03 ppb | 20:49:47 |
| 3 | Cd 226.502† | 35149.6 | 35161.6 | 495.81 ug/L | 495.81 ppb | 20:49:52 |
| 3 | Co 228.616† | 19464.1 | 19417.6 | 505.44 ug/L | 505.44 ppb | 20:49:52 |
| 3 | Cr 267.716† | 38185.0 | 37922.3 | 494.75 ug/L | 494.75 ppb | 20:49:52 |
| 3 | Cu 324.752† | 160430.8 | 153373.4 | 497.30 ug/L | 497.30 ppb | 20:49:52 |
| 3 | Mn 257.610† | 374384.7 | 372288.0 | 488.76 ug/L | 488.76 ppb | 20:49:52 |
| 3 | Mo 202.031† | 5668.6 | 5629.5 | 495.38 ug/L | 495.38 ppb | 20:50:12 |
| 3 | Ni 231.604† | 16217.7 | 16052.8 | 500.95 ug/L | 500.95 ppb | 20:49:52 |
| 3 | P 214.914† | 3586.1 | 3402.1 | 2348.3 ug/L | 2348.3 ppb | 20:50:12 |
| 3 | Pb 220.353† | 3198.1 | 3242.8 | 490.28 ug/L | 490.28 ppb | 20:50:12 |
| 3 | S 181.975 Axial† | 587.0 | 560.1 | 980.77 ug/L | 980.77 ppb | 20:50:12 |
| 3 | Sb 206.836† | 1235.3 | 1203.3 | 529.05 ug/L | 529.05 ppb | 20:50:12 |
| 3 | Se 196.026† | 613.7 | 628.0 | 518.91 ug/L | 518.91 ppb | 20:50:12 |
| 3 | Si 251.611† | 67976.6 | 67152.6 | 2494.2 ug/L | 2494.2 ppb | 20:49:52 |
| 3 | Sn 189.927† | 2245.6 | 2232.7 | 495.09 ug/L | 495.09 ppb | 20:50:12 |
| 3 | Ti 334.940† | 288610.8 | 288426.6 | 496.09 ug/L | 496.09 ppb | 20:49:52 |
| 3 | Tl 190.801† | 1239.8 | 1259.4 | 490.24 ug/L | 490.24 ppb | 20:50:12 |
| 3 | U 409.014† | 15663.6 | 17630.0 | 517.07 ug/L | 517.07 ppb | 20:49:52 |
| 3 | V 292.402† | 63203.2 | 64353.1 | 502.73 ug/L | 502.73 ppb | 20:49:52 |
| 3 | Zn 213.857† | 42597.2 | 41803.7 | 491.99 ug/L | 491.99 ppb | 20:49:52 |
| 3 | SiO2† | 67584.4 | 66734.2 | 5318.3 ug/L | 5318.3 ppb | 20:50:27 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 840247.5 | 100.05 % | 0.804 | | | 0.80% |
| Sc Radial | 4041.5 | 100 % | 0.7 | | | 0.70% |
| Y 371.029 | 708090.1 | 98.885 % | 0.8662 | | | 0.88% |
| Y RADIAL | 4462.6 | 98.77 % | 0.705 | | | 0.71% |
| Ag 328.068† | 100330.8 | 508.91 ug/L | 1.271 | 508.91 ppb | 1.271 | 0.25% |
| QC value within limits for Ag 328.068 Recovery = 101.78% | | | | | | |
| Al 396.153Radial† | 4586.9 | 4864.5 ug/L | 60.26 | 4864.5 ppb | 60.26 | 1.24% |
| QC value within limits for Al 396.153Radial Recovery = 97.29% | | | | | | |
| As 188.979† | 907.6 | 490.85 ug/L | 3.099 | 490.85 ppb | 3.099 | 0.63% |
| QC value within limits for As 188.979 Recovery = 98.17% | | | | | | |
| B 249.677† | 17684.0 | 483.81 ug/L | 0.818 | 483.81 ppb | 0.818 | 0.17% |
| QC value within limits for B 249.677 Recovery = 96.76% | | | | | | |
| Ba 233.527† | 52790.5 | 496.13 ug/L | 1.251 | 496.13 ppb | 1.251 | 0.25% |
| QC value within limits for Ba 233.527 Recovery = 99.23% | | | | | | |
| Be 313.107† | 1209158.2 | 492.05 ug/L | 0.422 | 492.05 ppb | 0.422 | 0.09% |
| QC value within limits for Be 313.107 Recovery = 98.41% | | | | | | |
| Ca 317.933Radial† | 2452.7 | 4983.3 ug/L | 15.00 | 4983.3 ppb | 15.00 | 0.30% |

| | | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|--|
| QC value within limits for Ca 317.933 Radial Recovery = 99.67% | | | | | | | |
| Cd 226.502† | 35263.1 | 497.24 ug/L | 1.741 | 497.24 ppb | 1.741 | 0.35% | |
| QC value within limits for Cd 226.502 Recovery = 99.45% | | | | | | | |
| Co 228.616† | 19483.0 | 507.15 ug/L | 1.697 | 507.15 ppb | 1.697 | 0.33% | |
| QC value within limits for Co 228.616 Recovery = 101.43% | | | | | | | |
| Cr 267.716† | 37984.6 | 495.57 ug/L | 1.223 | 495.57 ppb | 1.223 | 0.25% | |
| QC value within limits for Cr 267.716 Recovery = 99.11% | | | | | | | |
| Cu 324.752† | 153298.8 | 497.06 ug/L | 0.425 | 497.06 ppb | 0.425 | 0.09% | |
| QC value within limits for Cu 324.752 Recovery = 99.41% | | | | | | | |
| Fe 238.204 Radial† | 408.4 | 5122.2 ug/L | 20.89 | 5122.2 ppb | 20.89 | 0.41% | |
| QC value within limits for Fe 238.204 Radial Recovery = 102.44% | | | | | | | |
| K 766.490 Radial† | 24200.7 | 4824.8 ug/L | 84.74 | 4824.8 ppb | 84.74 | 1.76% | |
| QC value within limits for K 766.490 Radial Recovery = 96.50% | | | | | | | |
| Mg 279.077 IEC† | 115.7 | 5056.0 ug/L | 71.43 | 5056.0 ppb | 71.43 | 1.41% | |
| QC value within limits for Mg 279.077 IEC Recovery = 101.12% | | | | | | | |
| Mn 257.610† | 373126.0 | 489.86 ug/L | 1.343 | 489.86 ppb | 1.343 | 0.27% | |
| QC value within limits for Mn 257.610 Recovery = 97.97% | | | | | | | |
| Mo 202.031† | 5640.9 | 496.38 ug/L | 5.638 | 496.38 ppb | 5.638 | 1.14% | |
| QC value within limits for Mo 202.031 Recovery = 99.28% | | | | | | | |
| Na 589.592 Radial† | 25969.6 | 10199 ug/L | 210.6 | 10199 ppb | 210.6 | 2.06% | |
| QC value within limits for Na 589.592 Radial Recovery = 101.99% | | | | | | | |
| Ni 231.604† | 16098.5 | 502.37 ug/L | 1.534 | 502.37 ppb | 1.534 | 0.31% | |
| QC value within limits for Ni 231.604 Recovery = 100.47% | | | | | | | |
| P 214.914† | 3411.6 | 2355.2 ug/L | 28.23 | 2355.2 ppb | 28.23 | 1.20% | |
| QC value within limits for P 214.914 Recovery = 94.21% | | | | | | | |
| Pb 220.353† | 3240.6 | 489.93 ug/L | 4.049 | 489.93 ppb | 4.049 | 0.83% | |
| QC value within limits for Pb 220.353 Recovery = 97.99% | | | | | | | |
| S 181.975 Axial† | 566.2 | 991.48 ug/L | 21.630 | 991.48 ppb | 21.630 | 2.18% | |
| QC value within limits for S 181.975 Axial Recovery = 99.15% | | | | | | | |
| Sb 206.836† | 1192.3 | 524.41 ug/L | 8.190 | 524.41 ppb | 8.190 | 1.56% | |
| QC value within limits for Sb 206.836 Recovery = 104.88% | | | | | | | |
| Se 196.026† | 624.9 | 516.55 ug/L | 2.549 | 516.55 ppb | 2.549 | 0.49% | |
| QC value within limits for Se 196.026 Recovery = 103.31% | | | | | | | |
| Si 251.611† | 67279.5 | 2498.9 ug/L | 8.17 | 2498.9 ppb | 8.17 | 0.33% | |
| QC value within limits for Si 251.611 Recovery = 99.96% | | | | | | | |
| Sn 189.927† | 2234.5 | 495.50 ug/L | 5.212 | 495.50 ppb | 5.212 | 1.05% | |
| QC value within limits for Sn 189.927 Recovery = 99.10% | | | | | | | |
| Sr 421.552† | 57375.7 | 488.55 ug/L | 8.704 | 488.55 ppb | 8.704 | 1.78% | |
| QC value within limits for Sr 421.552 Recovery = 97.71% | | | | | | | |
| Ti 334.940† | 288525.7 | 496.26 ug/L | 0.551 | 496.26 ppb | 0.551 | 0.11% | |
| QC value within limits for Ti 334.940 Recovery = 99.25% | | | | | | | |
| Tl 190.801† | 1258.4 | 489.87 ug/L | 2.039 | 489.87 ppb | 2.039 | 0.42% | |
| QC value within limits for Tl 190.801 Recovery = 97.97% | | | | | | | |
| U 409.014† | 17700.8 | 519.15 ug/L | 2.062 | 519.15 ppb | 2.062 | 0.40% | |
| QC value within limits for U 409.014 Recovery = 103.83% | | | | | | | |
| V 292.402† | 64445.4 | 503.45 ug/L | 0.687 | 503.45 ppb | 0.687 | 0.14% | |
| QC value within limits for V 292.402 Recovery = 100.69% | | | | | | | |
| Zn 213.857† | 41866.4 | 492.73 ug/L | 1.152 | 492.73 ppb | 1.152 | 0.23% | |
| QC value within limits for Zn 213.857 Recovery = 98.55% | | | | | | | |
| SiO2† | 67070.2 | 5345.1 ug/L | 50.07 | 5345.1 ppb | 50.07 | 0.94% | |
| QC value within limits for SiO2 Recovery = 99.95% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 38

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 20:52:37

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 | 4125.2 | 4125.2 | 102 % | | 20:54:49 |
| 1 | Y RADIAL | 4509.6 | 4509.6 | 99.81 % | | 20:54:29 |
| 1 | Al 396.153Radial† | -64.8 | 16.3 | 17.399 ug/L | 17.399 ppb | 20:54:49 |
| 1 | Ca 317.933Radial† | 23.2 | 5.5 | 11.103 ug/L | 11.103 ppb | 20:54:49 |
| 1 | Fe 238.204 Radial† | 14.8 | 5.5 | 68.189 ug/L | 68.189 ppb | 20:54:49 |
| 1 | K 766.490 Radial† | 2598.0 | -262.8 | -52.475 ug/L | -52.475 ppb | 20:54:29 |
| 1 | Mg 279.077 IEC† | 2.6 | 1.9 | 81.001 ug/L | 81.001 ppb | 20:54:49 |
| 1 | Na 589.592 Radial† | -381.4 | 87.9 | 34.527 ug/L | 34.527 ppb | 20:54:29 |
| 1 | Sr 421.552† | 63.0 | -8.4 | -0.0715 ug/L | -0.0715 ppb | 20:54:29 |
| 1 | Sc 361.383 | 826959.5 | 826959.5 | 98.465 % | | 20:55:46 |
| 1 | Y 371.029 | 707842.6 | 707842.6 | 98.850 % | | 20:55:46 |
| 1 | Ag 328.068† | 170.5 | -80.2 | -0.3864 ug/L | -0.3864 ppb | 20:55:46 |
| 1 | As 188.979† | -21.2 | -0.7 | -0.3507 ug/L | -0.3507 ppb | 20:56:06 |
| 1 | B 249.677† | -280.9 | -35.1 | -0.9765 ug/L | -0.9765 ppb | 20:56:06 |
| 1 | Ba 233.527† | 33.5 | 15.5 | 0.1489 ug/L | 0.1489 ppb | 20:56:06 |
| 1 | Be 313.107† | -4365.6 | -171.0 | -0.0686 ug/L | -0.0686 ppb | 20:55:46 |
| 1 | Cd 226.502† | -154.6 | 9.4 | 0.1269 ug/L | 0.1269 ppb | 20:56:06 |
| 1 | Co 228.616† | -42.3 | -4.0 | -0.1073 ug/L | -0.1073 ppb | 20:56:06 |
| 1 | Cr 267.716† | 85.5 | -8.1 | -0.1002 ug/L | -0.1002 ppb | 20:56:06 |
| 1 | Cu 324.752† | 6511.2 | 260.0 | 0.8432 ug/L | 0.8432 ppb | 20:55:46 |
| 1 | Mn 257.610† | 960.3 | 522.8 | 0.6894 ug/L | 0.6894 ppb | 20:56:06 |
| 1 | Mo 202.031† | 10.7 | -3.3 | -0.2842 ug/L | -0.2842 ppb | 20:56:06 |
| 1 | Ni 231.604† | 70.2 | -22.3 | -0.6961 ug/L | -0.6961 ppb | 20:56:06 |
| 1 | P 214.914† | 189.3 | 24.1 | 17.102 ug/L | 17.102 ppb | 20:56:06 |
| 1 | Pb 220.353† | -52.9 | 5.1 | 0.7661 ug/L | 0.7661 ppb | 20:56:06 |
| 1 | S 181.975 Axial† | 33.2 | 9.3 | 16.296 ug/L | 16.296 ppb | 20:56:06 |
| 1 | Sb 206.836† | 29.0 | 2.9 | 1.2254 ug/L | 1.2254 ppb | 20:56:06 |
| 1 | Se 196.026† | -24.4 | -7.9 | -6.0541 ug/L | -6.0541 ppb | 20:56:06 |
| 1 | Si 251.611† | 578.7 | 62.3 | 2.3238 ug/L | 2.3238 ppb | 20:56:06 |
| 1 | Sn 189.927† | 7.0 | 4.0 | 0.8797 ug/L | 0.8797 ppb | 20:56:06 |
| 1 | Ti 334.940† | -863.1 | 206.8 | 0.3480 ug/L | 0.3480 ppb | 20:55:46 |
| 1 | Tl 190.801† | -31.1 | -6.6 | -2.5273 ug/L | -2.5273 ppb | 20:56:06 |
| 1 | U 409.014† | -1793.9 | 213.3 | 6.2681 ug/L | 6.2681 ppb | 20:55:46 |
| 1 | V 292.402† | -1339.5 | 67.2 | 0.5172 ug/L | 0.5172 ppb | 20:55:46 |
| 1 | Zn 213.857† | 692.7 | 97.0 | 1.1458 ug/L | 1.1458 ppb | 20:56:06 |
| 1 | SiO2† | 626.8 | 83.2 | 6.6557 ug/L | 6.6557 ppb | 20:57:02 |
| 2 | Sc Radial | 4088.2 | 4088.2 | 101 % | | 20:55:14 |
| 2 | Y RADIAL | 4505.1 | 4505.1 | 99.71 % | | 20:54:54 |
| 2 | Al 396.153Radial† | -70.5 | 10.1 | 10.732 ug/L | 10.732 ppb | 20:55:14 |
| 2 | Ca 317.933Radial† | 27.0 | 9.5 | 19.213 ug/L | 19.213 ppb | 20:55:14 |
| 2 | Fe 238.204 Radial† | 13.3 | 4.1 | 51.833 ug/L | 51.833 ppb | 20:55:14 |
| 2 | K 766.490 Radial† | 2526.6 | -310.3 | -61.954 ug/L | -61.954 ppb | 20:54:54 |
| 2 | Mg 279.077 IEC† | 2.6 | 1.8 | 79.087 ug/L | 79.087 ppb | 20:55:14 |
| 2 | Na 589.592 Radial† | -430.2 | 36.4 | 14.277 ug/L | 14.277 ppb | 20:54:54 |
| 2 | Sr 421.552† | 46.8 | -23.8 | -0.2032 ug/L | -0.2032 ppb | 20:54:54 |
| 2 | Sc 361.383 | 845279.5 | 845279.5 | 100.65 % | | 20:56:11 |
| 2 | Y 371.029 | 725296.7 | 725296.7 | 101.29 % | | 20:56:11 |
| 2 | Ag 328.068† | 221.8 | -33.0 | -0.1516 ug/L | -0.1516 ppb | 20:56:11 |
| 2 | As 188.979† | -29.3 | -8.3 | -4.4179 ug/L | -4.4179 ppb | 20:56:31 |
| 2 | B 249.677† | -285.1 | -33.1 | -0.9182 ug/L | -0.9182 ppb | 20:56:31 |
| 2 | Ba 233.527† | 26.8 | 8.1 | 0.0789 ug/L | 0.0789 ppb | 20:56:31 |
| 2 | Be 313.107† | -4528.8 | -237.0 | -0.0959 ug/L | -0.0959 ppb | 20:56:11 |
| 2 | Cd 226.502† | -166.9 | 0.5 | 0.0025 ug/L | 0.0025 ppb | 20:56:31 |
| 2 | Co 228.616† | -45.2 | -6.0 | -0.1573 ug/L | -0.1573 ppb | 20:56:31 |
| 2 | Cr 267.716† | 103.7 | 8.0 | 0.1093 ug/L | 0.1093 ppb | 20:56:31 |
| 2 | Cu 324.752† | 6620.1 | 224.9 | 0.7301 ug/L | 0.7301 ppb | 20:56:11 |
| 2 | Mn 257.610† | 1051.7 | 592.5 | 0.7793 ug/L | 0.7793 ppb | 20:56:31 |
| 2 | Mo 202.031† | 16.2 | 1.9 | 0.1687 ug/L | 0.1687 ppb | 20:56:31 |
| 2 | Ni 231.604† | 67.7 | -26.3 | -0.8222 ug/L | -0.8222 ppb | 20:56:31 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 201.1 | 31.5 | 22.495 ug/L | 22.495 ppb | 20:56:31 |
| 2 | Pb 220.353† | -48.6 | 10.6 | 1.5889 ug/L | 1.5889 ppb | 20:56:31 |
| 2 | S 181.975 Axial† | 26.0 | 1.4 | 2.4612 ug/L | 2.4612 ppb | 20:56:31 |
| 2 | Sb 206.836† | 33.3 | 6.5 | 2.7705 ug/L | 2.7705 ppb | 20:56:31 |
| 2 | Se 196.026† | -13.3 | 3.7 | 3.1235 ug/L | 3.1235 ppb | 20:56:31 |
| 2 | Si 251.611† | 645.7 | 116.1 | 4.3195 ug/L | 4.3195 ppb | 20:56:31 |
| 2 | Sn 189.927† | 6.0 | 2.9 | 0.6364 ug/L | 0.6364 ppb | 20:56:31 |
| 2 | Ti 334.940† | -1006.8 | 83.0 | 0.1374 ug/L | 0.1374 ppb | 20:56:11 |
| 2 | Tl 190.801† | -32.5 | -7.3 | -2.8045 ug/L | -2.8045 ppb | 20:56:31 |
| 2 | U 409.014† | -1931.9 | 115.7 | 3.3986 ug/L | 3.3986 ppb | 20:56:11 |
| 2 | V 292.402† | -1381.7 | 54.7 | 0.4245 ug/L | 0.4245 ppb | 20:56:11 |
| 2 | Zn 213.857† | 699.0 | 88.1 | 1.0429 ug/L | 1.0429 ppb | 20:56:31 |
| 2 | SiO2† | 600.0 | 42.8 | 3.4118 ug/L | 3.4118 ppb | 20:57:07 |
| 3 | Sc Radial | 4067.5 | 4067.5 | 101 % | | 20:55:39 |
| 3 | Y RADIAL | 4511.7 | 4511.7 | 99.86 % | | 20:55:19 |
| 3 | Al 396.153Radial† | -44.4 | 35.7 | 38.010 ug/L | 38.010 ppb | 20:55:39 |
| 3 | Ca 317.933Radial† | 33.5 | 16.0 | 32.500 ug/L | 32.500 ppb | 20:55:39 |
| 3 | Fe 238.204 Radial† | 21.8 | 12.6 | 157.28 ug/L | 157.28 ppb | 20:55:39 |
| 3 | K 766.490 Radial† | 2445.2 | -378.3 | -75.548 ug/L | -75.548 ppb | 20:55:19 |
| 3 | Mg 279.077 IEC† | 1.7 | 0.9 | 40.930 ug/L | 40.930 ppb | 20:55:39 |
| 3 | Na 589.592 Radial† | -392.7 | 71.4 | 28.056 ug/L | 28.056 ppb | 20:55:19 |
| 3 | Sr 421.552† | 62.0 | -8.6 | -0.0733 ug/L | -0.0733 ppb | 20:55:19 |
| 3 | Sc 361.383 | 827432.7 | 827432.7 | 98.521 % | | 20:56:36 |
| 3 | Y 371.029 | 710173.1 | 710173.1 | 99.176 % | | 20:56:36 |
| 3 | Ag 328.068† | 199.8 | -50.6 | -0.2052 ug/L | -0.2052 ppb | 20:56:36 |
| 3 | As 188.979† | -17.5 | 3.1 | 1.7030 ug/L | 1.7030 ppb | 20:56:56 |
| 3 | B 249.677† | -277.3 | -31.3 | -0.8858 ug/L | -0.8858 ppb | 20:56:56 |
| 3 | Ba 233.527† | 22.9 | 4.7 | 0.0511 ug/L | 0.0511 ppb | 20:56:56 |
| 3 | Be 313.107† | -4334.7 | -137.1 | -0.0556 ug/L | -0.0556 ppb | 20:56:36 |
| 3 | Cd 226.502† | -163.6 | 0.3 | -0.0118 ug/L | -0.0118 ppb | 20:56:56 |
| 3 | Co 228.616† | -41.6 | -3.3 | -0.0878 ug/L | -0.0878 ppb | 20:56:56 |
| 3 | Cr 267.716† | 90.7 | -3.0 | -0.0215 ug/L | -0.0215 ppb | 20:56:56 |
| 3 | Cu 324.752† | 6526.4 | 271.6 | 0.8879 ug/L | 0.8879 ppb | 20:56:36 |
| 3 | Mn 257.610† | 975.6 | 537.8 | 0.7195 ug/L | 0.7195 ppb | 20:56:56 |
| 3 | Mo 202.031† | 13.2 | -0.8 | -0.0602 ug/L | -0.0602 ppb | 20:56:56 |
| 3 | Ni 231.604† | 80.4 | -12.0 | -0.3746 ug/L | -0.3746 ppb | 20:56:56 |
| 3 | P 214.914† | 190.8 | 25.5 | 18.035 ug/L | 18.035 ppb | 20:56:56 |
| 3 | Pb 220.353† | -47.0 | 11.1 | 1.6616 ug/L | 1.6616 ppb | 20:56:56 |
| 3 | S 181.975 Axial† | 30.0 | 6.1 | 10.695 ug/L | 10.695 ppb | 20:56:56 |
| 3 | Sb 206.836† | 34.1 | 8.0 | 3.3818 ug/L | 3.3818 ppb | 20:56:56 |
| 3 | Se 196.026† | -21.7 | -5.1 | -3.5508 ug/L | -3.5508 ppb | 20:56:56 |
| 3 | Si 251.611† | 562.0 | 45.0 | 1.6765 ug/L | 1.6765 ppb | 20:56:56 |
| 3 | Sn 189.927† | 3.6 | 0.6 | 0.1237 ug/L | 0.1237 ppb | 20:56:56 |
| 3 | Ti 334.940† | -1063.0 | 4.4 | 0.0076 ug/L | 0.0076 ppb | 20:56:36 |
| 3 | Tl 190.801† | -27.6 | -2.9 | -1.1186 ug/L | -1.1186 ppb | 20:56:56 |
| 3 | U 409.014† | -1931.6 | 74.5 | 2.1753 ug/L | 2.1753 ppb | 20:56:36 |
| 3 | V 292.402† | -1297.1 | 111.0 | 0.8365 ug/L | 0.8365 ppb | 20:56:36 |
| 3 | Zn 213.857† | 688.0 | 91.9 | 1.0693 ug/L | 1.0693 ppb | 20:56:56 |
| 3 | SiO2† | 590.8 | 46.3 | 3.7032 ug/L | 3.7032 ppb | 20:57:12 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 833223.9 | 99.210 % | 1.2434 | | | 1.25% |
| Sc Radial | 4093.6 | 101 % | 0.7 | | | 0.71% |
| Y 371.029 | 714437.4 | 99.771 % | 1.3234 | | | 1.33% |
| Y RADIAL | 4508.8 | 99.80 % | 0.075 | | | 0.07% |
| Ag 328.068† | -54.6 | -0.2477 ug/L | 0.12302 | -0.2477 ppb | 0.12302 | 49.66% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 396.153Radial† | 20.7 | 22.047 ug/L | 14.2209 | 22.047 ppb | 14.2209 | 64.50% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | |
| As 188.979† | -1.9 | -1.0219 ug/L | 3.11513 | -1.0219 ppb | 3.11513 | 304.84% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.677† | -33.2 | -0.9268 ug/L | 0.04595 | -0.9268 ppb | 0.04595 | 4.96% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 9.5 | 0.0930 ug/L | 0.05043 | 0.0930 ppb | 0.05043 | 54.25% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | -181.7 | -0.0734 ug/L | 0.02055 | -0.0734 ppb | 0.02055 | 28.00% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933Radial† | 10.3 | 20.939 ug/L | 10.8022 | 20.939 ppb | 10.8022 | 51.59% |

| | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | 3.4 | 0.0392 ug/L | 0.07628 | 0.0392 ppb | 0.07628 | 194.57% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -4.4 | -0.1175 ug/L | 0.03584 | -0.1175 ppb | 0.03584 | 30.52% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | -1.0 | -0.0041 ug/L | 0.10580 | -0.0041 ppb | 0.10580 | >999.9% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 252.2 | 0.8204 ug/L | 0.08132 | 0.8204 ppb | 0.08132 | 9.91% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 7.4 | 92.435 ug/L | 56.7523 | 92.435 ppb | 56.7523 | 61.40% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -317.1 | -63.326 ug/L | 11.5975 | -63.326 ppb | 11.5975 | 18.31% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 1.5 | 67.006 ug/L | 22.6026 | 67.006 ppb | 22.6026 | 33.73% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 551.1 | 0.7294 ug/L | 0.04573 | 0.7294 ppb | 0.04573 | 6.27% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -0.8 | -0.0586 ug/L | 0.22647 | -0.0586 ppb | 0.22647 | 386.79% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 65.2 | 25.620 ug/L | 10.3425 | 25.620 ppb | 10.3425 | 40.37% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -20.2 | -0.6310 ug/L | 0.23081 | -0.6310 ppb | 0.23081 | 36.58% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 27.0 | 19.211 ug/L | 2.8824 | 19.211 ppb | 2.8824 | 15.00% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 8.9 | 1.3389 ug/L | 0.49737 | 1.3389 ppb | 0.49737 | 37.15% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 5.6 | 9.8174 ug/L | 6.95910 | 9.8174 ppb | 6.95910 | 70.89% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 5.8 | 2.4592 ug/L | 1.11136 | 2.4592 ppb | 1.11136 | 45.19% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -3.1 | -2.1604 ug/L | 4.74414 | -2.1604 ppb | 4.74414 | 219.59% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 74.5 | 2.7733 ug/L | 1.37764 | 2.7733 ppb | 1.37764 | 49.68% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 2.5 | 0.5466 ug/L | 0.38591 | 0.5466 ppb | 0.38591 | 70.60% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -13.6 | -0.1160 ug/L | 0.07552 | -0.1160 ppb | 0.07552 | 65.12% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 98.1 | 0.1644 ug/L | 0.17176 | 0.1644 ppb | 0.17176 | 104.51% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | -5.6 | -2.1501 ug/L | 0.90401 | -2.1501 ppb | 0.90401 | 42.04% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 134.5 | 3.9474 ug/L | 2.10087 | 3.9474 ppb | 2.10087 | 53.22% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 77.6 | 0.5927 ug/L | 0.21616 | 0.5927 ppb | 0.21616 | 36.47% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 92.3 | 1.0860 ug/L | 0.05349 | 1.0860 ppb | 0.05349 | 4.93% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 57.4 | 4.5902 ug/L | 1.79468 | 4.5902 ppb | 1.79468 | 39.10% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 39

Sample ID: 1202054493|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 3/25/2010 20:59:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054493|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4044.0 | 4044.0 | 100 % | | 21:01:34 |
| 1 | Y RADIAL | 4458.8 | 4458.8 | 98.69 % | | 21:01:14 |
| 1 | Al 396.153Radial† | -51.5 | 28.3 | 30.085 ug/L | 30.085 ppb | 21:01:34 |
| 1 | Ca 317.933Radial† | 35.1 | 17.8 | 36.169 ug/L | 36.169 ppb | 21:01:34 |
| 1 | Fe 238.204 Radial† | 59.0 | 49.8 | 623.31 ug/L | 623.31 ppb | 21:01:34 |
| 1 | K 766.490 Radial† | 2461.2 | -348.3 | -69.563 ug/L | -69.563 ppb | 21:01:14 |
| 1 | Mg 279.077 IEC† | 3.2 | 2.5 | 107.21 ug/L | 107.21 ppb | 21:01:34 |
| 1 | Na 589.592 Radial† | -334.9 | 126.8 | 49.786 ug/L | 49.786 ppb | 21:01:14 |
| 1 | Sr 421.552† | 108.6 | 38.3 | 0.3258 ug/L | 0.3258 ppb | 21:01:14 |
| 1 | Sc 361.383 | 828035.5 | 828035.5 | 98.593 % | | 21:02:31 |
| 1 | Y 371.029 | 706865.0 | 706865.0 | 98.714 % | | 21:02:31 |
| 1 | Ag 328.068† | 61.2 | -191.3 | -0.7724 ug/L | -0.7724 ppb | 21:02:31 |
| 1 | As 188.979† | -12.0 | 8.6 | 4.7682 ug/L | 4.7682 ppb | 21:02:51 |
| 1 | B 249.677† | -290.8 | -44.8 | -1.3333 ug/L | -1.3333 ppb | 21:02:51 |
| 1 | Ba 233.527† | 184.5 | 168.6 | 1.6022 ug/L | 1.6022 ppb | 21:02:51 |
| 1 | Be 313.107† | -4381.2 | -181.1 | -0.0719 ug/L | -0.0719 ppb | 21:02:31 |
| 1 | Cd 226.502† | -169.7 | -5.8 | -0.1442 ug/L | -0.1442 ppb | 21:02:51 |
| 1 | Co 228.616† | -44.0 | -5.7 | -0.1559 ug/L | -0.1559 ppb | 21:02:51 |
| 1 | Cr 267.716† | 203.6 | 111.6 | 1.5176 ug/L | 1.5176 ppb | 21:02:51 |
| 1 | Cu 324.752† | 6639.6 | 381.6 | 1.2668 ug/L | 1.2668 ppb | 21:02:31 |
| 1 | Mn 257.610† | 2386.4 | 1968.0 | 2.6393 ug/L | 2.6393 ppb | 21:02:51 |
| 1 | Mo 202.031† | 25.0 | 11.2 | 1.0325 ug/L | 1.0325 ppb | 21:02:51 |
| 1 | Ni 231.604† | 105.1 | 13.0 | 0.4058 ug/L | 0.4058 ppb | 21:02:51 |
| 1 | P 214.914† | 201.0 | 35.7 | 24.921 ug/L | 24.921 ppb | 21:02:51 |
| 1 | Pb 220.353† | -49.8 | 8.3 | 1.1719 ug/L | 1.1719 ppb | 21:02:51 |
| 1 | S 181.975 Axial† | 40.9 | 17.1 | 29.945 ug/L | 29.945 ppb | 21:02:51 |
| 1 | Sb 206.836† | 27.5 | 1.3 | 0.5913 ug/L | 0.5913 ppb | 21:02:51 |
| 1 | Se 196.026† | -15.6 | 1.1 | 2.7402 ug/L | 2.7402 ppb | 21:02:51 |
| 1 | Si 251.611† | 1424.3 | 919.2 | 34.214 ug/L | 34.214 ppb | 21:02:51 |
| 1 | Sn 189.927† | 15.8 | 13.0 | 2.8427 ug/L | 2.8427 ppb | 21:02:51 |
| 1 | Ti 334.940† | -662.3 | 411.6 | 0.7007 ug/L | 0.7007 ppb | 21:02:31 |
| 1 | Tl 190.801† | -22.7 | 2.0 | 0.8043 ug/L | 0.8043 ppb | 21:02:51 |
| 1 | U 409.014† | -1782.0 | 227.7 | 6.6254 ug/L | 6.6254 ppb | 21:02:31 |
| 1 | V 292.402† | -1243.9 | 165.9 | 1.2158 ug/L | 1.2158 ppb | 21:02:31 |
| 1 | Zn 213.857† | 830.4 | 235.8 | 2.7041 ug/L | 2.7041 ppb | 21:02:51 |
| 1 | SiO2† | 1507.8 | 976.0 | 77.949 ug/L | 77.949 ppb | 21:03:47 |
| 2 | Sc Radial | 4047.0 | 4047.0 | 100 % | | 21:01:59 |
| 2 | Y RADIAL | 4577.2 | 4577.2 | 101.3 % | | 21:01:39 |
| 2 | Al 396.153Radial† | -51.8 | 28.0 | 29.802 ug/L | 29.802 ppb | 21:01:59 |
| 2 | Ca 317.933Radial† | 39.8 | 22.5 | 45.663 ug/L | 45.663 ppb | 21:01:59 |
| 2 | Fe 238.204 Radial† | 61.0 | 51.8 | 647.12 ug/L | 647.12 ppb | 21:01:59 |
| 2 | K 766.490 Radial† | 2445.0 | -366.2 | -73.162 ug/L | -73.162 ppb | 21:01:39 |
| 2 | Mg 279.077 IEC† | 2.3 | 1.6 | 70.021 ug/L | 70.021 ppb | 21:01:59 |
| 2 | Na 589.592 Radial† | -251.6 | 210.1 | 82.497 ug/L | 82.497 ppb | 21:01:39 |
| 2 | Sr 421.552† | 81.4 | 11.1 | 0.0944 ug/L | 0.0944 ppb | 21:01:39 |
| 2 | Sc 361.383 | 842053.0 | 842053.0 | 100.26 % | | 21:02:56 |
| 2 | Y 371.029 | 718136.8 | 718136.8 | 100.29 % | | 21:02:56 |
| 2 | Ag 328.068† | 115.3 | -138.4 | -0.4941 ug/L | -0.4941 ppb | 21:02:56 |
| 2 | As 188.979† | -23.3 | -2.4 | -1.1207 ug/L | -1.1207 ppb | 21:03:16 |
| 2 | B 249.677† | -275.5 | -24.6 | -0.7806 ug/L | -0.7806 ppb | 21:03:16 |
| 2 | Ba 233.527† | 175.4 | 156.4 | 1.4895 ug/L | 1.4895 ppb | 21:03:16 |
| 2 | Be 313.107† | -4305.7 | -31.8 | -0.0108 ug/L | -0.0108 ppb | 21:02:56 |
| 2 | Cd 226.502† | -167.7 | -0.8 | -0.0781 ug/L | -0.0781 ppb | 21:03:16 |
| 2 | Co 228.616† | -39.7 | -0.6 | -0.0278 ug/L | -0.0278 ppb | 21:03:16 |
| 2 | Cr 267.716† | 231.9 | 136.4 | 1.8451 ug/L | 1.8451 ppb | 21:03:16 |
| 2 | Cu 324.752† | 6714.9 | 344.6 | 1.1503 ug/L | 1.1503 ppb | 21:02:56 |
| 2 | Mn 257.610† | 2285.8 | 1827.4 | 2.4587 ug/L | 2.4587 ppb | 21:03:16 |
| 2 | Mo 202.031† | 15.1 | 0.9 | 0.1268 ug/L | 0.1268 ppb | 21:03:16 |
| 2 | Ni 231.604† | 94.2 | 0.4 | 0.0117 ug/L | 0.0117 ppb | 21:03:16 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 188.7 | 20.0 | 13.645 ug/L | 13.645 ppb | 21:03:16 |
| 2 | Pb 220.353† | -47.5 | 11.4 | 1.6375 ug/L | 1.6375 ppb | 21:03:16 |
| 2 | S 181.975 Axial† | 31.0 | 6.5 | 11.395 ug/L | 11.395 ppb | 21:03:16 |
| 2 | Sb 206.836† | 30.4 | 3.7 | 1.5858 ug/L | 1.5858 ppb | 21:03:16 |
| 2 | Se 196.026† | -14.2 | 2.8 | 4.1816 ug/L | 4.1816 ppb | 21:03:16 |
| 2 | Si 251.611† | 1416.3 | 887.1 | 33.030 ug/L | 33.030 ppb | 21:03:16 |
| 2 | Sn 189.927† | 11.6 | 8.5 | 1.8590 ug/L | 1.8590 ppb | 21:03:16 |
| 2 | Ti 334.940† | -540.7 | 544.0 | 0.9346 ug/L | 0.9346 ppb | 21:02:56 |
| 2 | Tl 190.801† | -30.6 | -5.5 | -2.0916 ug/L | -2.0916 ppb | 21:03:16 |
| 2 | U 409.014† | -1956.9 | 83.4 | 2.3769 ug/L | 2.3769 ppb | 21:02:56 |
| 2 | V 292.402† | -1227.0 | 203.8 | 1.4821 ug/L | 1.4821 ppb | 21:02:56 |
| 2 | Zn 213.857† | 820.4 | 211.8 | 2.4182 ug/L | 2.4182 ppb | 21:03:16 |
| 2 | SiO2† | 1471.0 | 913.8 | 73.002 ug/L | 73.002 ppb | 21:03:52 |
| 3 | Sc Radial | 4021.4 | 4021.4 | 99.7 % | | 21:02:24 |
| 3 | Y RADIAL | 4487.6 | 4487.6 | 99.33 % | | 21:02:04 |
| 3 | Al 396.153Radial† | -58.9 | 20.5 | 21.900 ug/L | 21.900 ppb | 21:02:24 |
| 3 | Ca 317.933Radial† | 31.9 | 14.8 | 30.072 ug/L | 30.072 ppb | 21:02:24 |
| 3 | Fe 238.204 Radial† | 59.0 | 50.2 | 627.62 ug/L | 627.62 ppb | 21:02:24 |
| 3 | K 766.490 Radial† | 2568.1 | -227.2 | -45.402 ug/L | -45.402 ppb | 21:02:04 |
| 3 | Mg 279.077 IEC† | 1.6 | 0.9 | 37.327 ug/L | 37.327 ppb | 21:02:24 |
| 3 | Na 589.592 Radial† | -260.1 | 200.0 | 78.545 ug/L | 78.545 ppb | 21:02:04 |
| 3 | Sr 421.552† | 109.8 | 40.1 | 0.3415 ug/L | 0.3415 ppb | 21:02:04 |
| 3 | Sc 361.383 | 830454.3 | 830454.3 | 98.881 % | | 21:03:21 |
| 3 | Y 371.029 | 708728.5 | 708728.5 | 98.974 % | | 21:03:21 |
| 3 | Ag 328.068† | 119.0 | -133.1 | -0.4793 ug/L | -0.4793 ppb | 21:03:21 |
| 3 | As 188.979† | -30.0 | -9.5 | -4.9397 ug/L | -4.9397 ppb | 21:03:41 |
| 3 | B 249.677† | -261.2 | -14.0 | -0.4879 ug/L | -0.4879 ppb | 21:03:41 |
| 3 | Ba 233.527† | 163.3 | 146.6 | 1.3949 ug/L | 1.3949 ppb | 21:03:41 |
| 3 | Be 313.107† | -4347.4 | -133.9 | -0.0530 ug/L | -0.0530 ppb | 21:03:21 |
| 3 | Cd 226.502† | -160.8 | 3.8 | -0.0098 ug/L | -0.0098 ppb | 21:03:41 |
| 3 | Co 228.616† | -32.6 | 5.9 | 0.1428 ug/L | 0.1428 ppb | 21:03:41 |
| 3 | Cr 267.716† | 216.2 | 123.7 | 1.6758 ug/L | 1.6758 ppb | 21:03:41 |
| 3 | Cu 324.752† | 6586.2 | 308.1 | 1.0290 ug/L | 1.0290 ppb | 21:03:21 |
| 3 | Mn 257.610† | 2404.0 | 1978.8 | 2.6567 ug/L | 2.6567 ppb | 21:03:41 |
| 3 | Mo 202.031† | 9.3 | -4.8 | -0.3736 ug/L | -0.3736 ppb | 21:03:41 |
| 3 | Ni 231.604† | 90.5 | -2.1 | -0.0645 ug/L | -0.0645 ppb | 21:03:41 |
| 3 | P 214.914† | 197.2 | 31.3 | 21.798 ug/L | 21.798 ppb | 21:03:41 |
| 3 | Pb 220.353† | -45.2 | 13.1 | 1.8958 ug/L | 1.8958 ppb | 21:03:41 |
| 3 | S 181.975 Axial† | 32.1 | 8.1 | 14.196 ug/L | 14.196 ppb | 21:03:41 |
| 3 | Sb 206.836† | 31.1 | 4.9 | 2.0983 ug/L | 2.0983 ppb | 21:03:41 |
| 3 | Se 196.026† | -23.3 | -6.6 | -3.4053 ug/L | -3.4053 ppb | 21:03:41 |
| 3 | Si 251.611† | 1434.0 | 924.8 | 34.439 ug/L | 34.439 ppb | 21:03:41 |
| 3 | Sn 189.927† | 16.7 | 13.8 | 3.0322 ug/L | 3.0322 ppb | 21:03:41 |
| 3 | Ti 334.940† | -724.7 | 350.5 | 0.6009 ug/L | 0.6009 ppb | 21:03:21 |
| 3 | Tl 190.801† | -30.7 | -6.0 | -2.3119 ug/L | -2.3119 ppb | 21:03:41 |
| 3 | U 409.014† | -1827.3 | 187.2 | 5.4322 ug/L | 5.4322 ppb | 21:03:21 |
| 3 | V 292.402† | -1333.7 | 78.8 | 0.5200 ug/L | 0.5200 ppb | 21:03:21 |
| 3 | Zn 213.857† | 820.1 | 222.9 | 2.5532 ug/L | 2.5532 ppb | 21:03:41 |
| 3 | SiO2† | 1412.7 | 875.3 | 69.944 ug/L | 69.944 ppb | 21:03:57 |

Mean Data: 1202054493|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------------|--------|----------|-------------|----------|---------|
| | Intensity | Units | | | Conc. Units | | |
| Sc 361.383 | 833514.3 | 99.245 % | | 0.8922 | | | 0.90% |
| Sc Radial | 4037.5 | 100 % | | 0.3 | | | 0.35% |
| Y 371.029 | 711243.4 | 99.325 % | | 0.8438 | | | 0.85% |
| Y RADIAL | 4507.9 | 99.77 % | | 1.367 | | | 1.37% |
| Ag 328.068† | -154.3 | -0.5819 ug/L | | 0.16516 | -0.5819 ppb | 0.16516 | 28.38% |
| Al 396.153Radial† | 25.6 | 27.262 ug/L | | 4.6460 | 27.262 ppb | 4.6460 | 17.04% |
| As 188.979† | -1.1 | -0.4307 ug/L | | 4.89063 | -0.4307 ppb | 4.89063 | >999.9% |
| B 249.677† | -27.8 | -0.8673 ug/L | | 0.42929 | -0.8673 ppb | 0.42929 | 49.50% |
| Ba 233.527† | 157.2 | 1.4956 ug/L | | 0.10377 | 1.4956 ppb | 0.10377 | 6.94% |
| Be 313.107† | -115.6 | -0.0452 ug/L | | 0.03129 | -0.0452 ppb | 0.03129 | 69.18% |
| Ca 317.933Radial† | 18.4 | 37.302 ug/L | | 7.8570 | 37.302 ppb | 7.8570 | 21.06% |
| Cd 226.502† | -0.9 | -0.0774 ug/L | | 0.06719 | -0.0774 ppb | 0.06719 | 86.85% |
| Co 228.616† | -0.1 | -0.0136 ug/L | | 0.14985 | -0.0136 ppb | 0.14985 | >999.9% |
| Cr 267.716† | 123.9 | 1.6795 ug/L | | 0.16379 | 1.6795 ppb | 0.16379 | 9.75% |
| Cu 324.752† | 344.8 | 1.1487 ug/L | | 0.11888 | 1.1487 ppb | 0.11888 | 10.35% |
| Fe 238.204 Radial† | 50.6 | 632.69 ug/L | | 12.689 | 632.69 ppb | 12.689 | 2.01% |
| K 766.490 Radial† | -313.9 | -62.709 ug/L | | 15.0959 | -62.709 ppb | 15.0959 | 24.07% |

| | | | | | | |
|--------------------|--------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 1.7 | 71.519 ug/L | 34.9656 | 71.519 ppb | 34.9656 | 48.89% |
| Mn 257.610† | 1924.7 | 2.5849 ug/L | 0.10967 | 2.5849 ppb | 0.10967 | 4.24% |
| Mo 202.031† | 2.4 | 0.2619 ug/L | 0.71275 | 0.2619 ppb | 0.71275 | 272.14% |
| Na 589.592 Radial† | 179.0 | 70.276 ug/L | 17.8549 | 70.276 ppb | 17.8549 | 25.41% |
| Ni 231.604† | 3.8 | 0.1177 ug/L | 0.25242 | 0.1177 ppb | 0.25242 | 214.49% |
| P 214.914† | 29.0 | 20.121 ug/L | 5.8219 | 20.121 ppb | 5.8219 | 28.93% |
| Pb 220.353† | 11.0 | 1.5684 ug/L | 0.36689 | 1.5684 ppb | 0.36689 | 23.39% |
| S 181.975 Axial† | 10.6 | 18.512 ug/L | 10.0002 | 18.512 ppb | 10.0002 | 54.02% |
| Sb 206.836† | 3.3 | 1.4252 ug/L | 0.76624 | 1.4252 ppb | 0.76624 | 53.77% |
| Se 196.026† | -0.9 | 1.1722 ug/L | 4.02921 | 1.1722 ppb | 4.02921 | 343.74% |
| Si 251.611† | 910.4 | 33.894 ug/L | 0.7571 | 33.894 ppb | 0.7571 | 2.23% |
| Sn 189.927† | 11.8 | 2.5780 ug/L | 0.62978 | 2.5780 ppb | 0.62978 | 24.43% |
| Sr 421.552† | 29.8 | 0.2539 ug/L | 0.13839 | 0.2539 ppb | 0.13839 | 54.51% |
| Ti 334.940† | 435.3 | 0.7454 ug/L | 0.17129 | 0.7454 ppb | 0.17129 | 22.98% |
| Tl 190.801† | -3.1 | -1.1997 ug/L | 1.73906 | -1.1997 ppb | 1.73906 | 144.95% |
| U 409.014† | 166.1 | 4.8115 ug/L | 2.19124 | 4.8115 ppb | 2.19124 | 45.54% |
| V 292.402† | 149.5 | 1.0726 ug/L | 0.49678 | 1.0726 ppb | 0.49678 | 46.31% |
| Zn 213.857† | 223.5 | 2.5585 ug/L | 0.14300 | 2.5585 ppb | 0.14300 | 5.59% |
| SiO2† | 921.7 | 73.632 ug/L | 4.0391 | 73.632 ppb | 4.0391 | 5.49% |

Sequence No.: 40

Sample ID: 1202054498|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 3/25/2010 21:06:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054498|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4267.9 | 4267.9 | 106 % | | 21:08:20 |
| 1 | Y RADIAL | 5002.6 | 5002.6 | 110.7 % | | 21:08:20 |
| 1 | Al 396.153Radial† | 86138.4 | 81494.1 | 86829 ug/L | 86829 ppb | 21:08:00 |
| 1 | Ca 317.933Radial† | 47633.6 | 45004.1 | 91437 ug/L | 91437 ppb | 21:08:00 |
| 1 | Fe 238.204 Radial† | 14467.5 | 13665.1 | 170900 ug/L | 170900 ppb | 21:08:00 |
| 1 | K 766.490 Radial† | 205373.0 | 191306.7 | 38154 ug/L | 38154 ppb | 21:08:00 |
| 1 | Mg 279.077 IEC† | 880.5 | 831.5 | 36151 ug/L | 36151 ppb | 21:08:20 |
| 1 | Na 589.592 Radial† | 27042.9 | 26020.7 | 10219 ug/L | 10219 ppb | 21:08:00 |
| 1 | Sr 421.552† | 268611.0 | 253809.8 | 2160.6 ug/L | 2160.6 ppb | 21:08:00 |
| 1 | Sc 361.383 | 831348.7 | 831348.7 | 98.987 % | | 21:09:24 |
| 1 | Y 371.029 | 766294.2 | 766294.2 | 107.01 % | | 21:09:24 |
| 1 | Ag 328.068† | 51872.3 | 52149.7 | 319.68 ug/L | 319.68 ppb | 21:09:24 |
| 1 | As 188.979† | 1820.2 | 1859.7 | 1084.9 ug/L | 1084.9 ppb | 21:09:44 |
| 1 | B 249.677† | 54444.2 | 55251.4 | 1488.3 ug/L | 1488.3 ppb | 21:09:24 |
| 1 | Ba 233.527† | 218154.9 | 220368.6 | 2073.8 ug/L | 2073.8 ppb | 21:09:24 |
| 1 | Be 313.107† | 1896859.6 | 1920531.7 | 792.59 ug/L | 792.59 ppb | 21:09:19 |
| 1 | Cd 226.502† | 41491.4 | 42082.4 | 576.71 ug/L | 576.71 ppb | 21:09:44 |
| 1 | Co 228.616† | 35214.4 | 35613.6 | 913.67 ug/L | 913.67 ppb | 21:09:44 |
| 1 | Cr 267.716† | 179232.0 | 180971.0 | 2376.0 ug/L | 2376.0 ppb | 21:09:24 |
| 1 | Cu 324.752† | 573597.7 | 573114.2 | 1867.5 ug/L | 1867.5 ppb | 21:09:24 |
| 1 | Mn 257.610† | 4014832.7 | 4055461.7 | 5336.4 ug/L | 5336.4 ppb | 21:09:19 |
| 1 | Mo 202.031† | 5458.8 | 5500.5 | 497.94 ug/L | 497.94 ppb | 21:09:44 |
| 1 | Ni 231.604† | 43164.2 | 43512.3 | 1358.1 ug/L | 1358.1 ppb | 21:09:24 |
| 1 | P 214.914† | 11356.4 | 11304.3 | 7649.8 ug/L | 7649.8 ppb | 21:09:44 |
| 1 | Pb 220.353† | 5170.9 | 5282.6 | 792.74 ug/L | 792.74 ppb | 21:09:44 |
| 1 | S 181.975 Axial† | 2152.2 | 2149.9 | 3752.0 ug/L | 3752.0 ppb | 21:09:44 |
| 1 | Sb 206.836† | 2771.9 | 2773.6 | 1185.9 ug/L | 1185.9 ppb | 21:09:44 |
| 1 | Se 196.026† | 3020.3 | 3068.2 | 2985.8 ug/L | 2985.8 ppb | 21:09:44 |
| 1 | Si 251.611† | 1270367.6 | 1282841.0 | 47758 ug/L | 47758 ppb | 21:09:19 |
| 1 | Sn 189.927† | 4557.4 | 4601.0 | 1025.5 ug/L | 1025.5 ppb | 21:09:44 |
| 1 | Ti 334.940† | 3254765.6 | 3289153.0 | 5667.5 ug/L | 5667.5 ppb | 21:09:19 |
| 1 | Tl 190.801† | 2866.2 | 2920.6 | 1195.2 ug/L | 1195.2 ppb | 21:09:44 |
| 1 | U 409.014† | -6788.8 | -4823.1 | -166.67 ug/L | -166.67 ppb | 21:09:24 |
| 1 | V 292.402† | 158986.5 | 162040.8 | 1224.7 ug/L | 1224.7 ppb | 21:09:24 |
| 1 | Zn 213.857† | 481923.1 | 486247.9 | 5739.8 ug/L | 5739.8 ppb | 21:09:24 |
| 1 | SiO2† | 1283326.7 | 1295904.9 | 103520 ug/L | 103520 ppb | 21:10:55 |
| 2 | Sc Radial | 4251.1 | 4251.1 | 105 % | | 21:08:45 |
| 2 | Y RADIAL | 4971.1 | 4971.1 | 110.0 % | | 21:08:45 |
| 2 | Al 396.153Radial† | 88509.7 | 84066.5 | 89571 ug/L | 89571 ppb | 21:08:25 |
| 2 | Ca 317.933Radial† | 48729.8 | 46222.6 | 93913 ug/L | 93913 ppb | 21:08:25 |
| 2 | Fe 238.204 Radial† | 14767.3 | 14003.7 | 175140 ug/L | 175140 ppb | 21:08:25 |
| 2 | K 766.490 Radial† | 210443.9 | 196887.0 | 39267 ug/L | 39267 ppb | 21:08:25 |
| 2 | Mg 279.077 IEC† | 870.8 | 825.6 | 35886 ug/L | 35886 ppb | 21:08:45 |
| 2 | Na 589.592 Radial† | 27459.1 | 26516.8 | 10414 ug/L | 10414 ppb | 21:08:25 |
| 2 | Sr 421.552† | 275731.3 | 261571.4 | 2226.7 ug/L | 2226.7 ppb | 21:08:25 |
| 2 | Sc 361.383 | 826154.6 | 826154.6 | 98.369 % | | 21:09:56 |
| 2 | Y 371.029 | 758993.4 | 758993.4 | 105.99 % | | 21:09:56 |
| 2 | Ag 328.068† | 51372.2 | 51970.7 | 320.04 ug/L | 320.04 ppb | 21:09:56 |
| 2 | As 188.979† | 1796.8 | 1847.5 | 1080.0 ug/L | 1080.0 ppb | 21:10:16 |
| 2 | B 249.677† | 53701.0 | 54841.7 | 1476.4 ug/L | 1476.4 ppb | 21:09:56 |
| 2 | Ba 233.527† | 216491.6 | 220063.3 | 2071.0 ug/L | 2071.0 ppb | 21:09:56 |
| 2 | Be 313.107† | 1909841.6 | 1945776.7 | 803.02 ug/L | 803.02 ppb | 21:09:51 |
| 2 | Cd 226.502† | 41440.1 | 42293.8 | 579.25 ug/L | 579.25 ppb | 21:10:16 |
| 2 | Co 228.616† | 35184.7 | 35807.1 | 918.48 ug/L | 918.48 ppb | 21:10:16 |
| 2 | Cr 267.716† | 177878.1 | 180733.0 | 2373.4 ug/L | 2373.4 ppb | 21:09:56 |
| 2 | Cu 324.752† | 566442.8 | 569483.8 | 1855.9 ug/L | 1855.9 ppb | 21:09:56 |
| 2 | Mn 257.610† | 4040588.3 | 4107144.1 | 5404.6 ug/L | 5404.6 ppb | 21:09:51 |
| 2 | Mo 202.031† | 5461.4 | 5537.8 | 501.58 ug/L | 501.58 ppb | 21:10:16 |
| 2 | Ni 231.604† | 42884.2 | 43501.8 | 1357.8 ug/L | 1357.8 ppb | 21:09:56 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 11347.1 | 11367.0 | 7694.5 ug/L | 7694.5 ppb | 21:10:16 |
| 2 | Pb 220.353† | 5162.7 | 5307.2 | 796.49 ug/L | 796.49 ppb | 21:10:16 |
| 2 | S 181.975 Axial† | 2144.7 | 2155.8 | 3762.0 ug/L | 3762.0 ppb | 21:10:16 |
| 2 | Sb 206.836† | 2756.6 | 2775.7 | 1186.5 ug/L | 1186.5 ppb | 21:10:16 |
| 2 | Se 196.026† | 2999.6 | 3066.3 | 2997.8 ug/L | 2997.8 ppb | 21:10:16 |
| 2 | Si 251.611† | 1280312.9 | 1301019.9 | 48435 ug/L | 48435 ppb | 21:09:51 |
| 2 | Sn 189.927† | 4557.4 | 4629.9 | 1032.1 ug/L | 1032.1 ppb | 21:10:16 |
| 2 | Ti 334.940† | 3280643.0 | 3336131.8 | 5748.7 ug/L | 5748.7 ppb | 21:09:51 |
| 2 | Tl 190.801† | 2878.7 | 2951.5 | 1208.1 ug/L | 1208.1 ppb | 21:10:16 |
| 2 | U 409.014† | -6749.2 | -4826.0 | -167.23 ug/L | -167.23 ppb | 21:09:56 |
| 2 | V 292.402† | 157533.3 | 161573.4 | 1220.4 ug/L | 1220.4 ppb | 21:09:56 |
| 2 | Zn 213.857† | 477975.1 | 485295.3 | 5727.9 ug/L | 5727.9 ppb | 21:09:56 |
| 2 | SiO2† | 1268904.0 | 1289393.9 | 103000 ug/L | 103000 ppb | 21:11:01 |
| 3 | Sc Radial | 4303.7 | 4303.7 | 107 % | | 21:09:11 |
| 3 | Y RADIAL | 5039.4 | 5039.4 | 111.5 % | | 21:09:11 |
| 3 | Al 396.153Radial† | 87436.1 | 82033.9 | 87405 ug/L | 87405 ppb | 21:08:51 |
| 3 | Ca 317.933Radial† | 48097.7 | 45065.0 | 91561 ug/L | 91561 ppb | 21:08:51 |
| 3 | Fe 238.204 Radial† | 14531.6 | 13611.5 | 170230 ug/L | 170230 ppb | 21:08:51 |
| 3 | K 766.490 Radial† | 207310.6 | 191509.9 | 38194 ug/L | 38194 ppb | 21:08:51 |
| 3 | Mg 279.077 IEC† | 878.5 | 822.7 | 35766 ug/L | 35766 ppb | 21:09:11 |
| 3 | Na 589.592 Radial† | 26896.0 | 25670.7 | 10081 ug/L | 10081 ppb | 21:08:51 |
| 3 | Sr 421.552† | 271440.5 | 254352.3 | 2165.3 ug/L | 2165.3 ppb | 21:08:51 |
| 3 | Sc 361.383 | 827363.2 | 827363.2 | 98.513 % | | 21:10:28 |
| 3 | Y 371.029 | 761405.3 | 761405.3 | 106.33 % | | 21:10:28 |
| 3 | Ag 328.068† | 51467.3 | 51991.0 | 318.67 ug/L | 318.67 ppb | 21:10:28 |
| 3 | As 188.979† | 1805.7 | 1853.8 | 1081.7 ug/L | 1081.7 ppb | 21:10:48 |
| 3 | B 249.677† | 53750.3 | 54812.0 | 1476.4 ug/L | 1476.4 ppb | 21:10:28 |
| 3 | Ba 233.527† | 216246.4 | 219493.0 | 2065.6 ug/L | 2065.6 ppb | 21:10:28 |
| 3 | Be 313.107† | 1893717.5 | 1926573.2 | 795.10 ug/L | 795.10 ppb | 21:10:23 |
| 3 | Cd 226.502† | 41233.2 | 42022.2 | 575.92 ug/L | 575.92 ppb | 21:10:48 |
| 3 | Co 228.616† | 34999.8 | 35567.2 | 912.42 ug/L | 912.42 ppb | 21:10:48 |
| 3 | Cr 267.716† | 177979.0 | 180571.3 | 2370.8 ug/L | 2370.8 ppb | 21:10:28 |
| 3 | Cu 324.752† | 566287.9 | 568485.5 | 1852.4 ug/L | 1852.4 ppb | 21:10:28 |
| 3 | Mn 257.610† | 4009250.4 | 4069333.0 | 5354.5 ug/L | 5354.5 ppb | 21:10:23 |
| 3 | Mo 202.031† | 5435.4 | 5503.3 | 498.13 ug/L | 498.13 ppb | 21:10:48 |
| 3 | Ni 231.604† | 42806.2 | 43358.9 | 1353.3 ug/L | 1353.3 ppb | 21:10:28 |
| 3 | P 214.914† | 11264.7 | 11266.6 | 7626.3 ug/L | 7626.3 ppb | 21:10:48 |
| 3 | Pb 220.353† | 5156.5 | 5293.2 | 794.56 ug/L | 794.56 ppb | 21:10:48 |
| 3 | S 181.975 Axial† | 2141.4 | 2149.3 | 3750.9 ug/L | 3750.9 ppb | 21:10:48 |
| 3 | Sb 206.836† | 2776.3 | 2791.6 | 1193.4 ug/L | 1193.4 ppb | 21:10:48 |
| 3 | Se 196.026† | 2974.4 | 3036.2 | 2958.5 ug/L | 2958.5 ppb | 21:10:48 |
| 3 | Si 251.611† | 1267952.6 | 1286571.8 | 47897 ug/L | 47897 ppb | 21:10:23 |
| 3 | Sn 189.927† | 4532.8 | 4598.1 | 1024.9 ug/L | 1024.9 ppb | 21:10:48 |
| 3 | Ti 334.940† | 3252831.8 | 3303029.1 | 5691.4 ug/L | 5691.4 ppb | 21:10:23 |
| 3 | Tl 190.801† | 2861.9 | 2930.2 | 1199.2 ug/L | 1199.2 ppb | 21:10:48 |
| 3 | U 409.014† | -7180.7 | -5254.0 | -179.26 ug/L | -179.26 ppb | 21:10:28 |
| 3 | V 292.402† | 157719.5 | 161528.4 | 1220.8 ug/L | 1220.8 ppb | 21:10:28 |
| 3 | Zn 213.857† | 477635.0 | 484240.3 | 5716.1 ug/L | 5716.1 ppb | 21:10:28 |
| 3 | SiO2† | 1265687.3 | 1284244.3 | 102590 ug/L | 102590 ppb | 21:11:06 |

Mean Data: 1202054498|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|-------------|----------|-------|
| | Intensity | | Units | | Conc. Units | | |
| Sc 361.383 | 828288.8 | 98.623 | % | 0.3236 | | | 0.33% |
| Sc Radial | 4274.2 | 106 | % | 0.7 | | | 0.63% |
| Y 371.029 | 762231.0 | 106.45 | % | 0.519 | | | 0.49% |
| Y RADIAL | 5004.4 | 110.8 | % | 0.76 | | | 0.68% |
| Ag 328.068† | 52037.2 | 319.46 | ug/L | 0.712 | 319.46 ppb | 0.712 | 0.22% |
| Al 396.153Radial† | 82531.5 | 87935 | ug/L | 1445.6 | 87935 ppb | 1445.6 | 1.64% |
| As 188.979† | 1853.6 | 1082.2 | ug/L | 2.47 | 1082.2 ppb | 2.47 | 0.23% |
| B 249.677† | 54968.4 | 1480.3 | ug/L | 6.91 | 1480.3 ppb | 6.91 | 0.47% |
| Ba 233.527† | 219975.0 | 2070.1 | ug/L | 4.19 | 2070.1 ppb | 4.19 | 0.20% |
| Be 313.107† | 1930960.5 | 796.90 | ug/L | 5.446 | 796.90 ppb | 5.446 | 0.68% |
| Ca 317.933Radial† | 45430.6 | 92303 | ug/L | 1394.9 | 92303 ppb | 1394.9 | 1.51% |
| Cd 226.502† | 42132.8 | 577.29 | ug/L | 1.740 | 577.29 ppb | 1.740 | 0.30% |
| Co 228.616† | 35662.6 | 914.86 | ug/L | 3.201 | 914.86 ppb | 3.201 | 0.35% |
| Cr 267.716† | 180758.4 | 2373.4 | ug/L | 2.64 | 2373.4 ppb | 2.64 | 0.11% |
| Cu 324.752† | 570361.2 | 1858.6 | ug/L | 7.87 | 1858.6 ppb | 7.87 | 0.42% |
| Fe 238.204 Radial† | 13760.1 | 172090 | ug/L | 2659.4 | 172090 ppb | 2659.4 | 1.55% |
| K 766.490 Radial† | 193234.5 | 38538 | ug/L | 631.3 | 38538 ppb | 631.3 | 1.64% |

| | | | | | | |
|--------------------|-----------|--------------|-------|-------------|-------|-------|
| Mg 279.077 IEC† | 826.6 | 35935 ug/L | 197.2 | 35935 ppb | 197.2 | 0.55% |
| Mn 257.610† | 4077312.9 | 5365.2 ug/L | 35.34 | 5365.2 ppb | 35.34 | 0.66% |
| Mo 202.031† | 5513.9 | 499.22 ug/L | 2.046 | 499.22 ppb | 2.046 | 0.41% |
| Na 589.592 Radial† | 26069.4 | 10238 ug/L | 167.0 | 10238 ppb | 167.0 | 1.63% |
| Ni 231.604† | 43457.7 | 1356.4 ug/L | 2.67 | 1356.4 ppb | 2.67 | 0.20% |
| P 214.914† | 11312.7 | 7656.9 ug/L | 34.65 | 7656.9 ppb | 34.65 | 0.45% |
| Pb 220.353† | 5294.3 | 794.60 ug/L | 1.875 | 794.60 ppb | 1.875 | 0.24% |
| S 181.975 Axial† | 2151.7 | 3755.0 ug/L | 6.09 | 3755.0 ppb | 6.09 | 0.16% |
| Sb 206.836† | 2780.3 | 1188.6 ug/L | 4.19 | 1188.6 ppb | 4.19 | 0.35% |
| Se 196.026† | 3056.9 | 2980.7 ug/L | 20.14 | 2980.7 ppb | 20.14 | 0.68% |
| Si 251.611† | 1290144.2 | 48030 ug/L | 357.5 | 48030 ppb | 357.5 | 0.74% |
| Sn 189.927† | 4609.7 | 1027.5 ug/L | 3.99 | 1027.5 ppb | 3.99 | 0.39% |
| Sr 421.552† | 256577.9 | 2184.2 ug/L | 36.89 | 2184.2 ppb | 36.89 | 1.69% |
| Ti 334.940† | 3309438.0 | 5702.6 ug/L | 41.72 | 5702.6 ppb | 41.72 | 0.73% |
| Tl 190.801† | 2934.1 | 1200.8 ug/L | 6.62 | 1200.8 ppb | 6.62 | 0.55% |
| U 409.014† | -4967.7 | -171.05 ug/L | 7.112 | -171.05 ppb | 7.112 | 4.16% |
| V 292.402† | 161714.2 | 1221.9 ug/L | 2.36 | 1221.9 ppb | 2.36 | 0.19% |
| Zn 213.857† | 485261.2 | 5727.9 ug/L | 11.85 | 5727.9 ppb | 11.85 | 0.21% |
| SiO2† | 1289847.7 | 103040 ug/L | 466.9 | 103040 ppb | 466.9 | 0.45% |

Sequence No.: 41
 Sample ID: 247899001|958053|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 3/25/2010 21:13:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247899001|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|----------------|-----------------|-----------------------|------------------|
| 1 | Sc Radial | 4216.0 | 4216.0 | 105 % | | | 21:15:31 |
| 1 | Y RADIAL | 6799.4 | 6799.4 | 150.5 % | | | 21:15:10 |
| 1 | Al 396.153Radial† | 40309.7 | 38647.8 | 41189 ug/L | | 41189 ppb | 21:15:10 |
| 1 | Ca 317.933Radial† | 4957.2 | 4725.9 | 9601.8 ug/L | | 9601.8 ppb | 21:15:10 |
| 1 | Fe 238.204 Radial† | 7893.6 | 7543.6 | 94330 ug/L | | 94330 ppb | 21:15:10 |
| 1 | K 766.490 Radial† | 29978.5 | 25880.1 | 5161.9 ug/L | | 5161.9 ppb | 21:15:10 |
| 1 | Mg 279.077 IEC† | 184.4 | 175.7 | 7578.7 ug/L | | 7578.7 ppb | 21:15:31 |
| 1 | Na 589.592 Radial† | 2808.3 | 3147.8 | 1236.2 ug/L | | 1236.2 ppb | 21:15:10 |
| 1 | Sr 421.552† | 8733.9 | 8286.6 | 70.493 ug/L | | 70.493 ppb | 21:15:10 |
| 1 | Sc 361.383 | 869665.9 | 869665.9 | 103.55 % | | | 21:16:28 |
| 1 | Y 371.029 | 1041846.7 | 1041846.7 | 145.49 % | | | 21:16:28 |
| 1 | Ag 328.068† | -5254.6 | -5327.9 | 2.7821 ug/L | | 2.7821 ppb | 21:16:33 |
| 1 | As 188.979† | -26.2 | -4.5 | 40.914 ug/L | | 40.914 ppb | 21:16:53 |
| 1 | B 249.677† | 838.3 | 1059.7 | 13.771 ug/L | | 13.771 ppb | 21:16:33 |
| 1 | Ba 233.527† | 28212.4 | 27226.8 | 258.30 ug/L | | 258.30 ppb | 21:16:33 |
| 1 | Be 313.107† | 7530.9 | 11535.5 | 10.247 ug/L | | 10.247 ppb | 21:16:33 |
| 1 | Cd 226.502† | 553.5 | 700.9 | 0.1237 ug/L | | 0.1237 ppb | 21:16:53 |
| 1 | Co 228.616† | 512.9 | 534.2 | 7.4897 ug/L | | 7.4897 ppb | 21:16:53 |
| 1 | Cr 267.716† | 7355.1 | 7008.0 | 101.48 ug/L | | 101.48 ppb | 21:16:53 |
| 1 | Cu 324.752† | 22529.9 | 15404.9 | 55.109 ug/L | | 55.109 ppb | 21:16:33 |
| 1 | Mn 257.610† | 1842245.5 | 1778644.2 | 2342.7 ug/L | | 2342.7 ppb | 21:16:28 |
| 1 | Mo 202.031† | 8.4 | -6.1 | 6.9018 ug/L | | 6.9018 ppb | 21:16:53 |
| 1 | Ni 231.604† | 2187.4 | 2018.8 | 63.029 ug/L | | 63.029 ppb | 21:16:53 |
| 1 | P 214.914† | 957.2 | 756.2 | 467.85 ug/L | | 467.85 ppb | 21:16:53 |
| 1 | Pb 220.353† | 332.5 | 379.9 | 53.069 ug/L | | 53.069 ppb | 21:16:53 |
| 1 | S 181.975 Axial† | 102.1 | 74.2 | 122.36 ug/L | | 122.36 ppb | 21:16:53 |
| 1 | Sb 206.836† | 44.9 | 16.8 | -2.9301 ug/L | | -2.9301 ppb | 21:16:53 |
| 1 | Se 196.026† | -386.3 | -356.1 | 11.240 ug/L | | 11.240 ppb | 21:16:53 |
| 1 | Si 251.611† | 1108403.8 | 1069884.3 | 39835 ug/L | | 39835 ppb | 21:16:28 |
| 1 | Sn 189.927† | -24.2 | -26.4 | -9.5638 ug/L | | -9.5638 ppb | 21:16:53 |
| 1 | Ti 334.940† | 1473734.9 | 1424301.3 | 2451.3 ug/L | | 2451.3 ppb | 21:16:28 |
| 1 | Tl 190.801† | -108.8 | -80.0 | 0.3201 ug/L | | 0.3201 ppb | 21:16:53 |
| 1 | U 409.014† | -12607.7 | -10140.4 | -309.33 ug/L | | -309.33 ppb | 21:16:28 |
| 1 | V 292.402† | 10424.4 | 11494.7 | 71.813 ug/L | | 71.813 ppb | 21:16:33 |
| 1 | Zn 213.857† | 41715.7 | 39679.3 | 456.80 ug/L | | 456.80 ppb | 21:16:33 |
| 1 | SiO2† | 1099273.9 | 1061039.4 | 84772 ug/L | | 84772 ppb | 21:18:02 |
| 2 | Sc Radial | 4187.7 | 4187.7 | 104 % | | | 21:15:56 |
| 2 | Y RADIAL | 6673.8 | 6673.8 | 147.7 % | | | 21:15:36 |
| 2 | Al 396.153Radial† | 39620.2 | 38244.2 | 40759 ug/L | | 40759 ppb | 21:15:36 |
| 2 | Ca 317.933Radial† | 4853.6 | 4658.1 | 9464.0 ug/L | | 9464.0 ppb | 21:15:36 |
| 2 | Fe 238.204 Radial† | 7743.9 | 7450.4 | 93164 ug/L | | 93164 ppb | 21:15:36 |
| 2 | K 766.490 Radial† | 29678.9 | 25785.3 | 5143.0 ug/L | | 5143.0 ppb | 21:15:36 |
| 2 | Mg 279.077 IEC† | 178.6 | 171.3 | 7386.1 ug/L | | 7386.1 ppb | 21:15:56 |
| 2 | Na 589.592 Radial† | 2673.2 | 3035.8 | 1192.2 ug/L | | 1192.2 ppb | 21:15:36 |
| 2 | Sr 421.552† | 8487.1 | 8105.2 | 68.950 ug/L | | 68.950 ppb | 21:15:36 |
| 2 | Sc 361.383 | 859648.3 | 859648.3 | 102.36 % | | | 21:16:59 |
| 2 | Y 371.029 | 1027809.9 | 1027809.9 | 143.53 % | | | 21:16:59 |
| 2 | Ag 328.068† | -5295.4 | -5426.9 | 1.9386 ug/L | | 1.9386 ppb | 21:17:04 |
| 2 | As 188.979† | -28.9 | -7.4 | 39.093 ug/L | | 39.093 ppb | 21:17:24 |
| 2 | B 249.677† | 855.0 | 1085.5 | 14.668 ug/L | | 14.668 ppb | 21:17:04 |
| 2 | Ba 233.527† | 28465.8 | 27791.9 | 263.57 ug/L | | 263.57 ppb | 21:17:04 |
| 2 | Be 313.107† | 7702.6 | 11787.9 | 10.354 ug/L | | 10.354 ppb | 21:17:04 |
| 2 | Cd 226.502† | 552.5 | 706.2 | 0.3178 ug/L | | 0.3178 ppb | 21:17:24 |
| 2 | Co 228.616† | 504.2 | 531.5 | 7.4325 ug/L | | 7.4325 ppb | 21:17:24 |
| 2 | Cr 267.716† | 7310.3 | 7047.0 | 101.87 ug/L | | 101.87 ppb | 21:17:24 |
| 2 | Cu 324.752† | 22672.1 | 15797.3 | 56.325 ug/L | | 56.325 ppb | 21:17:04 |
| 2 | Mn 257.610† | 1825487.0 | 1783003.8 | 2348.3 ug/L | | 2348.3 ppb | 21:16:59 |
| 2 | Mo 202.031† | 6.4 | -7.9 | 6.6510 ug/L | | 6.6510 ppb | 21:17:24 |
| 2 | Ni 231.604† | 2186.3 | 2042.3 | 63.764 ug/L | | 63.764 ppb | 21:17:24 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 954.5 | 764.3 | 474.21 ug/L | 474.21 ppb | 21:17:24 |
| 2 | Pb 220.353† | 321.9 | 373.4 | 52.153 ug/L | 52.153 ppb | 21:17:24 |
| 2 | S 181.975 Axial† | 91.8 | 65.3 | 106.78 ug/L | 106.78 ppb | 21:17:24 |
| 2 | Sb 206.836† | 59.2 | 31.2 | 3.1721 ug/L | 3.1721 ppb | 21:17:24 |
| 2 | Se 196.026† | -375.0 | -349.5 | 12.902 ug/L | 12.902 ppb | 21:17:24 |
| 2 | Si 251.611† | 1097388.3 | 1071596.1 | 39899 ug/L | 39899 ppb | 21:16:59 |
| 2 | Sn 189.927† | -37.7 | -39.9 | -12.513 ug/L | -12.513 ppb | 21:17:24 |
| 2 | Ti 334.940† | 1458100.1 | 1425611.5 | 2453.5 ug/L | 2453.5 ppb | 21:16:59 |
| 2 | Tl 190.801† | -117.7 | -89.9 | -3.4645 ug/L | -3.4645 ppb | 21:17:24 |
| 2 | U 409.014† | -12759.4 | -10430.5 | -317.74 ug/L | -317.74 ppb | 21:16:59 |
| 2 | V 292.402† | 10537.9 | 11722.8 | 73.716 ug/L | 73.716 ppb | 21:17:04 |
| 2 | Zn 213.857† | 42051.0 | 40476.4 | 466.43 ug/L | 466.43 ppb | 21:17:04 |
| 2 | SiO2† | 1116787.5 | 1090520.7 | 87127 ug/L | 87127 ppb | 21:18:08 |
| 3 | Sc Radial | 4225.6 | 4225.6 | 105 % | | 21:16:21 |
| 3 | Y RADIAL | 6616.3 | 6616.3 | 146.4 % | | 21:16:01 |
| 3 | Al 396.153Radial† | 39148.4 | 37451.5 | 39914 ug/L | 39914 ppb | 21:16:01 |
| 3 | Ca 317.933Radial† | 4819.0 | 4583.1 | 9311.7 ug/L | 9311.7 ppb | 21:16:01 |
| 3 | Fe 238.204 Radial† | 7640.5 | 7284.8 | 91094 ug/L | 91094 ppb | 21:16:01 |
| 3 | K 766.490 Radial† | 29187.6 | 25059.8 | 4998.3 ug/L | 4998.3 ppb | 21:16:01 |
| 3 | Mg 279.077 IEC† | 183.8 | 174.8 | 7539.8 ug/L | 7539.8 ppb | 21:16:21 |
| 3 | Na 589.592 Radial† | 2631.9 | 2973.3 | 1167.7 ug/L | 1167.7 ppb | 21:16:01 |
| 3 | Sr 421.552† | 8374.7 | 7924.6 | 67.413 ug/L | 67.413 ppb | 21:16:01 |
| 3 | Sc 361.383 | 858006.6 | 858006.6 | 102.16 % | | 21:17:30 |
| 3 | Y 371.029 | 1028861.4 | 1028861.4 | 143.68 % | | 21:17:30 |
| 3 | Ag 328.068† | -5237.6 | -5380.2 | 1.5270 ug/L | 1.5270 ppb | 21:17:35 |
| 3 | As 188.979† | -31.3 | -9.8 | 37.264 ug/L | 37.264 ppb | 21:17:55 |
| 3 | B 249.677† | 755.5 | 989.6 | 12.369 ug/L | 12.369 ppb | 21:17:35 |
| 3 | Ba 233.527† | 28225.8 | 27610.2 | 261.80 ug/L | 261.80 ppb | 21:17:35 |
| 3 | Be 313.107† | 7387.5 | 11494.0 | 10.215 ug/L | 10.215 ppb | 21:17:35 |
| 3 | Cd 226.502† | 565.2 | 719.6 | 0.7223 ug/L | 0.7223 ppb | 21:17:55 |
| 3 | Co 228.616† | 512.5 | 540.6 | 7.7151 ug/L | 7.7151 ppb | 21:17:55 |
| 3 | Cr 267.716† | 7294.5 | 7045.2 | 101.62 ug/L | 101.62 ppb | 21:17:55 |
| 3 | Cu 324.752† | 22516.4 | 15687.3 | 55.854 ug/L | 55.854 ppb | 21:17:35 |
| 3 | Mn 257.610† | 1811029.6 | 1772264.7 | 2334.0 ug/L | 2334.0 ppb | 21:17:30 |
| 3 | Mo 202.031† | 2.8 | -11.5 | 6.1748 ug/L | 6.1748 ppb | 21:17:55 |
| 3 | Ni 231.604† | 2182.8 | 2043.0 | 63.786 ug/L | 63.786 ppb | 21:17:55 |
| 3 | P 214.914† | 948.8 | 760.5 | 473.07 ug/L | 473.07 ppb | 21:17:55 |
| 3 | Pb 220.353† | 335.2 | 386.9 | 54.308 ug/L | 54.308 ppb | 21:17:55 |
| 3 | S 181.975 Axial† | 96.1 | 69.7 | 114.67 ug/L | 114.67 ppb | 21:17:55 |
| 3 | Sb 206.836† | 46.8 | 19.1 | -1.8647 ug/L | -1.8647 ppb | 21:17:55 |
| 3 | Se 196.026† | -382.1 | -357.1 | 0.3774 ug/L | 0.3774 ppb | 21:17:55 |
| 3 | Si 251.611† | 1089800.9 | 1066220.5 | 39699 ug/L | 39699 ppb | 21:17:30 |
| 3 | Sn 189.927† | -30.5 | -32.9 | -10.867 ug/L | -10.867 ppb | 21:17:55 |
| 3 | Ti 334.940† | 1450020.9 | 1420428.8 | 2444.6 ug/L | 2444.6 ppb | 21:17:30 |
| 3 | Tl 190.801† | -115.3 | -87.7 | -2.7647 ug/L | -2.7647 ppb | 21:17:55 |
| 3 | U 409.014† | -12473.3 | -10174.2 | -309.96 ug/L | -309.96 ppb | 21:17:30 |
| 3 | V 292.402† | 10427.8 | 11634.7 | 73.361 ug/L | 73.361 ppb | 21:17:35 |
| 3 | Zn 213.857† | 41661.0 | 40173.2 | 463.14 ug/L | 463.14 ppb | 21:17:35 |
| 3 | SiO2† | 1104333.5 | 1080417.8 | 86320 ug/L | 86320 ppb | 21:18:14 |

Mean Data: 247899001|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|-------------|-----------------|--------|
| Sc 361.383 | 862440.3 | 102.69 % | | 0.751 | | | 0.73% |
| Sc Radial | 4209.8 | 104 % | | 0.5 | | | 0.47% |
| Y 371.029 | 1032839.3 | 144.24 % | | 1.092 | | | 0.76% |
| Y RADIAL | 6696.5 | 148.2 % | | 2.07 | | | 1.40% |
| Ag 328.068† | -5378.3 | 2.0826 ug/L | | 0.63983 | 2.0826 ppb | 0.63983 | 30.72% |
| Al 396.153Radial† | 38114.5 | 40621 ug/L | | 648.6 | 40621 ppb | 648.6 | 1.60% |
| As 188.979† | -7.2 | 39.090 ug/L | | 1.8250 | 39.090 ppb | 1.8250 | 4.67% |
| B 249.677† | 1045.0 | 13.603 ug/L | | 1.1584 | 13.603 ppb | 1.1584 | 8.52% |
| Ba 233.527† | 27543.0 | 261.22 ug/L | | 2.680 | 261.22 ppb | 2.680 | 1.03% |
| Be 313.107† | 11605.8 | 10.272 ug/L | | 0.0731 | 10.272 ppb | 0.0731 | 0.71% |
| Ca 317.933Radial† | 4655.7 | 9459.2 ug/L | | 145.13 | 9459.2 ppb | 145.13 | 1.53% |
| Cd 226.502† | 708.9 | 0.3879 ug/L | | 0.30540 | 0.3879 ppb | 0.30540 | 78.72% |
| Co 228.616† | 535.4 | 7.5458 ug/L | | 0.14938 | 7.5458 ppb | 0.14938 | 1.98% |
| Cr 267.716† | 7033.4 | 101.65 ug/L | | 0.198 | 101.65 ppb | 0.198 | 0.19% |
| Cu 324.752† | 15629.8 | 55.763 ug/L | | 0.6129 | 55.763 ppb | 0.6129 | 1.10% |
| Fe 238.204 Radial† | 7426.3 | 92863 ug/L | | 1639.0 | 92863 ppb | 1639.0 | 1.76% |
| K 766.490 Radial† | 25575.1 | 5101.1 ug/L | | 89.52 | 5101.1 ppb | 89.52 | 1.75% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 173.9 | 7501.5 ug/L | 101.85 | 7501.5 ppb | 101.85 | 1.36% |
| Mn 257.610† | 1777970.9 | 2341.6 ug/L | 7.21 | 2341.6 ppb | 7.21 | 0.31% |
| Mo 202.031† | -8.5 | 6.5759 ug/L | 0.36926 | 6.5759 ppb | 0.36926 | 5.62% |
| Na 589.592 Radial† | 3052.3 | 1198.7 ug/L | 34.73 | 1198.7 ppb | 34.73 | 2.90% |
| Ni 231.604† | 2034.7 | 63.526 ug/L | 0.4308 | 63.526 ppb | 0.4308 | 0.68% |
| P 214.914† | 760.3 | 471.71 ug/L | 3.391 | 471.71 ppb | 3.391 | 0.72% |
| Pb 220.353† | 380.1 | 53.177 ug/L | 1.0814 | 53.177 ppb | 1.0814 | 2.03% |
| S 181.975 Axial† | 69.7 | 114.60 ug/L | 7.792 | 114.60 ppb | 7.792 | 6.80% |
| Sb 206.836† | 22.4 | -0.5409 ug/L | 3.25937 | -0.5409 ppb | 3.25937 | 602.61% |
| Se 196.026† | -354.2 | 8.1730 ug/L | 6.80213 | 8.1730 ppb | 6.80213 | 83.23% |
| Si 251.611† | 1069233.7 | 39811 ug/L | 102.2 | 39811 ppb | 102.2 | 0.26% |
| Sn 189.927† | -33.1 | -10.981 ug/L | 1.4777 | -10.981 ppb | 1.4777 | 13.46% |
| Sr 421.552† | 8105.5 | 68.952 ug/L | 1.5402 | 68.952 ppb | 1.5402 | 2.23% |
| Ti 334.940† | 1423447.2 | 2449.8 ug/L | 4.66 | 2449.8 ppb | 4.66 | 0.19% |
| Tl 190.801† | -85.9 | -1.9697 ug/L | 2.01365 | -1.9697 ppb | 2.01365 | 102.23% |
| U 409.014† | -10248.4 | -312.34 ug/L | 4.681 | -312.34 ppb | 4.681 | 1.50% |
| V 292.402† | 11617.4 | 72.963 ug/L | 1.0123 | 72.963 ppb | 1.0123 | 1.39% |
| Zn 213.857† | 40109.6 | 462.13 ug/L | 4.899 | 462.13 ppb | 4.899 | 1.06% |
| SiO2† | 1077326.0 | 86073 ug/L | 1197.0 | 86073 ppb | 1197.0 | 1.39% |

Sequence No.: 42

Sample ID: 1202054494|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 3/25/2010 21:20:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054494|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4179.4 | 4179.4 | 104 % | | 21:22:37 |
| 1 | Y RADIAL | 7176.4 | 7176.4 | 158.8 % | | 21:22:17 |
| 1 | Al 396.153Radial† | 55494.9 | 53641.6 | 57169 ug/L | 57169 ppb | 21:22:17 |
| 1 | Ca 317.933Radial† | 7008.0 | 6746.7 | 13708 ug/L | 13708 ppb | 21:22:17 |
| 1 | Fe 238.204 Radial† | 9872.7 | 9519.8 | 119040 ug/L | 119040 ppb | 21:22:17 |
| 1 | K 766.490 Radial† | 39815.6 | 35625.6 | 7105.6 ug/L | 7105.6 ppb | 21:22:17 |
| 1 | Mg 279.077 IEC† | 259.1 | 249.3 | 10767 ug/L | 10767 ppb | 21:22:37 |
| 1 | Na 589.592 Radial† | 3023.6 | 3379.2 | 1327.1 ug/L | 1327.1 ppb | 21:22:17 |
| 1 | Sr 421.552† | 12241.7 | 11745.3 | 99.915 ug/L | 99.915 ppb | 21:22:17 |
| 1 | Sc 361.383 | 868777.9 | 868777.9 | 103.44 % | | 21:23:35 |
| 1 | Y 371.029 | 1122816.6 | 1122816.6 | 156.80 % | | 21:23:35 |
| 1 | Ag 328.068† | -6843.8 | -6869.4 | 2.7777 ug/L | 2.7777 ppb | 21:23:40 |
| 1 | As 188.979† | -37.3 | -15.2 | 45.948 ug/L | 45.948 ppb | 21:24:00 |
| 1 | B 249.677† | 870.9 | 1092.1 | 10.637 ug/L | 10.637 ppb | 21:23:40 |
| 1 | Ba 233.527† | 44214.1 | 42723.6 | 404.39 ug/L | 404.39 ppb | 21:23:40 |
| 1 | Be 313.107† | 12662.2 | 16503.4 | 13.572 ug/L | 13.572 ppb | 21:23:40 |
| 1 | Cd 226.502† | 803.3 | 942.9 | 0.9842 ug/L | 0.9842 ppb | 21:24:00 |
| 1 | Co 228.616† | 666.0 | 682.7 | 9.8413 ug/L | 9.8413 ppb | 21:24:00 |
| 1 | Cr 267.716† | 10147.4 | 9714.6 | 139.41 ug/L | 139.41 ppb | 21:23:40 |
| 1 | Cu 324.752† | 28828.0 | 21515.5 | 76.280 ug/L | 76.280 ppb | 21:23:40 |
| 1 | Mn 257.610† | 2590783.4 | 2504081.1 | 3296.8 ug/L | 3296.8 ppb | 21:23:35 |
| 1 | Mo 202.031† | -9.0 | -22.9 | 7.3905 ug/L | 7.3905 ppb | 21:24:00 |
| 1 | Ni 231.604† | 3065.2 | 2869.6 | 89.592 ug/L | 89.592 ppb | 21:24:00 |
| 1 | P 214.914† | 1099.1 | 894.3 | 547.19 ug/L | 547.19 ppb | 21:24:00 |
| 1 | Pb 220.353† | 421.2 | 466.0 | 66.117 ug/L | 66.117 ppb | 21:24:00 |
| 1 | S 181.975 Axial† | 150.0 | 120.6 | 200.67 ug/L | 200.67 ppb | 21:24:00 |
| 1 | Sb 206.836† | 52.6 | 24.2 | -2.4238 ug/L | -2.4238 ppb | 21:24:00 |
| 1 | Se 196.026† | -486.9 | -453.8 | 12.650 ug/L | 12.650 ppb | 21:24:00 |
| 1 | Si 251.611† | 1288432.9 | 1245014.2 | 46356 ug/L | 46356 ppb | 21:23:35 |
| 1 | Sn 189.927† | -53.9 | -55.2 | -16.630 ug/L | -16.630 ppb | 21:24:00 |
| 1 | Ti 334.940† | 1818689.0 | 1759226.4 | 3027.8 ug/L | 3027.8 ppb | 21:23:35 |
| 1 | Tl 190.801† | -144.6 | -114.8 | -3.8452 ug/L | -3.8452 ppb | 21:24:00 |
| 1 | U 409.014† | -15705.9 | -13147.8 | -400.72 ug/L | -400.72 ppb | 21:23:35 |
| 1 | V 292.402† | 14014.9 | 14975.9 | 94.298 ug/L | 94.298 ppb | 21:23:40 |
| 1 | Zn 213.857† | 53838.5 | 51439.7 | 592.62 ug/L | 592.62 ppb | 21:23:40 |
| 1 | SiO2† | 1296734.9 | 1253011.9 | 100110 ug/L | 100110 ppb | 21:25:08 |
| 2 | Sc Radial | 4187.3 | 4187.3 | 104 % | | 21:23:02 |
| 2 | Y RADIAL | 7227.1 | 7227.1 | 160.0 % | | 21:22:42 |
| 2 | Al 396.153Radial† | 55639.1 | 53679.0 | 57209 ug/L | 57209 ppb | 21:22:42 |
| 2 | Ca 317.933Radial† | 7047.5 | 6771.9 | 13759 ug/L | 13759 ppb | 21:22:42 |
| 2 | Fe 238.204 Radial† | 9880.0 | 9508.8 | 118900 ug/L | 118900 ppb | 21:22:42 |
| 2 | K 766.490 Radial† | 40053.9 | 35782.2 | 7136.9 ug/L | 7136.9 ppb | 21:22:42 |
| 2 | Mg 279.077 IEC† | 257.5 | 247.3 | 10680 ug/L | 10680 ppb | 21:23:02 |
| 2 | Na 589.592 Radial† | 2991.2 | 3342.4 | 1312.6 ug/L | 1312.6 ppb | 21:22:42 |
| 2 | Sr 421.552† | 12256.8 | 11737.5 | 99.848 ug/L | 99.848 ppb | 21:22:42 |
| 2 | Sc 361.383 | 871946.3 | 871946.3 | 103.82 % | | 21:24:06 |
| 2 | Y 371.029 | 1128888.0 | 1128888.0 | 157.65 % | | 21:24:06 |
| 2 | Ag 328.068† | -6887.6 | -6887.5 | 2.6410 ug/L | 2.6410 ppb | 21:24:11 |
| 2 | As 188.979† | -25.1 | -3.4 | 52.268 ug/L | 52.268 ppb | 21:24:31 |
| 2 | B 249.677† | 903.0 | 1120.0 | 11.423 ug/L | 11.423 ppb | 21:24:11 |
| 2 | Ba 233.527† | 44087.9 | 42446.8 | 401.79 ug/L | 401.79 ppb | 21:24:11 |
| 2 | Be 313.107† | 12648.1 | 16445.3 | 13.546 ug/L | 13.546 ppb | 21:24:11 |
| 2 | Cd 226.502† | 816.0 | 952.4 | 1.1312 ug/L | 1.1312 ppb | 21:24:31 |
| 2 | Co 228.616† | 691.5 | 705.0 | 10.424 ug/L | 10.424 ppb | 21:24:31 |
| 2 | Cr 267.716† | 10057.7 | 9592.6 | 137.80 ug/L | 137.80 ppb | 21:24:11 |
| 2 | Cu 324.752† | 28825.6 | 21411.9 | 75.938 ug/L | 75.938 ppb | 21:24:11 |
| 2 | Mn 257.610† | 2596890.9 | 2500863.1 | 3292.6 ug/L | 3292.6 ppb | 21:24:06 |
| 2 | Mo 202.031† | -5.1 | -19.1 | 7.7171 ug/L | 7.7171 ppb | 21:24:31 |
| 2 | Ni 231.604† | 3076.5 | 2869.6 | 89.594 ug/L | 89.594 ppb | 21:24:31 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1115.7 | 906.4 | 556.06 ug/L | 556.06 ppb | 21:24:31 |
| 2 | Pb 220.353† | 429.7 | 472.7 | 67.152 ug/L | 67.152 ppb | 21:24:31 |
| 2 | S 181.975 Axial† | 137.8 | 108.3 | 179.17 ug/L | 179.17 ppb | 21:24:31 |
| 2 | Sb 206.836† | 47.5 | 19.1 | -4.6276 ug/L | -4.6276 ppb | 21:24:31 |
| 2 | Se 196.026† | -492.2 | -457.1 | 9.6193 ug/L | 9.6193 ppb | 21:24:31 |
| 2 | Si 251.611† | 1291515.9 | 1243457.8 | 46298 ug/L | 46298 ppb | 21:24:06 |
| 2 | Sn 189.927† | -68.2 | -68.8 | -19.616 ug/L | -19.616 ppb | 21:24:31 |
| 2 | Ti 334.940† | 1824806.9 | 1758730.5 | 3027.0 ug/L | 3027.0 ppb | 21:24:06 |
| 2 | Tl 190.801† | -141.1 | -110.8 | -2.3482 ug/L | -2.3482 ppb | 21:24:31 |
| 2 | U 409.014† | -15826.4 | -13208.8 | -402.50 ug/L | -402.50 ppb | 21:24:06 |
| 2 | V 292.402† | 13949.0 | 14863.2 | 93.451 ug/L | 93.451 ppb | 21:24:11 |
| 2 | Zn 213.857† | 53649.4 | 51068.5 | 588.23 ug/L | 588.23 ppb | 21:24:11 |
| 2 | SiO2† | 1279170.8 | 1231539.1 | 98394 ug/L | 98394 ppb | 21:25:14 |
| 3 | Sc Radial | 4199.6 | 4199.6 | 104 % | | 21:23:27 |
| 3 | Y RADIAL | 7295.7 | 7295.7 | 161.5 % | | 21:23:07 |
| 3 | Al 396.153Radial† | 56069.6 | 53936.5 | 57483 ug/L | 57483 ppb | 21:23:07 |
| 3 | Ca 317.933Radial† | 7101.5 | 6804.1 | 13824 ug/L | 13824 ppb | 21:23:07 |
| 3 | Fe 238.204 Radial† | 9937.2 | 9536.0 | 119240 ug/L | 119240 ppb | 21:23:07 |
| 3 | K 766.490 Radial† | 40368.7 | 35972.4 | 7174.8 ug/L | 7174.8 ppb | 21:23:07 |
| 3 | Mg 279.077 IEC† | 263.6 | 252.5 | 10904 ug/L | 10904 ppb | 21:23:27 |
| 3 | Na 589.592 Radial† | 2928.1 | 3273.4 | 1285.5 ug/L | 1285.5 ppb | 21:23:07 |
| 3 | Sr 421.552† | 12281.4 | 11726.7 | 99.756 ug/L | 99.756 ppb | 21:23:07 |
| 3 | Sc 361.383 | 876643.7 | 876643.7 | 104.38 % | | 21:24:37 |
| 3 | Y 371.029 | 1135191.5 | 1135191.5 | 158.53 % | | 21:24:37 |
| 3 | Ag 328.068† | -6807.7 | -6775.4 | 3.3058 ug/L | 3.3058 ppb | 21:24:42 |
| 3 | As 188.979† | -25.3 | -3.4 | 52.281 ug/L | 52.281 ppb | 21:25:02 |
| 3 | B 249.677† | 974.5 | 1183.8 | 13.124 ug/L | 13.124 ppb | 21:24:42 |
| 3 | Ba 233.527† | 44349.4 | 42469.8 | 402.01 ug/L | 402.01 ppb | 21:24:42 |
| 3 | Be 313.107† | 12652.1 | 16383.8 | 13.513 ug/L | 13.513 ppb | 21:24:42 |
| 3 | Cd 226.502† | 791.5 | 924.7 | 0.7060 ug/L | 0.7060 ppb | 21:25:02 |
| 3 | Co 228.616† | 665.9 | 676.9 | 9.6959 ug/L | 9.6959 ppb | 21:25:02 |
| 3 | Cr 267.716† | 10131.4 | 9611.3 | 138.08 ug/L | 138.08 ppb | 21:24:42 |
| 3 | Cu 324.752† | 28806.3 | 21244.7 | 75.411 ug/L | 75.411 ppb | 21:24:42 |
| 3 | Mn 257.610† | 2604626.3 | 2494870.9 | 3284.7 ug/L | 3284.7 ppb | 21:24:37 |
| 3 | Mo 202.031† | -3.7 | -17.7 | 7.8618 ug/L | 7.8618 ppb | 21:25:02 |
| 3 | Ni 231.604† | 3073.9 | 2851.3 | 89.022 ug/L | 89.022 ppb | 21:25:02 |
| 3 | P 214.914† | 1126.1 | 910.6 | 559.01 ug/L | 559.01 ppb | 21:25:02 |
| 3 | Pb 220.353† | 414.3 | 455.7 | 64.613 ug/L | 64.613 ppb | 21:25:02 |
| 3 | S 181.975 Axial† | 138.0 | 107.9 | 178.30 ug/L | 178.30 ppb | 21:25:02 |
| 3 | Sb 206.836† | 53.7 | 24.8 | -2.1690 ug/L | -2.1690 ppb | 21:25:02 |
| 3 | Se 196.026† | -488.4 | -451.0 | 15.597 ug/L | 15.597 ppb | 21:25:02 |
| 3 | Si 251.611† | 1295956.5 | 1241046.4 | 46208 ug/L | 46208 ppb | 21:24:37 |
| 3 | Sn 189.927† | -58.3 | -58.9 | -17.445 ug/L | -17.445 ppb | 21:25:02 |
| 3 | Ti 334.940† | 1832426.8 | 1756612.5 | 3023.3 ug/L | 3023.3 ppb | 21:24:37 |
| 3 | Tl 190.801† | -155.9 | -124.3 | -7.6259 ug/L | -7.6259 ppb | 21:25:02 |
| 3 | U 409.014† | -15762.1 | -13065.5 | -398.32 ug/L | -398.32 ppb | 21:24:37 |
| 3 | V 292.402† | 13971.0 | 14812.3 | 93.027 ug/L | 93.027 ppb | 21:24:42 |
| 3 | Zn 213.857† | 53953.2 | 51082.6 | 588.35 ug/L | 588.35 ppb | 21:24:42 |
| 3 | SiO2† | 1289740.1 | 1235062.9 | 98675 ug/L | 98675 ppb | 21:25:20 |

Mean Data: 1202054494|958053|1

| Analyte | Mean Corrected | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|----------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 872456.0 | 103.88 % | | 0.471 | | | 0.45% |
| Sc Radial | 4188.8 | 104 % | | 0.3 | | | 0.24% |
| Y 371.029 | 1128965.3 | 157.66 % | | 0.864 | | | 0.55% |
| Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 157.7% | | | | | | | |
| Y RADIAL | 7233.1 | 160.1 % | | 1.32 | | | 0.83% |
| Ag 328.068† | -6844.1 | 2.9081 ug/L | | 0.35107 | 2.9081 ppb | 0.35107 | 12.07% |
| Al 396.153Radial† | 53752.4 | 57287 ug/L | | 171.1 | 57287 ppb | 171.1 | 0.30% |
| As 188.979† | -7.3 | 50.166 ug/L | | 3.6523 | 50.166 ppb | 3.6523 | 7.28% |
| B 249.677† | 1131.9 | 11.728 ug/L | | 1.2714 | 11.728 ppb | 1.2714 | 10.84% |
| Ba 233.527† | 42546.7 | 402.73 ug/L | | 1.441 | 402.73 ppb | 1.441 | 0.36% |
| Be 313.107† | 16444.2 | 13.544 ug/L | | 0.0295 | 13.544 ppb | 0.0295 | 0.22% |
| Ca 317.933Radial† | 6774.2 | 13764 ug/L | | 58.5 | 13764 ppb | 58.5 | 0.42% |
| Cd 226.502† | 940.0 | 0.9405 ug/L | | 0.21591 | 0.9405 ppb | 0.21591 | 22.96% |
| Co 228.616† | 688.2 | 9.9870 ug/L | | 0.38527 | 9.9870 ppb | 0.38527 | 3.86% |
| Cr 267.716† | 9639.5 | 138.43 ug/L | | 0.857 | 138.43 ppb | 0.857 | 0.62% |
| Cu 324.752† | 21390.7 | 75.876 ug/L | | 0.4376 | 75.876 ppb | 0.4376 | 0.58% |
| Fe 238.204 Radial† | 9521.5 | 119060 ug/L | | 171.4 | 119060 ppb | 171.4 | 0.14% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| K 766.490 Radial† | 35793.4 | 7139.1 ug/L | 34.66 | 7139.1 ppb | 34.66 | 0.49% |
| Mg 279.077 IEC† | 249.7 | 10783 ug/L | 113.0 | 10783 ppb | 113.0 | 1.05% |
| Mn 257.610† | 2499938.4 | 3291.4 ug/L | 6.12 | 3291.4 ppb | 6.12 | 0.19% |
| Mo 202.031† | -19.9 | 7.6565 ug/L | 0.24145 | 7.6565 ppb | 0.24145 | 3.15% |
| Na 589.592 Radial† | 3331.7 | 1308.4 ug/L | 21.10 | 1308.4 ppb | 21.10 | 1.61% |
| Ni 231.604† | 2863.5 | 89.403 ug/L | 0.3296 | 89.403 ppb | 0.3296 | 0.37% |
| P 214.914† | 903.8 | 554.09 ug/L | 6.152 | 554.09 ppb | 6.152 | 1.11% |
| Pb 220.353† | 464.8 | 65.961 ug/L | 1.2768 | 65.961 ppb | 1.2768 | 1.94% |
| S 181.975 Axial† | 112.3 | 186.05 ug/L | 12.669 | 186.05 ppb | 12.669 | 6.81% |
| Sb 206.836† | 22.7 | -3.0735 ug/L | 1.35191 | -3.0735 ppb | 1.35191 | 43.99% |
| Se 196.026† | -454.0 | 12.622 ug/L | 2.9887 | 12.622 ppb | 2.9887 | 23.68% |
| Si 251.611† | 1243172.8 | 46287 ug/L | 74.4 | 46287 ppb | 74.4 | 0.16% |
| Sn 189.927† | -61.0 | -17.897 ug/L | 1.5435 | -17.897 ppb | 1.5435 | 8.62% |
| Sr 421.552† | 11736.5 | 99.840 ug/L | 0.0798 | 99.840 ppb | 0.0798 | 0.08% |
| Ti 334.940† | 1758189.8 | 3026.1 ug/L | 2.39 | 3026.1 ppb | 2.39 | 0.08% |
| Tl 190.801† | -116.6 | -4.6064 ug/L | 2.71992 | -4.6064 ppb | 2.71992 | 59.05% |
| U 409.014† | -13140.7 | -400.51 ug/L | 2.096 | -400.51 ppb | 2.096 | 0.52% |
| V 292.402† | 14883.8 | 93.592 ug/L | 0.6474 | 93.592 ppb | 0.6474 | 0.69% |
| Zn 213.857† | 51197.0 | 589.73 ug/L | 2.500 | 589.73 ppb | 2.500 | 0.42% |
| SiO2† | 1239871.3 | 99060 ug/L | 920.1 | 99060 ppb | 920.1 | 0.93% |

Internal Standard Check failed. Continue with analysis.

Sequence No.: 43

Sample ID: 1202054496|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 3/25/2010 21:27:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054496|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4278.6 | 4278.6 | 106 % | | 21:29:44 |
| 1 | Y RADIAL | 6617.9 | 6617.9 | 146.5 % | | 21:29:44 |
| 1 | Al 396.153Radial† | 85964.2 | 81126.0 | 86439 ug/L | 86439 ppb | 21:29:24 |
| 1 | Ca 317.933Radial† | 7497.1 | 7051.0 | 14326 ug/L | 14326 ppb | 21:29:44 |
| 1 | Fe 238.204 Radial† | 9101.7 | 8572.0 | 107200 ug/L | 107200 ppb | 21:29:24 |
| 1 | K 766.490 Radial† | 70150.9 | 63334.4 | 12635 ug/L | 12635 ppb | 21:29:24 |
| 1 | Mg 279.077 IEC† | 390.7 | 367.7 | 15954 ug/L | 15954 ppb | 21:29:44 |
| 1 | Na 589.592 Radial† | 15673.4 | 15237.6 | 5984.0 ug/L | 5984.0 ppb | 21:29:24 |
| 1 | Sr 421.552† | 67180.9 | 63267.6 | 538.65 ug/L | 538.65 ppb | 21:29:24 |
| 1 | Sc 361.383 | 866315.7 | 866315.7 | 103.15 % | | 21:30:43 |
| 1 | Y 371.029 | 1058747.8 | 1058747.8 | 147.85 % | | 21:30:43 |
| 1 | Ag 328.068† | 91393.8 | 88349.0 | 480.57 ug/L | 480.57 ppb | 21:30:43 |
| 1 | As 188.979† | 850.6 | 845.5 | 508.66 ug/L | 508.66 ppb | 21:31:03 |
| 1 | B 249.677† | 18306.0 | 17997.0 | 475.92 ug/L | 475.92 ppb | 21:30:43 |
| 1 | Ba 233.527† | 84727.3 | 82120.9 | 774.38 ug/L | 774.38 ppb | 21:30:43 |
| 1 | Be 313.107† | 1224207.1 | 1191078.3 | 491.80 ug/L | 491.80 ppb | 21:30:43 |
| 1 | Cd 226.502† | 33818.3 | 32951.8 | 454.05 ug/L | 454.05 ppb | 21:31:03 |
| 1 | Co 228.616† | 18935.5 | 18396.0 | 470.82 ug/L | 470.82 ppb | 21:31:03 |
| 1 | Cr 267.716† | 46224.3 | 44717.5 | 594.30 ug/L | 594.30 ppb | 21:30:43 |
| 1 | Cu 324.752† | 187889.7 | 175798.2 | 575.62 ug/L | 575.62 ppb | 21:30:43 |
| 1 | Mn 257.610† | 2515386.0 | 2438105.0 | 3208.8 ug/L | 3208.8 ppb | 21:30:43 |
| 1 | Mo 202.031† | 5284.0 | 5108.5 | 457.61 ug/L | 457.61 ppb | 21:31:03 |
| 1 | Ni 231.604† | 17936.3 | 17294.8 | 539.74 ug/L | 539.74 ppb | 21:31:03 |
| 1 | P 214.914† | 1737.2 | 1515.9 | 915.78 ug/L | 915.78 ppb | 21:31:03 |
| 1 | Pb 220.353† | 3430.0 | 3384.1 | 515.07 ug/L | 515.07 ppb | 21:31:03 |
| 1 | S 181.975 Axial† | 2871.4 | 2759.3 | 4820.3 ug/L | 4820.3 ppb | 21:31:03 |
| 1 | Sb 206.836† | 1034.0 | 975.8 | 417.30 ug/L | 417.30 ppb | 21:31:03 |
| 1 | Se 196.026† | 186.8 | 198.0 | 509.65 ug/L | 509.65 ppb | 21:31:03 |
| 1 | Si 251.611† | 1250982.3 | 1212247.5 | 45130 ug/L | 45130 ppb | 21:30:43 |
| 1 | Sn 189.927† | 2079.5 | 2012.9 | 442.20 ug/L | 442.20 ppb | 21:31:03 |
| 1 | Ti 334.940† | 2170529.0 | 2105316.9 | 3622.5 ug/L | 3622.5 ppb | 21:30:43 |
| 1 | Tl 190.801† | 1071.2 | 1063.5 | 453.36 ug/L | 453.36 ppb | 21:31:03 |
| 1 | U 409.014† | 3503.0 | 5431.2 | 146.29 ug/L | 146.29 ppb | 21:30:43 |
| 1 | V 292.402† | 75931.2 | 75039.5 | 565.77 ug/L | 565.77 ppb | 21:30:43 |
| 1 | Zn 213.857† | 86772.3 | 83515.5 | 971.90 ug/L | 971.90 ppb | 21:30:43 |
| 1 | SiO2† | 1246034.9 | 1207423.4 | 96455 ug/L | 96455 ppb | 21:32:04 |
| 2 | Sc Radial | 4297.7 | 4297.7 | 107 % | | 21:30:09 |
| 2 | Y RADIAL | 6639.6 | 6639.6 | 147.0 % | | 21:30:09 |
| 2 | Al 396.153Radial† | 85978.7 | 80780.2 | 86070 ug/L | 86070 ppb | 21:29:49 |
| 2 | Ca 317.933Radial† | 7523.8 | 7044.8 | 14313 ug/L | 14313 ppb | 21:30:09 |
| 2 | Fe 238.204 Radial† | 9080.6 | 8514.2 | 106480 ug/L | 106480 ppb | 21:29:49 |
| 2 | K 766.490 Radial† | 69987.4 | 62887.7 | 12546 ug/L | 12546 ppb | 21:29:49 |
| 2 | Mg 279.077 IEC† | 393.4 | 368.6 | 15995 ug/L | 15995 ppb | 21:30:09 |
| 2 | Na 589.592 Radial† | 15354.7 | 14873.0 | 5840.8 ug/L | 5840.8 ppb | 21:29:49 |
| 2 | Sr 421.552† | 66796.8 | 62626.1 | 533.19 ug/L | 533.19 ppb | 21:29:49 |
| 2 | Sc 361.383 | 863966.5 | 863966.5 | 102.87 % | | 21:31:10 |
| 2 | Y 371.029 | 1056010.9 | 1056010.9 | 147.47 % | | 21:31:10 |
| 2 | Ag 328.068† | 91148.5 | 88351.4 | 480.36 ug/L | 480.36 ppb | 21:31:10 |
| 2 | As 188.979† | 855.6 | 852.5 | 512.24 ug/L | 512.24 ppb | 21:31:30 |
| 2 | B 249.677† | 18175.0 | 17917.9 | 473.86 ug/L | 473.86 ppb | 21:31:10 |
| 2 | Ba 233.527† | 84453.3 | 82077.9 | 773.95 ug/L | 773.95 ppb | 21:31:10 |
| 2 | Be 313.107† | 1220534.9 | 1190735.6 | 491.66 ug/L | 491.66 ppb | 21:31:10 |
| 2 | Cd 226.502† | 33792.5 | 33015.9 | 455.03 ug/L | 455.03 ppb | 21:31:30 |
| 2 | Co 228.616† | 18964.6 | 18474.3 | 472.88 ug/L | 472.88 ppb | 21:31:30 |
| 2 | Cr 267.716† | 46123.4 | 44741.3 | 594.53 ug/L | 594.53 ppb | 21:31:10 |
| 2 | Cu 324.752† | 187007.0 | 175435.3 | 574.40 ug/L | 574.40 ppb | 21:31:10 |
| 2 | Mn 257.610† | 2506952.9 | 2436537.7 | 3206.7 ug/L | 3206.7 ppb | 21:31:10 |
| 2 | Mo 202.031† | 5285.8 | 5124.1 | 458.93 ug/L | 458.93 ppb | 21:31:30 |
| 2 | Ni 231.604† | 17951.3 | 17356.7 | 541.67 ug/L | 541.67 ppb | 21:31:30 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 1733.2 | 1516.7 | 917.07 ug/L | 917.07 ppb | 21:31:30 |
| 2 | Pb 220.353† | 3443.1 | 3405.9 | 518.37 ug/L | 518.37 ppb | 21:31:30 |
| 2 | S 181.975 Axial† | 2867.3 | 2762.9 | 4826.6 ug/L | 4826.6 ppb | 21:31:30 |
| 2 | Sb 206.836† | 1026.6 | 971.3 | 415.50 ug/L | 415.50 ppb | 21:31:30 |
| 2 | Se 196.026† | 181.5 | 193.4 | 503.68 ug/L | 503.68 ppb | 21:31:30 |
| 2 | Si 251.611† | 1246673.8 | 1211356.8 | 45097 ug/L | 45097 ppb | 21:31:10 |
| 2 | Sn 189.927† | 2085.7 | 2024.4 | 444.79 ug/L | 444.79 ppb | 21:31:30 |
| 2 | Ti 334.940† | 2162259.9 | 2102999.9 | 3618.5 ug/L | 3618.5 ppb | 21:31:10 |
| 2 | Tl 190.801† | 1070.1 | 1065.3 | 454.00 ug/L | 454.00 ppb | 21:31:30 |
| 2 | U 409.014† | 3506.9 | 5444.2 | 146.75 ug/L | 146.75 ppb | 21:31:10 |
| 2 | V 292.402† | 75536.6 | 74856.0 | 564.49 ug/L | 564.49 ppb | 21:31:10 |
| 2 | Zn 213.857† | 86454.5 | 83435.3 | 971.04 ug/L | 971.04 ppb | 21:31:10 |
| 2 | SiO2† | 1252693.8 | 1217180.9 | 97234 ug/L | 97234 ppb | 21:32:10 |
| 3 | Sc Radial | 4206.5 | 4206.5 | 104 % | | 21:30:34 |
| 3 | Y RADIAL | 6484.0 | 6484.0 | 143.5 % | | 21:30:34 |
| 3 | Al 396.153Radial† | 85900.0 | 82453.7 | 87854 ug/L | 87854 ppb | 21:30:14 |
| 3 | Ca 317.933Radial† | 7394.5 | 7073.8 | 14372 ug/L | 14372 ppb | 21:30:34 |
| 3 | Fe 238.204 Radial† | 9066.2 | 8685.0 | 108620 ug/L | 108620 ppb | 21:30:14 |
| 3 | K 766.490 Radial† | 69921.3 | 64248.0 | 12817 ug/L | 12817 ppb | 21:30:14 |
| 3 | Mg 279.077 IEC† | 383.3 | 366.9 | 15919 ug/L | 15919 ppb | 21:30:34 |
| 3 | Na 589.592 Radial† | 15414.5 | 15242.6 | 5986.0 ug/L | 5986.0 ppb | 21:30:14 |
| 3 | Sr 421.552† | 66805.8 | 63993.6 | 544.83 ug/L | 544.83 ppb | 21:30:14 |
| 3 | Sc 361.383 | 861015.7 | 861015.7 | 102.52 % | | 21:31:38 |
| 3 | Y 371.029 | 1053282.4 | 1053282.4 | 147.09 % | | 21:31:38 |
| 3 | Ag 328.068† | 90809.7 | 88324.5 | 480.88 ug/L | 480.88 ppb | 21:31:38 |
| 3 | As 188.979† | 865.6 | 865.2 | 519.48 ug/L | 519.48 ppb | 21:31:58 |
| 3 | B 249.677† | 18165.4 | 17969.1 | 474.91 ug/L | 474.91 ppb | 21:31:38 |
| 3 | Ba 233.527† | 84069.7 | 81985.1 | 773.14 ug/L | 773.14 ppb | 21:31:38 |
| 3 | Be 313.107† | 1217619.0 | 1191957.5 | 492.15 ug/L | 492.15 ppb | 21:31:38 |
| 3 | Cd 226.502† | 33992.8 | 33323.8 | 459.15 ug/L | 459.15 ppb | 21:31:58 |
| 3 | Co 228.616† | 19054.2 | 18624.8 | 476.78 ug/L | 476.78 ppb | 21:31:58 |
| 3 | Cr 267.716† | 45891.3 | 44668.5 | 593.81 ug/L | 593.81 ppb | 21:31:38 |
| 3 | Cu 324.752† | 186375.8 | 175442.7 | 574.54 ug/L | 574.54 ppb | 21:31:38 |
| 3 | Mn 257.610† | 2496840.4 | 2435025.7 | 3204.9 ug/L | 3204.9 ppb | 21:31:38 |
| 3 | Mo 202.031† | 5314.0 | 5169.2 | 463.06 ug/L | 463.06 ppb | 21:31:58 |
| 3 | Ni 231.604† | 18016.5 | 17480.2 | 545.53 ug/L | 545.53 ppb | 21:31:58 |
| 3 | P 214.914† | 1734.3 | 1523.4 | 920.71 ug/L | 920.71 ppb | 21:31:58 |
| 3 | Pb 220.353† | 3459.6 | 3433.4 | 522.62 ug/L | 522.62 ppb | 21:31:58 |
| 3 | S 181.975 Axial† | 2895.9 | 2800.3 | 4891.9 ug/L | 4891.9 ppb | 21:31:58 |
| 3 | Sb 206.836† | 1038.3 | 986.2 | 421.92 ug/L | 421.92 ppb | 21:31:58 |
| 3 | Se 196.026† | 180.8 | 193.3 | 510.64 ug/L | 510.64 ppb | 21:31:58 |
| 3 | Si 251.611† | 1241686.4 | 1210645.3 | 45071 ug/L | 45071 ppb | 21:31:38 |
| 3 | Sn 189.927† | 2105.0 | 2050.2 | 450.40 ug/L | 450.40 ppb | 21:31:58 |
| 3 | Ti 334.940† | 2153865.4 | 2102015.3 | 3616.9 ug/L | 3616.9 ppb | 21:31:38 |
| 3 | Tl 190.801† | 1069.3 | 1068.1 | 455.02 ug/L | 455.02 ppb | 21:31:58 |
| 3 | U 409.014† | 3613.8 | 5560.2 | 149.92 ug/L | 149.92 ppb | 21:31:38 |
| 3 | V 292.402† | 75275.7 | 74853.2 | 564.22 ug/L | 564.22 ppb | 21:31:38 |
| 3 | Zn 213.857† | 86233.2 | 83507.5 | 971.56 ug/L | 971.56 ppb | 21:31:38 |
| 3 | SiO2† | 1246349.9 | 1215166.3 | 97073 ug/L | 97073 ppb | 21:32:16 |

Mean Data: 1202054496|958053|1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 863766.0 | 102.85 % | 0.316 | | | 0.31% |
| Sc Radial | 4260.9 | 106 % | 1.2 | | | 1.13% |
| Y 371.029 | 1056013.7 | 147.47 % | 0.382 | | | 0.26% |
| Y RADIAL | 6580.5 | 145.6 % | 1.87 | | | 1.28% |
| Ag 328.068† | 88341.6 | 480.60 ug/L | 0.262 | 480.60 ppb | 0.262 | 0.05% |
| Al 396.153Radial† | 81453.3 | 86788 ug/L | 941.4 | 86788 ppb | 941.4 | 1.08% |
| As 188.979† | 854.4 | 513.46 ug/L | 5.511 | 513.46 ppb | 5.511 | 1.07% |
| B 249.677† | 17961.4 | 474.89 ug/L | 1.031 | 474.89 ppb | 1.031 | 0.22% |
| Ba 233.527† | 82061.3 | 773.82 ug/L | 0.626 | 773.82 ppb | 0.626 | 0.08% |
| Be 313.107† | 1191257.1 | 491.87 ug/L | 0.253 | 491.87 ppb | 0.253 | 0.05% |
| Ca 317.933Radial† | 7056.5 | 14337 ug/L | 31.0 | 14337 ppb | 31.0 | 0.22% |
| Cd 226.502† | 33097.1 | 456.07 ug/L | 2.709 | 456.07 ppb | 2.709 | 0.59% |
| Co 228.616† | 18498.4 | 473.49 ug/L | 3.026 | 473.49 ppb | 3.026 | 0.64% |
| Cr 267.716† | 44709.1 | 594.21 ug/L | 0.369 | 594.21 ppb | 0.369 | 0.06% |
| Cu 324.752† | 175558.7 | 574.85 ug/L | 0.666 | 574.85 ppb | 0.666 | 0.12% |
| Fe 238.204 Radial† | 8590.4 | 107430 ug/L | 1086.7 | 107430 ppb | 1086.7 | 1.01% |
| K 766.490 Radial† | 63490.0 | 12666 ug/L | 138.4 | 12666 ppb | 138.4 | 1.09% |

| | | | | | | |
|--------------------|-----------|-------------|-------|------------|-------|-------|
| Mg 279.077 IEC† | 367.7 | 15956 ug/L | 37.8 | 15956 ppb | 37.8 | 0.24% |
| Mn 257.610† | 2436556.1 | 3206.8 ug/L | 1.95 | 3206.8 ppb | 1.95 | 0.06% |
| Mo 202.031† | 5133.9 | 459.87 ug/L | 2.846 | 459.87 ppb | 2.846 | 0.62% |
| Na 589.592 Radial† | 15117.7 | 5937.0 ug/L | 83.25 | 5937.0 ppb | 83.25 | 1.40% |
| Ni 231.604† | 17377.2 | 542.31 ug/L | 2.944 | 542.31 ppb | 2.944 | 0.54% |
| P 214.914† | 1518.7 | 917.85 ug/L | 2.558 | 917.85 ppb | 2.558 | 0.28% |
| Pb 220.353† | 3407.8 | 518.69 ug/L | 3.788 | 518.69 ppb | 3.788 | 0.73% |
| S 181.975 Axial† | 2774.2 | 4846.3 ug/L | 39.65 | 4846.3 ppb | 39.65 | 0.82% |
| Sb 206.836† | 977.7 | 418.24 ug/L | 3.313 | 418.24 ppb | 3.313 | 0.79% |
| Se 196.026† | 194.9 | 507.99 ug/L | 3.765 | 507.99 ppb | 3.765 | 0.74% |
| Si 251.611† | 1211416.5 | 45099 ug/L | 29.9 | 45099 ppb | 29.9 | 0.07% |
| Sn 189.927† | 2029.2 | 445.80 ug/L | 4.188 | 445.80 ppb | 4.188 | 0.94% |
| Sr 421.552† | 63295.8 | 538.89 ug/L | 5.826 | 538.89 ppb | 5.826 | 1.08% |
| Ti 334.940† | 2103444.1 | 3619.3 ug/L | 2.91 | 3619.3 ppb | 2.91 | 0.08% |
| Tl 190.801† | 1065.6 | 454.13 ug/L | 0.837 | 454.13 ppb | 0.837 | 0.18% |
| U 409.014† | 5478.5 | 147.65 ug/L | 1.978 | 147.65 ppb | 1.978 | 1.34% |
| V 292.402† | 74916.3 | 564.83 ug/L | 0.830 | 564.83 ppb | 0.830 | 0.15% |
| Zn 213.857† | 83486.1 | 971.50 ug/L | 0.431 | 971.50 ppb | 0.431 | 0.04% |
| SiO2† | 1213256.9 | 96921 ug/L | 411.5 | 96921 ppb | 411.5 | 0.42% |

Sequence No.: 44

Sample ID: 1202054497|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 3/25/2010 21:34:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054497|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4263.1 | 4263.1 | 106 % | | 21:36:40 |
| 1 | Y RADIAL | 6484.0 | 6484.0 | 143.5 % | | 21:36:40 |
| 1 | Al 396.153Radial† | 77867.3 | 73759.7 | 78588 ug/L | 78588 ppb | 21:36:20 |
| 1 | Ca 317.933Radial† | 7156.4 | 6754.4 | 13723 ug/L | 13723 ppb | 21:36:40 |
| 1 | Fe 238.204 Radial† | 8168.3 | 7720.0 | 96550 ug/L | 96550 ppb | 21:36:20 |
| 1 | K 766.490 Radial† | 66030.6 | 59676.7 | 11905 ug/L | 11905 ppb | 21:36:20 |
| 1 | Mg 279.077 IEC† | 370.9 | 350.3 | 15205 ug/L | 15205 ppb | 21:36:40 |
| 1 | Na 589.592 Radial† | 15289.2 | 14927.9 | 5862.4 ug/L | 5862.4 ppb | 21:36:20 |
| 1 | Sr 421.552† | 64640.5 | 61094.5 | 520.15 ug/L | 520.15 ppb | 21:36:20 |
| 1 | Sc 361.383 | 867006.6 | 867006.6 | 103.23 % | | 21:37:39 |
| 1 | Y 371.029 | 1041305.8 | 1041305.8 | 145.42 % | | 21:37:39 |
| 1 | Ag 328.068† | 90717.8 | 87623.5 | 473.54 ug/L | 473.54 ppb | 21:37:39 |
| 1 | As 188.979† | 838.8 | 833.4 | 497.06 ug/L | 497.06 ppb | 21:37:59 |
| 1 | B 249.677† | 18251.3 | 17929.9 | 475.82 ug/L | 475.82 ppb | 21:37:39 |
| 1 | Ba 233.527† | 81758.0 | 79179.2 | 746.45 ug/L | 746.45 ppb | 21:37:39 |
| 1 | Be 313.107† | 1209578.3 | 1175961.9 | 484.98 ug/L | 484.98 ppb | 21:37:39 |
| 1 | Cd 226.502† | 33367.3 | 32488.8 | 448.61 ug/L | 448.61 ppb | 21:37:59 |
| 1 | Co 228.616† | 18672.1 | 18126.3 | 464.58 ug/L | 464.58 ppb | 21:37:59 |
| 1 | Cr 267.716† | 44914.2 | 43412.7 | 576.15 ug/L | 576.15 ppb | 21:37:39 |
| 1 | Cu 324.752† | 184374.5 | 172247.8 | 563.52 ug/L | 563.52 ppb | 21:37:39 |
| 1 | Mn 257.610† | 1833579.8 | 1775707.0 | 2338.7 ug/L | 2338.7 ppb | 21:37:39 |
| 1 | Mo 202.031† | 5249.6 | 5071.1 | 453.49 ug/L | 453.49 ppb | 21:37:59 |
| 1 | Ni 231.604† | 17325.7 | 16689.5 | 520.85 ug/L | 520.85 ppb | 21:37:59 |
| 1 | P 214.914† | 1633.8 | 1414.5 | 851.77 ug/L | 851.77 ppb | 21:37:59 |
| 1 | Pb 220.353† | 3383.3 | 3336.1 | 507.60 ug/L | 507.60 ppb | 21:37:59 |
| 1 | S 181.975 Axial† | 2863.8 | 2749.8 | 4805.1 ug/L | 4805.1 ppb | 21:37:59 |
| 1 | Sb 206.836† | 1050.4 | 990.9 | 424.91 ug/L | 424.91 ppb | 21:37:59 |
| 1 | Se 196.026† | 219.9 | 229.9 | 500.52 ug/L | 500.52 ppb | 21:37:59 |
| 1 | Si 251.611† | 1167625.5 | 1130534.7 | 42088 ug/L | 42088 ppb | 21:37:39 |
| 1 | Sn 189.927† | 2079.2 | 2011.0 | 442.29 ug/L | 442.29 ppb | 21:37:59 |
| 1 | Ti 334.940† | 1990033.9 | 1928797.4 | 3318.8 ug/L | 3318.8 ppb | 21:37:39 |
| 1 | Tl 190.801† | 1084.5 | 1075.6 | 451.43 ug/L | 451.43 ppb | 21:37:59 |
| 1 | U 409.014† | 5024.7 | 6902.5 | 190.83 ug/L | 190.83 ppb | 21:37:39 |
| 1 | V 292.402† | 74227.9 | 73330.9 | 554.50 ug/L | 554.50 ppb | 21:37:39 |
| 1 | Zn 213.857† | 82041.5 | 78865.9 | 918.39 ug/L | 918.39 ppb | 21:37:39 |
| 1 | SiO2† | 1144091.3 | 1107709.6 | 88488 ug/L | 88488 ppb | 21:39:00 |
| 2 | Sc Radial | 4290.5 | 4290.5 | 106 % | | 21:37:06 |
| 2 | Y RADIAL | 6510.2 | 6510.2 | 144.1 % | | 21:37:06 |
| 2 | Al 396.153Radial† | 79062.9 | 74412.2 | 79284 ug/L | 79284 ppb | 21:36:45 |
| 2 | Ca 317.933Radial† | 7187.3 | 6740.1 | 13694 ug/L | 13694 ppb | 21:37:06 |
| 2 | Fe 238.204 Radial† | 8237.3 | 7735.5 | 96743 ug/L | 96743 ppb | 21:36:45 |
| 2 | K 766.490 Radial† | 67080.5 | 60263.8 | 12022 ug/L | 12022 ppb | 21:36:45 |
| 2 | Mg 279.077 IEC† | 378.1 | 354.7 | 15400 ug/L | 15400 ppb | 21:37:06 |
| 2 | Na 589.592 Radial† | 15461.0 | 14996.9 | 5889.5 ug/L | 5889.5 ppb | 21:36:45 |
| 2 | Sr 421.552† | 65446.8 | 61461.0 | 523.27 ug/L | 523.27 ppb | 21:36:45 |
| 2 | Sc 361.383 | 862723.5 | 862723.5 | 102.72 % | | 21:38:07 |
| 2 | Y 371.029 | 1037735.3 | 1037735.3 | 144.92 % | | 21:38:07 |
| 2 | Ag 328.068† | 90164.2 | 87520.8 | 473.08 ug/L | 473.08 ppb | 21:38:07 |
| 2 | As 188.979† | 844.5 | 843.0 | 502.22 ug/L | 502.22 ppb | 21:38:27 |
| 2 | B 249.677† | 18177.3 | 17945.6 | 476.24 ug/L | 476.24 ppb | 21:38:07 |
| 2 | Ba 233.527† | 81171.6 | 79001.5 | 744.79 ug/L | 744.79 ppb | 21:38:07 |
| 2 | Be 313.107† | 1203142.8 | 1175513.9 | 484.79 ug/L | 484.79 ppb | 21:38:07 |
| 2 | Cd 226.502† | 33027.1 | 32318.1 | 446.18 ug/L | 446.18 ppb | 21:38:27 |
| 2 | Co 228.616† | 18422.4 | 17973.0 | 460.59 ug/L | 460.59 ppb | 21:38:27 |
| 2 | Cr 267.716† | 44635.4 | 43357.3 | 575.44 ug/L | 575.44 ppb | 21:38:07 |
| 2 | Cu 324.752† | 183315.8 | 172103.9 | 563.06 ug/L | 563.06 ppb | 21:38:07 |
| 2 | Mn 257.610† | 1819579.7 | 1770895.9 | 2332.4 ug/L | 2332.4 ppb | 21:38:07 |
| 2 | Mo 202.031† | 5214.4 | 5062.0 | 452.71 ug/L | 452.71 ppb | 21:38:27 |
| 2 | Ni 231.604† | 17165.4 | 16616.8 | 518.58 ug/L | 518.58 ppb | 21:38:27 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 1614.5 | 1403.5 | 843.94 ug/L | 843.94 ppb | 21:38:27 |
| 2 | Pb 220.353† | 3344.3 | 3314.4 | 504.46 ug/L | 504.46 ppb | 21:38:27 |
| 2 | S 181.975 Axial† | 2814.0 | 2715.0 | 4744.0 ug/L | 4744.0 ppb | 21:38:27 |
| 2 | Sb 206.836† | 1020.8 | 967.1 | 414.76 ug/L | 414.76 ppb | 21:38:27 |
| 2 | Se 196.026† | 209.4 | 220.8 | 494.04 ug/L | 494.04 ppb | 21:38:27 |
| 2 | Si 251.611† | 1159207.3 | 1127954.9 | 41992 ug/L | 41992 ppb | 21:38:07 |
| 2 | Sn 189.927† | 2053.4 | 1995.9 | 438.93 ug/L | 438.93 ppb | 21:38:27 |
| 2 | Ti 334.940† | 1978246.7 | 1926892.9 | 3315.5 ug/L | 3315.5 ppb | 21:38:07 |
| 2 | Tl 190.801† | 1085.7 | 1082.0 | 453.84 ug/L | 453.84 ppb | 21:38:27 |
| 2 | U 409.014† | 5058.5 | 6959.6 | 192.49 ug/L | 192.49 ppb | 21:38:07 |
| 2 | V 292.402† | 73814.9 | 73285.8 | 554.12 ug/L | 554.12 ppb | 21:38:07 |
| 2 | Zn 213.857† | 81361.9 | 78598.8 | 915.20 ug/L | 915.20 ppb | 21:38:07 |
| 2 | SiO2† | 1154044.5 | 1122901.0 | 89702 ug/L | 89702 ppb | 21:39:06 |
| 3 | Sc Radial | 4262.5 | 4262.5 | 106 % | | 21:37:31 |
| 3 | Y RADIAL | 6480.0 | 6480.0 | 143.4 % | | 21:37:31 |
| 3 | Al 396.153Radial† | 80353.9 | 76122.5 | 81106 ug/L | 81106 ppb | 21:37:11 |
| 3 | Ca 317.933Radial† | 7182.2 | 6779.7 | 13775 ug/L | 13775 ppb | 21:37:31 |
| 3 | Fe 238.204 Radial† | 8359.5 | 7902.0 | 98825 ug/L | 98825 ppb | 21:37:11 |
| 3 | K 766.490 Radial† | 67870.7 | 61426.2 | 12254 ug/L | 12254 ppb | 21:37:11 |
| 3 | Mg 279.077 IEC† | 375.6 | 354.8 | 15399 ug/L | 15399 ppb | 21:37:31 |
| 3 | Na 589.592 Radial† | 15712.0 | 15329.9 | 6020.3 ug/L | 6020.3 ppb | 21:37:11 |
| 3 | Sr 421.552† | 66653.3 | 63007.3 | 536.44 ug/L | 536.44 ppb | 21:37:11 |
| 3 | Sc 361.383 | 864644.6 | 864644.6 | 102.95 % | | 21:38:34 |
| 3 | Y 371.029 | 1040543.8 | 1040543.8 | 145.31 % | | 21:38:34 |
| 3 | Ag 328.068† | 90332.2 | 87489.0 | 473.57 ug/L | 473.57 ppb | 21:38:34 |
| 3 | As 188.979† | 845.4 | 842.0 | 502.14 ug/L | 502.14 ppb | 21:38:54 |
| 3 | B 249.677† | 18156.2 | 17885.8 | 474.24 ug/L | 474.24 ppb | 21:38:34 |
| 3 | Ba 233.527† | 81345.9 | 78995.2 | 744.79 ug/L | 744.79 ppb | 21:38:34 |
| 3 | Be 313.107† | 1207408.3 | 1177054.8 | 485.41 ug/L | 485.41 ppb | 21:38:34 |
| 3 | Cd 226.502† | 33314.9 | 32526.2 | 448.91 ug/L | 448.91 ppb | 21:38:54 |
| 3 | Co 228.616† | 18598.4 | 18104.1 | 463.98 ug/L | 463.98 ppb | 21:38:54 |
| 3 | Cr 267.716† | 44811.0 | 43431.3 | 576.63 ug/L | 576.63 ppb | 21:38:34 |
| 3 | Cu 324.752† | 183106.7 | 171504.3 | 561.23 ug/L | 561.23 ppb | 21:38:34 |
| 3 | Mn 257.610† | 1824639.6 | 1771875.1 | 2333.9 ug/L | 2333.9 ppb | 21:38:34 |
| 3 | Mo 202.031† | 5241.9 | 5077.4 | 454.22 ug/L | 454.22 ppb | 21:38:54 |
| 3 | Ni 231.604† | 17283.2 | 16694.1 | 520.99 ug/L | 520.99 ppb | 21:38:54 |
| 3 | P 214.914† | 1632.9 | 1417.9 | 853.48 ug/L | 853.48 ppb | 21:38:54 |
| 3 | Pb 220.353† | 3326.8 | 3290.3 | 500.93 ug/L | 500.93 ppb | 21:38:54 |
| 3 | S 181.975 Axial† | 2821.6 | 2716.3 | 4746.0 ug/L | 4746.0 ppb | 21:38:54 |
| 3 | Sb 206.836† | 1043.4 | 986.9 | 423.13 ug/L | 423.13 ppb | 21:38:54 |
| 3 | Se 196.026† | 231.5 | 241.8 | 517.66 ug/L | 517.66 ppb | 21:38:54 |
| 3 | Si 251.611† | 1160125.6 | 1126339.5 | 41932 ug/L | 41932 ppb | 21:38:34 |
| 3 | Sn 189.927† | 2067.1 | 2004.8 | 440.79 ug/L | 440.79 ppb | 21:38:54 |
| 3 | Ti 334.940† | 1980759.0 | 1925054.3 | 3312.4 ug/L | 3312.4 ppb | 21:38:34 |
| 3 | Tl 190.801† | 1081.1 | 1075.2 | 451.18 ug/L | 451.18 ppb | 21:38:54 |
| 3 | U 409.014† | 4869.2 | 6764.8 | 186.52 ug/L | 186.52 ppb | 21:38:34 |
| 3 | V 292.402† | 73938.1 | 73245.9 | 553.52 ug/L | 553.52 ppb | 21:38:34 |
| 3 | Zn 213.857† | 81545.8 | 78601.4 | 914.91 ug/L | 914.91 ppb | 21:38:34 |
| 3 | SiO2† | 1157621.7 | 1123879.5 | 89780 ug/L | 89780 ppb | 21:39:12 |

Mean Data: 1202054497|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|-------------|----------|-------|
| Sc 361.383 | 864791.6 | 102.97 % | | 0.255 | | | 0.25% |
| Sc Radial | 4272.0 | 106 % | | 0.4 | | | 0.37% |
| Y 371.029 | 1039861.6 | 145.22 % | | 0.263 | | | 0.18% |
| Y RADIAL | 6491.4 | 143.7 % | | 0.36 | | | 0.25% |
| Ag 328.068† | 87544.4 | 473.40 ug/L | | 0.273 | 473.40 ppb | 0.273 | 0.06% |
| Al 396.153Radial† | 74764.8 | 79660 ug/L | | 1300.4 | 79660 ppb | 1300.4 | 1.63% |
| As 188.979† | 839.4 | 500.47 ug/L | | 2.958 | 500.47 ppb | 2.958 | 0.59% |
| B 249.677† | 17920.5 | 475.43 ug/L | | 1.051 | 475.43 ppb | 1.051 | 0.22% |
| Ba 233.527† | 79058.6 | 745.34 ug/L | | 0.958 | 745.34 ppb | 0.958 | 0.13% |
| Be 313.107† | 1176176.9 | 485.06 ug/L | | 0.317 | 485.06 ppb | 0.317 | 0.07% |
| Ca 317.933Radial† | 6758.1 | 13731 ug/L | | 40.7 | 13731 ppb | 40.7 | 0.30% |
| Cd 226.502† | 32444.4 | 447.90 ug/L | | 1.494 | 447.90 ppb | 1.494 | 0.33% |
| Co 228.616† | 18067.8 | 463.05 ug/L | | 2.152 | 463.05 ppb | 2.152 | 0.46% |
| Cr 267.716† | 43400.4 | 576.07 ug/L | | 0.596 | 576.07 ppb | 0.596 | 0.10% |
| Cu 324.752† | 171952.0 | 562.60 ug/L | | 1.211 | 562.60 ppb | 1.211 | 0.22% |
| Fe 238.204 Radial† | 7785.8 | 97373 ug/L | | 1261.5 | 97373 ppb | 1261.5 | 1.30% |
| K 766.490 Radial† | 60455.6 | 12061 ug/L | | 177.7 | 12061 ppb | 177.7 | 1.47% |

| | | | | | | |
|--------------------|-----------|-------------|--------|------------|--------|-------|
| Mg 279.077 IEC† | 353.3 | 15335 ug/L | 112.2 | 15335 ppb | 112.2 | 0.73% |
| Mn 257.610† | 1772826.0 | 2335.0 ug/L | 3.29 | 2335.0 ppb | 3.29 | 0.14% |
| Mo 202.031† | 5070.2 | 453.47 ug/L | 0.759 | 453.47 ppb | 0.759 | 0.17% |
| Na 589.592 Radial† | 15084.9 | 5924.1 ug/L | 84.41 | 5924.1 ppb | 84.41 | 1.42% |
| Ni 231.604† | 16666.8 | 520.14 ug/L | 1.354 | 520.14 ppb | 1.354 | 0.26% |
| P 214.914† | 1411.9 | 849.73 ug/L | 5.086 | 849.73 ppb | 5.086 | 0.60% |
| Pb 220.353† | 3313.6 | 504.33 ug/L | 3.339 | 504.33 ppb | 3.339 | 0.66% |
| S 181.975 Axial† | 2727.0 | 4765.0 ug/L | 34.69 | 4765.0 ppb | 34.69 | 0.73% |
| Sb 206.836† | 981.6 | 420.93 ug/L | 5.422 | 420.93 ppb | 5.422 | 1.29% |
| Se 196.026† | 230.8 | 504.07 ug/L | 12.204 | 504.07 ppb | 12.204 | 2.42% |
| Si 251.611† | 1128276.4 | 42004 ug/L | 78.8 | 42004 ppb | 78.8 | 0.19% |
| Sn 189.927† | 2003.9 | 440.67 ug/L | 1.682 | 440.67 ppb | 1.682 | 0.38% |
| Sr 421.552† | 61854.3 | 526.62 ug/L | 8.645 | 526.62 ppb | 8.645 | 1.64% |
| Ti 334.940† | 1926914.9 | 3315.6 ug/L | 3.22 | 3315.6 ppb | 3.22 | 0.10% |
| Tl 190.801† | 1077.6 | 452.15 ug/L | 1.469 | 452.15 ppb | 1.469 | 0.32% |
| U 409.014† | 6875.7 | 189.95 ug/L | 3.083 | 189.95 ppb | 3.083 | 1.62% |
| V 292.402† | 73287.5 | 554.05 ug/L | 0.492 | 554.05 ppb | 0.492 | 0.09% |
| Zn 213.857† | 78688.7 | 916.17 ug/L | 1.930 | 916.17 ppb | 1.930 | 0.21% |
| Sio2† | 1118163.4 | 89324 ug/L | 724.4 | 89324 ppb | 724.4 | 0.81% |

Sequence No.: 45

Sample ID: 1202054495|958053|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 3/25/2010 21:41:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054495|958053|5

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4211.6 | 4211.6 | 104 % | | 21:43:17 |
| 1 | Y RADIAL | 4923.5 | 4923.5 | 109.0 % | | 21:43:17 |
| 1 | Al 396.153Radial† | 7593.8 | 7353.0 | 7836.5 ug/L | 7836.5 ppb | 21:43:17 |
| 1 | Ca 317.933Radial† | 978.3 | 919.8 | 1868.8 ug/L | 1868.8 ppb | 21:43:37 |
| 1 | Fe 238.204 Radial† | 1537.1 | 1463.3 | 18298 ug/L | 18298 ppb | 21:43:37 |
| 1 | K 766.490 Radial† | 7820.9 | 4687.6 | 934.87 ug/L | 934.87 ppb | 21:43:17 |
| 1 | Mg 279.077 IEC† | 37.4 | 35.1 | 1514.0 ug/L | 1514.0 ppb | 21:43:37 |
| 1 | Na 589.592 Radial† | 232.1 | 683.2 | 268.30 ug/L | 268.30 ppb | 21:43:17 |
| 1 | Sr 421.552† | 1660.7 | 1520.6 | 12.935 ug/L | 12.935 ppb | 21:43:17 |
| 1 | Sc 361.383 | 840553.7 | 840553.7 | 100.08 % | | 21:44:34 |
| 1 | Y 371.029 | 774468.5 | 774468.5 | 108.15 % | | 21:44:34 |
| 1 | Ag 328.068† | -880.3 | -1133.0 | 0.0439 ug/L | 0.0439 ppb | 21:44:34 |
| 1 | As 188.979† | -27.2 | -6.4 | 5.2760 ug/L | 5.2760 ppb | 21:44:54 |
| 1 | B 249.677† | -20.5 | 229.6 | 3.3331 ug/L | 3.3331 ppb | 21:44:34 |
| 1 | Ba 233.527† | 5785.8 | 5762.5 | 54.619 ug/L | 54.619 ppb | 21:44:34 |
| 1 | Be 313.107† | -2042.5 | 2221.9 | 2.0575 ug/L | 2.0575 ppb | 21:44:34 |
| 1 | Cd 226.502† | -19.1 | 147.3 | 0.1856 ug/L | 0.1856 ppb | 21:44:54 |
| 1 | Co 228.616† | 67.2 | 106.1 | 1.4462 ug/L | 1.4462 ppb | 21:44:54 |
| 1 | Cr 267.716† | 1552.6 | 1456.3 | 20.948 ug/L | 20.948 ppb | 21:44:54 |
| 1 | Cu 324.752† | 9727.6 | 3366.8 | 11.916 ug/L | 11.916 ppb | 21:44:34 |
| 1 | Mn 257.610† | 378210.8 | 377444.1 | 496.97 ug/L | 496.97 ppb | 21:44:34 |
| 1 | Mo 202.031† | 4.3 | -9.9 | 0.5740 ug/L | 0.5740 ppb | 21:44:54 |
| 1 | Ni 231.604† | 517.5 | 423.5 | 13.221 ug/L | 13.221 ppb | 21:44:54 |
| 1 | P 214.914† | 339.3 | 170.8 | 107.77 ug/L | 107.77 ppb | 21:44:54 |
| 1 | Pb 220.353† | 18.9 | 77.7 | 10.862 ug/L | 10.862 ppb | 21:44:54 |
| 1 | S 181.975 Axial† | 44.3 | 19.9 | 33.441 ug/L | 33.441 ppb | 21:44:54 |
| 1 | Sb 206.836† | 30.5 | 3.8 | -0.5046 ug/L | -0.5046 ppb | 21:44:54 |
| 1 | Se 196.026† | -96.1 | -79.1 | -5.8428 ug/L | -5.8428 ppb | 21:44:54 |
| 1 | Si 251.611† | 224118.9 | 223407.3 | 8318.2 ug/L | 8318.2 ppb | 21:44:34 |
| 1 | Sn 189.927† | -17.1 | -20.2 | -5.1830 ug/L | -5.1830 ppb | 21:44:54 |
| 1 | Ti 334.940† | 294964.8 | 295803.1 | 509.07 ug/L | 509.07 ppb | 21:44:34 |
| 1 | Tl 190.801† | -39.7 | -14.6 | 0.9032 ug/L | 0.9032 ppb | 21:44:54 |
| 1 | U 409.014† | -3938.0 | -1899.5 | -58.021 ug/L | -58.021 ppb | 21:44:34 |
| 1 | V 292.402† | 1044.6 | 2471.3 | 15.750 ug/L | 15.750 ppb | 21:44:34 |
| 1 | Zn 213.857† | 9003.6 | 8389.7 | 96.831 ug/L | 96.831 ppb | 21:44:34 |
| 1 | SiO2† | 221790.2 | 221052.5 | 17661 ug/L | 17661 ppb | 21:45:51 |
| 2 | Sc Radial | 4185.0 | 4185.0 | 104 % | | 21:43:42 |
| 2 | Y RADIAL | 4937.9 | 4937.9 | 109.3 % | | 21:43:42 |
| 2 | Al 396.153Radial† | 7571.5 | 7377.7 | 7862.9 ug/L | 7862.9 ppb | 21:43:42 |
| 2 | Ca 317.933Radial† | 987.0 | 934.2 | 1898.1 ug/L | 1898.1 ppb | 21:44:02 |
| 2 | Fe 238.204 Radial† | 1551.1 | 1486.1 | 18583 ug/L | 18583 ppb | 21:44:02 |
| 2 | K 766.490 Radial† | 7941.9 | 4851.8 | 967.65 ug/L | 967.65 ppb | 21:43:42 |
| 2 | Mg 279.077 IEC† | 37.5 | 35.5 | 1529.9 ug/L | 1529.9 ppb | 21:44:02 |
| 2 | Na 589.592 Radial† | 175.5 | 630.0 | 247.42 ug/L | 247.42 ppb | 21:43:42 |
| 2 | Sr 421.552† | 1659.8 | 1529.8 | 13.013 ug/L | 13.013 ppb | 21:43:42 |
| 2 | Sc 361.383 | 834724.5 | 834724.5 | 99.389 % | | 21:44:59 |
| 2 | Y 371.029 | 769492.8 | 769492.8 | 107.46 % | | 21:44:59 |
| 2 | Ag 328.068† | -988.6 | -1248.1 | -0.4497 ug/L | -0.4497 ppb | 21:44:59 |
| 2 | As 188.979† | -26.8 | -6.1 | 5.4967 ug/L | 5.4967 ppb | 21:45:20 |
| 2 | B 249.677† | -89.7 | 160.0 | 1.3710 ug/L | 1.3710 ppb | 21:44:59 |
| 2 | Ba 233.527† | 5744.1 | 5760.9 | 54.612 ug/L | 54.612 ppb | 21:44:59 |
| 2 | Be 313.107† | -2077.6 | 2172.3 | 2.0370 ug/L | 2.0370 ppb | 21:44:59 |
| 2 | Cd 226.502† | -16.5 | 149.9 | 0.1912 ug/L | 0.1912 ppb | 21:45:20 |
| 2 | Co 228.616† | 67.4 | 106.8 | 1.4617 ug/L | 1.4617 ppb | 21:45:20 |
| 2 | Cr 267.716† | 1551.6 | 1466.2 | 21.106 ug/L | 21.106 ppb | 21:45:20 |
| 2 | Cu 324.752† | 9681.5 | 3388.3 | 12.001 ug/L | 12.001 ppb | 21:44:59 |
| 2 | Mn 257.610† | 376081.5 | 377940.7 | 497.65 ug/L | 497.65 ppb | 21:44:59 |
| 2 | Mo 202.031† | 11.2 | -3.0 | 1.2048 ug/L | 1.2048 ppb | 21:45:20 |
| 2 | Ni 231.604† | 498.8 | 408.3 | 12.746 ug/L | 12.746 ppb | 21:45:20 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 350.6 | 184.6 | 117.45 ug/L | 117.45 ppb | 21:45:20 |
| 2 | Pb 220.353† | 18.8 | 77.8 | 10.840 ug/L | 10.840 ppb | 21:45:20 |
| 2 | S 181.975 Axial† | 40.5 | 16.4 | 27.269 ug/L | 27.269 ppb | 21:45:20 |
| 2 | Sb 206.836† | 25.4 | -1.1 | -2.5480 ug/L | -2.5480 ppb | 21:45:20 |
| 2 | Se 196.026† | -85.3 | -68.9 | 3.1160 ug/L | 3.1160 ppb | 21:45:20 |
| 2 | Si 251.611† | 222798.1 | 223642.2 | 8326.9 ug/L | 8326.9 ppb | 21:44:59 |
| 2 | Sn 189.927† | -7.0 | -10.2 | -2.9792 ug/L | -2.9792 ppb | 21:45:20 |
| 2 | Ti 334.940† | 292814.1 | 295697.3 | 508.89 ug/L | 508.89 ppb | 21:44:59 |
| 2 | Tl 190.801† | -52.9 | -28.1 | -4.3304 ug/L | -4.3304 ppb | 21:45:20 |
| 2 | U 409.014† | -3901.5 | -1890.4 | -57.784 ug/L | -57.784 ppb | 21:44:59 |
| 2 | V 292.402† | 1003.1 | 2436.8 | 15.453 ug/L | 15.453 ppb | 21:44:59 |
| 2 | Zn 213.857† | 8935.0 | 8383.5 | 96.717 ug/L | 96.717 ppb | 21:44:59 |
| 2 | SiO2† | 222780.5 | 223596.5 | 17864 ug/L | 17864 ppb | 21:45:56 |
| 3 | Sc Radial | 4191.2 | 4191.2 | 104 % | | 21:44:07 |
| 3 | Y RADIAL | 4880.8 | 4880.8 | 108.0 % | | 21:44:07 |
| 3 | Al 396.153Radial† | 7541.2 | 7337.7 | 7820.2 ug/L | 7820.2 ppb | 21:44:07 |
| 3 | Ca 317.933Radial† | 976.4 | 922.6 | 1874.4 ug/L | 1874.4 ppb | 21:44:27 |
| 3 | Fe 238.204 Radial† | 1529.2 | 1462.8 | 18291 ug/L | 18291 ppb | 21:44:27 |
| 3 | K 766.490 Radial† | 7912.1 | 4811.8 | 959.67 ug/L | 959.67 ppb | 21:44:07 |
| 3 | Mg 279.077 IEC† | 37.8 | 35.7 | 1539.6 ug/L | 1539.6 ppb | 21:44:27 |
| 3 | Na 589.592 Radial† | 201.2 | 654.5 | 257.03 ug/L | 257.03 ppb | 21:44:07 |
| 3 | Sr 421.552† | 1691.0 | 1557.4 | 13.249 ug/L | 13.249 ppb | 21:44:07 |
| 3 | Sc 361.383 | 835843.4 | 835843.4 | 99.522 % | | 21:45:25 |
| 3 | Y 371.029 | 772324.7 | 772324.7 | 107.86 % | | 21:45:25 |
| 3 | Ag 328.068† | -995.0 | -1253.2 | -0.5619 ug/L | -0.5619 ppb | 21:45:25 |
| 3 | As 188.979† | -32.8 | -12.2 | 2.1638 ug/L | 2.1638 ppb | 21:45:45 |
| 3 | B 249.677† | -85.8 | 163.9 | 1.5288 ug/L | 1.5288 ppb | 21:45:25 |
| 3 | Ba 233.527† | 5737.3 | 5746.4 | 54.469 ug/L | 54.469 ppb | 21:45:25 |
| 3 | Be 313.107† | -2084.8 | 2167.9 | 2.0344 ug/L | 2.0344 ppb | 21:45:25 |
| 3 | Cd 226.502† | -18.1 | 148.2 | 0.1984 ug/L | 0.1984 ppb | 21:45:45 |
| 3 | Co 228.616† | 55.7 | 94.9 | 1.1590 ug/L | 1.1590 ppb | 21:45:45 |
| 3 | Cr 267.716† | 1547.0 | 1459.5 | 20.989 ug/L | 20.989 ppb | 21:45:45 |
| 3 | Cu 324.752† | 9528.1 | 3221.1 | 11.444 ug/L | 11.444 ppb | 21:45:25 |
| 3 | Mn 257.610† | 376416.5 | 377770.8 | 497.40 ug/L | 497.40 ppb | 21:45:25 |
| 3 | Mo 202.031† | 21.4 | 7.3 | 2.0882 ug/L | 2.0882 ppb | 21:45:45 |
| 3 | Ni 231.604† | 491.4 | 400.1 | 12.492 ug/L | 12.492 ppb | 21:45:45 |
| 3 | P 214.914† | 345.2 | 178.6 | 113.53 ug/L | 113.53 ppb | 21:45:45 |
| 3 | Pb 220.353† | 21.3 | 80.2 | 11.246 ug/L | 11.246 ppb | 21:45:45 |
| 3 | S 181.975 Axial† | 41.6 | 17.4 | 29.046 ug/L | 29.046 ppb | 21:45:45 |
| 3 | Sb 206.836† | 34.3 | 7.8 | 1.2730 ug/L | 1.2730 ppb | 21:45:45 |
| 3 | Se 196.026† | -83.9 | -67.3 | 3.5000 ug/L | 3.5000 ppb | 21:45:45 |
| 3 | Si 251.611† | 222897.2 | 223441.6 | 8319.4 ug/L | 8319.4 ppb | 21:45:25 |
| 3 | Sn 189.927† | -6.5 | -9.6 | -2.8524 ug/L | -2.8524 ppb | 21:45:45 |
| 3 | Ti 334.940† | 293014.4 | 295504.2 | 508.56 ug/L | 508.56 ppb | 21:45:25 |
| 3 | Tl 190.801† | -45.3 | -20.5 | -1.3785 ug/L | -1.3785 ppb | 21:45:45 |
| 3 | U 409.014† | -3934.0 | -1917.7 | -58.555 ug/L | -58.555 ppb | 21:45:25 |
| 3 | V 292.402† | 1103.4 | 2536.2 | 16.273 ug/L | 16.273 ppb | 21:45:25 |
| 3 | Zn 213.857† | 8967.7 | 8404.4 | 97.011 ug/L | 97.011 ppb | 21:45:25 |
| 3 | SiO2† | 219455.6 | 219955.7 | 17573 ug/L | 17573 ppb | 21:46:01 |

Mean Data: 1202054495|958053|5

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample Conc. | Units | Std.Dev. | RSD |
|--------------------|----------------|---------|--------|----------|--------------|-------|----------|--------|
| Sc 361.383 | 837040.6 | 99.665 | % | 0.3683 | | | | 0.37% |
| Sc Radial | 4195.9 | 104 | % | 0.3 | | | | 0.33% |
| Y 371.029 | 772095.3 | 107.82 | % | 0.349 | | | | 0.32% |
| Y RADIAL | 4914.0 | 108.8 | % | 0.66 | | | | 0.60% |
| Ag 328.068† | -1211.4 | -0.3225 | ug/L | 0.32229 | -0.3225 | ppb | 0.32229 | 99.92% |
| Al 396.153Radial† | 7356.1 | 7839.9 | ug/L | 21.52 | 7839.9 | ppb | 21.52 | 0.27% |
| As 188.979† | -8.2 | 4.3122 | ug/L | 1.86382 | 4.3122 | ppb | 1.86382 | 43.22% |
| B 249.677† | 184.5 | 2.0777 | ug/L | 1.09012 | 2.0777 | ppb | 1.09012 | 52.47% |
| Ba 233.527† | 5756.6 | 54.567 | ug/L | 0.0848 | 54.567 | ppb | 0.0848 | 0.16% |
| Be 313.107† | 2187.4 | 2.0430 | ug/L | 0.01265 | 2.0430 | ppb | 0.01265 | 0.62% |
| Ca 317.933Radial† | 925.5 | 1880.4 | ug/L | 15.55 | 1880.4 | ppb | 15.55 | 0.83% |
| Cd 226.502† | 148.5 | 0.1917 | ug/L | 0.00645 | 0.1917 | ppb | 0.00645 | 3.36% |
| Co 228.616† | 102.6 | 1.3557 | ug/L | 0.17048 | 1.3557 | ppb | 0.17048 | 12.58% |
| Cr 267.716† | 1460.7 | 21.014 | ug/L | 0.0822 | 21.014 | ppb | 0.0822 | 0.39% |
| Cu 324.752† | 3325.4 | 11.787 | ug/L | 0.3002 | 11.787 | ppb | 0.3002 | 2.55% |
| Fe 238.204 Radial† | 1470.7 | 18391 | ug/L | 166.9 | 18391 | ppb | 166.9 | 0.91% |
| K 766.490 Radial† | 4783.7 | 954.06 | ug/L | 17.095 | 954.06 | ppb | 17.095 | 1.79% |

| | | | | | | |
|--------------------|----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 35.4 | 1527.8 ug/L | 12.92 | 1527.8 ppb | 12.92 | 0.85% |
| Mn 257.610† | 377718.6 | 497.34 ug/L | 0.343 | 497.34 ppb | 0.343 | 0.07% |
| Mo 202.031† | -1.8 | 1.2890 ug/L | 0.76061 | 1.2890 ppb | 0.76061 | 59.01% |
| Na 589.592 Radial† | 655.9 | 257.58 ug/L | 10.451 | 257.58 ppb | 10.451 | 4.06% |
| Ni 231.604† | 410.6 | 12.820 ug/L | 0.3702 | 12.820 ppb | 0.3702 | 2.89% |
| P 214.914† | 178.0 | 112.92 ug/L | 4.873 | 112.92 ppb | 4.873 | 4.32% |
| Pb 220.353† | 78.6 | 10.983 ug/L | 0.2281 | 10.983 ppb | 0.2281 | 2.08% |
| S 181.975 Axial† | 17.9 | 29.919 ug/L | 3.1775 | 29.919 ppb | 3.1775 | 10.62% |
| Sb 206.836† | 3.5 | -0.5932 ug/L | 1.91204 | -0.5932 ppb | 1.91204 | 322.34% |
| Se 196.026† | -71.8 | 0.2577 ug/L | 5.28674 | 0.2577 ppb | 5.28674 | >999.9% |
| Si 251.611† | 223497.0 | 8321.5 ug/L | 4.72 | 8321.5 ppb | 4.72 | 0.06% |
| Sn 189.927† | -13.3 | -3.6715 ug/L | 1.31051 | -3.6715 ppb | 1.31051 | 35.69% |
| Sr 421.552† | 1536.0 | 13.066 ug/L | 0.1632 | 13.066 ppb | 0.1632 | 1.25% |
| Ti 334.940† | 295668.2 | 508.84 ug/L | 0.262 | 508.84 ppb | 0.262 | 0.05% |
| Tl 190.801† | -21.1 | -1.6019 ug/L | 2.62396 | -1.6019 ppb | 2.62396 | 163.80% |
| U 409.014† | -1902.5 | -58.120 ug/L | 0.3949 | -58.120 ppb | 0.3949 | 0.68% |
| V 292.402† | 2481.5 | 15.825 ug/L | 0.4155 | 15.825 ppb | 0.4155 | 2.63% |
| Zn 213.857† | 8392.5 | 96.853 ug/L | 0.1483 | 96.853 ppb | 0.1483 | 0.15% |
| SiO2† | 221534.9 | 17700 ug/L | 149.2 | 17700 ppb | 149.2 | 0.84% |

Sequence No.: 46

Sample ID: 247899002|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 3/25/2010 21:48:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899002|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4324.3 | 4324.3 | 107 % | | 21:50:06 |
| 1 | Y RADIAL | 5242.1 | 5242.1 | 116.0 % | | 21:50:06 |
| 1 | Al 396.153Radial† | 44615.8 | 41698.8 | 44441 ug/L | 44441 ppb | 21:50:06 |
| 1 | Ca 317.933Radial† | 9223.1 | 8586.4 | 17445 ug/L | 17445 ppb | 21:50:06 |
| 1 | Fe 238.204 Radial† | 7160.4 | 6670.4 | 83412 ug/L | 83412 ppb | 21:50:06 |
| 1 | K 766.490 Radial† | 46572.3 | 40641.0 | 8106.0 ug/L | 8106.0 ppb | 21:50:06 |
| 1 | Mg 279.077 IEC† | 217.9 | 202.5 | 8759.5 ug/L | 8759.5 ppb | 21:50:26 |
| 1 | Na 589.592 Radial† | 1574.8 | 1929.9 | 757.91 ug/L | 757.91 ppb | 21:50:06 |
| 1 | Sr 421.552† | 17658.0 | 16402.0 | 139.54 ug/L | 139.54 ppb | 21:50:06 |
| 1 | Sc 361.383 | 860468.8 | 860468.8 | 102.45 % | | 21:51:24 |
| 1 | Y 371.029 | 819345.1 | 819345.1 | 114.42 % | | 21:51:24 |
| 1 | Ag 328.068† | -5057.9 | -5190.1 | 0.1030 ug/L | 0.1030 ppb | 21:51:29 |
| 1 | As 188.979† | -49.6 | -27.5 | 30.842 ug/L | 30.842 ppb | 21:51:49 |
| 1 | B 249.677† | 972.3 | 1199.2 | 19.310 ug/L | 19.310 ppb | 21:51:29 |
| 1 | Ba 233.527† | 70757.5 | 69043.9 | 650.13 ug/L | 650.13 ppb | 21:51:29 |
| 1 | Be 313.107† | -10121.9 | -5616.7 | 4.5493 ug/L | 4.5493 ppb | 21:51:29 |
| 1 | Cd 226.502† | 566.2 | 719.1 | 1.5655 ug/L | 1.5655 ppb | 21:51:49 |
| 1 | Co 228.616† | 1422.9 | 1427.8 | 29.884 ug/L | 29.884 ppb | 21:51:49 |
| 1 | Cr 267.716† | 14247.7 | 13811.4 | 188.91 ug/L | 188.91 ppb | 21:51:29 |
| 1 | Cu 324.752† | 28396.1 | 21363.1 | 73.748 ug/L | 73.748 ppb | 21:51:29 |
| 1 | Mn 257.610† | 2208776.8 | 2155410.8 | 2835.9 ug/L | 2835.9 ppb | 21:51:24 |
| 1 | Mo 202.031† | 8.7 | -5.7 | 6.1844 ug/L | 6.1844 ppb | 21:51:49 |
| 1 | Ni 231.604† | 3272.9 | 3100.9 | 96.803 ug/L | 96.803 ppb | 21:51:49 |
| 1 | P 214.914† | 1923.1 | 1708.8 | 1158.2 ug/L | 1158.2 ppb | 21:51:49 |
| 1 | Pb 220.353† | 507.1 | 553.8 | 81.661 ug/L | 81.661 ppb | 21:51:49 |
| 1 | S 181.975 Axial† | 476.7 | 440.9 | 764.49 ug/L | 764.49 ppb | 21:51:49 |
| 1 | Sb 206.836† | 53.4 | 25.5 | -1.1037 ug/L | -1.1037 ppb | 21:51:49 |
| 1 | Se 196.026† | -347.3 | -322.0 | 7.3263 ug/L | 7.3263 ppb | 21:51:49 |
| 1 | Si 251.611† | 1009899.7 | 985181.1 | 36681 ug/L | 36681 ppb | 21:51:24 |
| 1 | Sn 189.927† | -105.1 | -105.6 | -25.086 ug/L | -25.086 ppb | 21:51:49 |
| 1 | Ti 334.940† | 1790313.0 | 1748507.5 | 3009.9 ug/L | 3009.9 ppb | 21:51:24 |
| 1 | Tl 190.801† | -138.7 | -110.3 | -4.6135 ug/L | -4.6135 ppb | 21:51:49 |
| 1 | U 409.014† | -6002.6 | -3823.6 | -122.42 ug/L | -122.42 ppb | 21:51:24 |
| 1 | V 292.402† | 18902.2 | 19876.9 | 137.78 ug/L | 137.78 ppb | 21:51:29 |
| 1 | Zn 213.857† | 28468.1 | 27179.7 | 309.70 ug/L | 309.70 ppb | 21:51:29 |
| 1 | SiO2† | 1010083.5 | 985332.5 | 78723 ug/L | 78723 ppb | 21:52:57 |
| 2 | Sc Radial | 4198.7 | 4198.7 | 104 % | | 21:50:31 |
| 2 | Y RADIAL | 5091.2 | 5091.2 | 112.7 % | | 21:50:31 |
| 2 | Al 396.153Radial† | 45018.5 | 43330.9 | 46180 ug/L | 46180 ppb | 21:50:31 |
| 2 | Ca 317.933Radial† | 9266.1 | 8885.1 | 18052 ug/L | 18052 ppb | 21:50:31 |
| 2 | Fe 238.204 Radial† | 7238.4 | 6945.3 | 86849 ug/L | 86849 ppb | 21:50:31 |
| 2 | K 766.490 Radial† | 46696.0 | 42059.6 | 8389.0 ug/L | 8389.0 ppb | 21:50:31 |
| 2 | Mg 279.077 IEC† | 213.7 | 204.6 | 8848.5 ug/L | 8848.5 ppb | 21:50:51 |
| 2 | Na 589.592 Radial† | 1533.1 | 1933.8 | 759.44 ug/L | 759.44 ppb | 21:50:31 |
| 2 | Sr 421.552† | 17764.6 | 16997.2 | 144.61 ug/L | 144.61 ppb | 21:50:31 |
| 2 | Sc 361.383 | 848028.0 | 848028.0 | 100.97 % | | 21:51:55 |
| 2 | Y 371.029 | 808535.6 | 808535.6 | 112.91 % | | 21:51:55 |
| 2 | Ag 328.068† | -5086.3 | -5290.7 | 0.6549 ug/L | 0.6549 ppb | 21:52:00 |
| 2 | As 188.979† | -44.1 | -22.8 | 34.395 ug/L | 34.395 ppb | 21:52:20 |
| 2 | B 249.677† | 1019.6 | 1259.9 | 20.421 ug/L | 20.421 ppb | 21:52:00 |
| 2 | Ba 233.527† | 70638.4 | 69939.2 | 658.62 ug/L | 658.62 ppb | 21:52:00 |
| 2 | Be 313.107† | -10052.9 | -5693.3 | 4.5748 ug/L | 4.5748 ppb | 21:52:00 |
| 2 | Cd 226.502† | 541.8 | 703.0 | 0.9842 ug/L | 0.9842 ppb | 21:52:20 |
| 2 | Co 228.616† | 1412.1 | 1437.4 | 30.040 ug/L | 30.040 ppb | 21:52:20 |
| 2 | Cr 267.716† | 14096.7 | 13865.9 | 189.99 ug/L | 189.99 ppb | 21:52:00 |
| 2 | Cu 324.752† | 28369.0 | 21742.8 | 75.162 ug/L | 75.162 ppb | 21:52:00 |
| 2 | Mn 257.610† | 2195012.3 | 2173406.2 | 2859.8 ug/L | 2859.8 ppb | 21:51:55 |
| 2 | Mo 202.031† | 17.0 | 2.7 | 7.1911 ug/L | 7.1911 ppb | 21:52:20 |
| 2 | Ni 231.604† | 3248.8 | 3123.9 | 97.521 ug/L | 97.521 ppb | 21:52:20 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1909.8 | 1723.2 | 1165.9 ug/L | 1165.9 ppb | 21:52:20 |
| 2 | Pb 220.353† | 482.3 | 536.4 | 78.951 ug/L | 78.951 ppb | 21:52:20 |
| 2 | S 181.975 Axial† | 478.7 | 449.7 | 779.54 ug/L | 779.54 ppb | 21:52:20 |
| 2 | Sb 206.836† | 69.5 | 42.2 | 5.8230 ug/L | 5.8230 ppb | 21:52:20 |
| 2 | Se 196.026† | -351.3 | -331.0 | 11.000 ug/L | 11.000 ppb | 21:52:20 |
| 2 | Si 251.611† | 1001515.0 | 991337.8 | 36911 ug/L | 36911 ppb | 21:51:55 |
| 2 | Sn 189.927† | -112.8 | -114.8 | -27.201 ug/L | -27.201 ppb | 21:52:20 |
| 2 | Ti 334.940† | 1779064.5 | 1763002.8 | 3034.9 ug/L | 3034.9 ppb | 21:51:55 |
| 2 | Tl 190.801† | -128.2 | -101.9 | -1.0559 ug/L | -1.0559 ppb | 21:52:20 |
| 2 | U 409.014† | -5969.1 | -3876.4 | -124.37 ug/L | -124.37 ppb | 21:51:55 |
| 2 | V 292.402† | 18729.2 | 19976.2 | 138.02 ug/L | 138.02 ppb | 21:52:00 |
| 2 | Zn 213.857† | 28439.8 | 27559.3 | 313.69 ug/L | 313.69 ppb | 21:52:00 |
| 2 | SiO2† | 994450.1 | 984313.0 | 78642 ug/L | 78642 ppb | 21:53:03 |
| 3 | Sc Radial | 4242.6 | 4242.6 | 105 % | | 21:50:56 |
| 3 | Y RADIAL | 5156.6 | 5156.6 | 114.1 % | | 21:50:56 |
| 3 | Al 396.153Radial† | 44965.9 | 42832.7 | 45649 ug/L | 45649 ppb | 21:50:56 |
| 3 | Ca 317.933Radial† | 9263.0 | 8789.9 | 17859 ug/L | 17859 ppb | 21:50:56 |
| 3 | Fe 238.204 Radial† | 7213.2 | 6849.2 | 85648 ug/L | 85648 ppb | 21:50:56 |
| 3 | K 766.490 Radial† | 46577.8 | 41482.5 | 8273.8 ug/L | 8273.8 ppb | 21:50:56 |
| 3 | Mg 279.077 IEC† | 216.0 | 204.6 | 8850.0 ug/L | 8850.0 ppb | 21:51:16 |
| 3 | Na 589.592 Radial† | 1534.4 | 1919.8 | 753.92 ug/L | 753.92 ppb | 21:50:56 |
| 3 | Sr 421.552† | 17683.0 | 16742.8 | 142.44 ug/L | 142.44 ppb | 21:50:56 |
| 3 | Sc 361.383 | 851103.0 | 851103.0 | 101.34 % | | 21:52:26 |
| 3 | Y 371.029 | 811629.3 | 811629.3 | 113.34 % | | 21:52:26 |
| 3 | Ag 328.068† | -5099.1 | -5285.1 | 0.3227 ug/L | 0.3227 ppb | 21:52:31 |
| 3 | As 188.979† | -28.5 | -7.2 | 42.442 ug/L | 42.442 ppb | 21:52:51 |
| 3 | B 249.677† | 1026.8 | 1263.4 | 20.714 ug/L | 20.714 ppb | 21:52:31 |
| 3 | Ba 233.527† | 71204.4 | 70244.9 | 661.46 ug/L | 661.46 ppb | 21:52:31 |
| 3 | Be 313.107† | -10515.1 | -6113.4 | 4.3997 ug/L | 4.3997 ppb | 21:52:31 |
| 3 | Cd 226.502† | 556.3 | 715.4 | 1.2823 ug/L | 1.2823 ppb | 21:52:51 |
| 3 | Co 228.616† | 1396.4 | 1416.9 | 29.525 ug/L | 29.525 ppb | 21:52:51 |
| 3 | Cr 267.716† | 14248.0 | 13964.8 | 191.15 ug/L | 191.15 ppb | 21:52:31 |
| 3 | Cu 324.752† | 28742.8 | 22010.2 | 75.967 ug/L | 75.967 ppb | 21:52:31 |
| 3 | Mn 257.610† | 2201714.7 | 2172165.8 | 2858.1 ug/L | 2858.1 ppb | 21:52:26 |
| 3 | Mo 202.031† | 6.1 | -8.2 | 6.1441 ug/L | 6.1441 ppb | 21:52:51 |
| 3 | Ni 231.604† | 3266.4 | 3129.6 | 97.699 ug/L | 97.699 ppb | 21:52:51 |
| 3 | P 214.914† | 1896.6 | 1703.3 | 1152.3 ug/L | 1152.3 ppb | 21:52:51 |
| 3 | Pb 220.353† | 501.1 | 553.3 | 81.540 ug/L | 81.540 ppb | 21:52:51 |
| 3 | S 181.975 Axial† | 473.5 | 442.9 | 767.73 ug/L | 767.73 ppb | 21:52:51 |
| 3 | Sb 206.836† | 55.6 | 28.3 | -0.0684 ug/L | -0.0684 ppb | 21:52:51 |
| 3 | Se 196.026† | -353.5 | -331.9 | 6.5587 ug/L | 6.5587 ppb | 21:52:51 |
| 3 | Si 251.611† | 1004738.8 | 990935.4 | 36896 ug/L | 36896 ppb | 21:52:26 |
| 3 | Sn 189.927† | -111.1 | -112.7 | -26.699 ug/L | -26.699 ppb | 21:52:51 |
| 3 | Ti 334.940† | 1784348.1 | 1761850.6 | 3032.9 ug/L | 3032.9 ppb | 21:52:26 |
| 3 | Tl 190.801† | -145.7 | -118.7 | -7.5685 ug/L | -7.5685 ppb | 21:52:51 |
| 3 | U 409.014† | -6058.5 | -3943.2 | -126.20 ug/L | -126.20 ppb | 21:52:26 |
| 3 | V 292.402† | 19015.3 | 20191.5 | 139.84 ug/L | 139.84 ppb | 21:52:31 |
| 3 | Zn 213.857† | 28725.0 | 27738.9 | 316.00 ug/L | 316.00 ppb | 21:52:31 |
| 3 | SiO2† | 1010327.4 | 996422.2 | 79609 ug/L | 79609 ppb | 21:53:09 |

Mean Data: 247899002|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Conc. | Sample Units | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|--------|--------------|----------|--------|
| Sc 361.383 | 853199.9 | 101.59 | % | 0.772 | | | | 0.76% |
| Sc Radial | 4255.2 | 105 | % | 1.6 | | | | 1.50% |
| Y 371.029 | 813170.0 | 113.56 | % | 0.777 | | | | 0.68% |
| Y RADIAL | 5163.3 | 114.3 | % | 1.68 | | | | 1.47% |
| Ag 328.068† | -5255.3 | 0.3602 | ug/L | 0.27782 | 0.3602 | ppb | 0.27782 | 77.13% |
| Al 396.153Radial† | 42620.8 | 45423 | ug/L | 891.4 | 45423 | ppb | 891.4 | 1.96% |
| As 188.979† | -19.2 | 35.893 | ug/L | 5.9429 | 35.893 | ppb | 5.9429 | 16.56% |
| B 249.677† | 1240.8 | 20.149 | ug/L | 0.7406 | 20.149 | ppb | 0.7406 | 3.68% |
| Ba 233.527† | 69742.7 | 656.74 | ug/L | 5.897 | 656.74 | ppb | 5.897 | 0.90% |
| Be 313.107† | -5807.8 | 4.5079 | ug/L | 0.09457 | 4.5079 | ppb | 0.09457 | 2.10% |
| Ca 317.933Radial† | 8753.8 | 17786 | ug/L | 310.0 | 17786 | ppb | 310.0 | 1.74% |
| Cd 226.502† | 712.5 | 1.2773 | ug/L | 0.29065 | 1.2773 | ppb | 0.29065 | 22.75% |
| Co 228.616† | 1427.4 | 29.816 | ug/L | 0.2640 | 29.816 | ppb | 0.2640 | 0.89% |
| Cr 267.716† | 13880.7 | 190.02 | ug/L | 1.120 | 190.02 | ppb | 1.120 | 0.59% |
| Cu 324.752† | 21705.4 | 74.959 | ug/L | 1.1231 | 74.959 | ppb | 1.1231 | 1.50% |
| Fe 238.204 Radial† | 6821.6 | 85303 | ug/L | 1744.1 | 85303 | ppb | 1744.1 | 2.04% |
| K 766.490 Radial† | 41394.4 | 8256.3 | ug/L | 142.30 | 8256.3 | ppb | 142.30 | 1.72% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 203.9 | 8819.4 ug/L | 51.83 | 8819.4 ppb | 51.83 | 0.59% |
| Mn 257.610† | 2166994.3 | 2851.3 ug/L | 13.35 | 2851.3 ppb | 13.35 | 0.47% |
| Mo 202.031† | -3.7 | 6.5065 ug/L | 0.59321 | 6.5065 ppb | 0.59321 | 9.12% |
| Na 589.592 Radial† | 1927.8 | 757.09 ug/L | 2.849 | 757.09 ppb | 2.849 | 0.38% |
| Ni 231.604† | 3118.1 | 97.341 ug/L | 0.4748 | 97.341 ppb | 0.4748 | 0.49% |
| P 214.914† | 1711.8 | 1158.8 ug/L | 6.85 | 1158.8 ppb | 6.85 | 0.59% |
| Pb 220.353† | 547.9 | 80.718 ug/L | 1.5308 | 80.718 ppb | 1.5308 | 1.90% |
| S 181.975 Axial† | 444.5 | 770.58 ug/L | 7.923 | 770.58 ppb | 7.923 | 1.03% |
| Sb 206.836† | 32.0 | 1.5503 ug/L | 3.73630 | 1.5503 ppb | 3.73630 | 241.01% |
| Se 196.026† | -328.3 | 8.2951 ug/L | 2.37398 | 8.2951 ppb | 2.37398 | 28.62% |
| Si 251.611† | 989151.4 | 36829 ug/L | 128.2 | 36829 ppb | 128.2 | 0.35% |
| Sn 189.927† | -111.0 | -26.328 ug/L | 1.1052 | -26.328 ppb | 1.1052 | 4.20% |
| Sr 421.552† | 16714.0 | 142.20 ug/L | 2.541 | 142.20 ppb | 2.541 | 1.79% |
| Ti 334.940† | 1757786.9 | 3025.9 ug/L | 13.90 | 3025.9 ppb | 13.90 | 0.46% |
| Tl 190.801† | -110.3 | -4.4126 ug/L | 3.26095 | -4.4126 ppb | 3.26095 | 73.90% |
| U 409.014† | -3881.1 | -124.33 ug/L | 1.890 | -124.33 ppb | 1.890 | 1.52% |
| V 292.402† | 20014.9 | 138.55 ug/L | 1.129 | 138.55 ppb | 1.129 | 0.81% |
| Zn 213.857† | 27492.6 | 313.13 ug/L | 3.187 | 313.13 ppb | 3.187 | 1.02% |
| SiO2† | 988689.3 | 78991 ug/L | 536.6 | 78991 ppb | 536.6 | 0.68% |

Sequence No.: 47

Sample ID: 247899003|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 3/25/2010 21:55:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899003|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|--------------|-----------------------|------------------|
| 1 | Sc Radial | 4169.3 | 4169.3 | 103 % | | 21:57:34 |
| 1 | Y RADIAL | 5367.1 | 5367.1 | 118.8 % | | 21:57:14 |
| 1 | Al 396.153Radial† | 58137.9 | 56328.9 | 60033 ug/L | 60033 ppb | 21:57:14 |
| 1 | Ca 317.933Radial† | 5191.3 | 5005.4 | 10170 ug/L | 10170 ppb | 21:57:14 |
| 1 | Fe 238.204 Radial† | 12369.2 | 11958.4 | 149540 ug/L | 149540 ppb | 21:57:14 |
| 1 | K 766.490 Radial† | 52349.6 | 47845.7 | 9546.6 ug/L | 9546.6 ppb | 21:57:14 |
| 1 | Mg 279.077 IEC† | 258.0 | 248.9 | 10719 ug/L | 10719 ppb | 21:57:34 |
| 1 | Na 589.592 Radial† | 2590.6 | 2967.3 | 1165.3 ug/L | 1165.3 ppb | 21:57:14 |
| 1 | Sr 421.552† | 13414.5 | 12908.7 | 109.85 ug/L | 109.85 ppb | 21:57:14 |
| 1 | Sc 361.383 | 864147.0 | 864147.0 | 102.89 % | | 21:58:32 |
| 1 | Y 371.029 | 852320.2 | 852320.2 | 119.03 % | | 21:58:32 |
| 1 | Ag 328.068† | -8725.4 | -8733.6 | 3.2599 ug/L | 3.2599 ppb | 21:58:37 |
| 1 | As 188.979† | -110.5 | -86.5 | 41.192 ug/L | 41.192 ppb | 21:58:58 |
| 1 | B 249.677† | 1020.2 | 1241.7 | 9.7125 ug/L | 9.7125 ppb | 21:58:37 |
| 1 | Ba 233.527† | 45285.3 | 43993.8 | 417.52 ug/L | 417.52 ppb | 21:58:37 |
| 1 | Be 313.107† | -23225.1 | -18309.5 | 6.3375 ug/L | 6.3375 ppb | 21:58:37 |
| 1 | Cd 226.502† | 1007.2 | 1145.3 | 0.7224 ug/L | 0.7224 ppb | 21:58:58 |
| 1 | Co 228.616† | 1821.9 | 1809.6 | 32.357 ug/L | 32.357 ppb | 21:58:58 |
| 1 | Cr 267.716† | 12179.4 | 11742.1 | 169.15 ug/L | 169.15 ppb | 21:58:37 |
| 1 | Cu 324.752† | 22812.6 | 15818.5 | 59.320 ug/L | 59.320 ppb | 21:58:37 |
| 1 | Mn 257.610† | 2091820.6 | 2032566.1 | 2681.2 ug/L | 2681.2 ppb | 21:58:32 |
| 1 | Mo 202.031† | -5.3 | -19.4 | 10.027 ug/L | 10.027 ppb | 21:58:58 |
| 1 | Ni 231.604† | 2973.0 | 2795.8 | 87.271 ug/L | 87.271 ppb | 21:58:58 |
| 1 | P 214.914† | 1299.7 | 1095.0 | 671.30 ug/L | 671.30 ppb | 21:58:58 |
| 1 | Pb 220.353† | 501.9 | 546.6 | 74.530 ug/L | 74.530 ppb | 21:58:58 |
| 1 | S 181.975 Axial† | 207.9 | 177.7 | 300.17 ug/L | 300.17 ppb | 21:58:58 |
| 1 | Sb 206.836† | 80.2 | 51.3 | -0.9013 ug/L | -0.9013 ppb | 21:58:58 |
| 1 | Se 196.026† | -580.7 | -547.4 | 29.393 ug/L | 29.393 ppb | 21:58:58 |
| 1 | Si 251.611† | 1139390.8 | 1106836.6 | 41211 ug/L | 41211 ppb | 21:58:32 |
| 1 | Sn 189.927† | -35.0 | -37.1 | -14.997 ug/L | -14.997 ppb | 21:58:58 |
| 1 | Ti 334.940† | 3626501.1 | 3525641.8 | 6066.4 ug/L | 6066.4 ppb | 21:58:32 |
| 1 | Tl 190.801† | -187.9 | -157.5 | 1.4938 ug/L | 1.4938 ppb | 21:58:58 |
| 1 | U 409.014† | -9184.0 | -6890.6 | -220.14 ug/L | -220.14 ppb | 21:58:32 |
| 1 | V 292.402† | 32170.8 | 32694.0 | 223.57 ug/L | 223.57 ppb | 21:58:37 |
| 1 | Zn 213.857† | 42750.3 | 40942.2 | 463.38 ug/L | 463.38 ppb | 21:58:37 |
| 1 | SiO2† | 1124970.0 | 1092793.2 | 87309 ug/L | 87309 ppb | 22:00:08 |
| 2 | Sc Radial | 4163.7 | 4163.7 | 103 % | | 21:57:59 |
| 2 | Y RADIAL | 5260.2 | 5260.2 | 116.4 % | | 21:57:39 |
| 2 | Al 396.153Radial† | 55747.3 | 54088.5 | 57645 ug/L | 57645 ppb | 21:57:39 |
| 2 | Ca 317.933Radial† | 4988.5 | 4815.8 | 9784.5 ug/L | 9784.5 ppb | 21:57:39 |
| 2 | Fe 238.204 Radial† | 11884.5 | 11504.8 | 143870 ug/L | 143870 ppb | 21:57:39 |
| 2 | K 766.490 Radial† | 50629.7 | 46247.5 | 9227.7 ug/L | 9227.7 ppb | 21:57:39 |
| 2 | Mg 279.077 IEC† | 255.9 | 247.2 | 10650 ug/L | 10650 ppb | 21:57:59 |
| 2 | Na 589.592 Radial† | 2454.4 | 2838.7 | 1114.8 ug/L | 1114.8 ppb | 21:57:39 |
| 2 | Sr 421.552† | 12755.8 | 12288.0 | 104.57 ug/L | 104.57 ppb | 21:57:39 |
| 2 | Sc 361.383 | 858627.4 | 858627.4 | 102.24 % | | 21:59:04 |
| 2 | Y 371.029 | 847473.8 | 847473.8 | 118.35 % | | 21:59:04 |
| 2 | Ag 328.068† | -8763.8 | -8825.6 | 1.0615 ug/L | 1.0615 ppb | 21:59:10 |
| 2 | As 188.979† | -96.8 | -73.8 | 46.616 ug/L | 46.616 ppb | 21:59:30 |
| 2 | B 249.677† | 959.6 | 1188.8 | 9.1774 ug/L | 9.1774 ppb | 21:59:10 |
| 2 | Ba 233.527† | 45622.4 | 44606.5 | 423.10 ug/L | 423.10 ppb | 21:59:10 |
| 2 | Be 313.107† | -23778.2 | -18995.6 | 6.0423 ug/L | 6.0423 ppb | 21:59:10 |
| 2 | Cd 226.502† | 998.1 | 1142.6 | 1.2719 ug/L | 1.2719 ppb | 21:59:30 |
| 2 | Co 228.616† | 1845.3 | 1843.9 | 33.350 ug/L | 33.350 ppb | 21:59:30 |
| 2 | Cr 267.716† | 12218.0 | 11855.9 | 170.04 ug/L | 170.04 ppb | 21:59:10 |
| 2 | Cu 324.752† | 22871.1 | 16018.4 | 59.667 ug/L | 59.667 ppb | 21:59:10 |
| 2 | Mn 257.610† | 2073602.2 | 2027814.9 | 2674.4 ug/L | 2674.4 ppb | 21:59:04 |
| 2 | Mo 202.031† | -0.3 | -14.5 | 10.013 ug/L | 10.013 ppb | 21:59:30 |
| 2 | Ni 231.604† | 2976.5 | 2817.8 | 87.957 ug/L | 87.957 ppb | 21:59:30 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1296.1 | 1099.5 | 678.42 ug/L | 678.42 ppb | 21:59:30 |
| 2 | Pb 220.353† | 493.7 | 541.7 | 74.063 ug/L | 74.063 ppb | 21:59:30 |
| 2 | S 181.975 Axial† | 212.0 | 183.0 | 309.92 ug/L | 309.92 ppb | 21:59:30 |
| 2 | Sb 206.836† | 64.6 | 36.5 | -7.0086 ug/L | -7.0086 ppb | 21:59:30 |
| 2 | Se 196.026† | -603.6 | -573.5 | -9.0747 ug/L | -9.0747 ppb | 21:59:30 |
| 2 | Si 251.611† | 1129652.2 | 1104429.3 | 41121 ug/L | 41121 ppb | 21:59:04 |
| 2 | Sn 189.927† | -33.0 | -35.4 | -14.359 ug/L | -14.359 ppb | 21:59:30 |
| 2 | Ti 334.940† | 3598995.5 | 3521394.5 | 6059.0 ug/L | 6059.0 ppb | 21:59:04 |
| 2 | Tl 190.801† | -185.1 | -155.9 | 2.0042 ug/L | 2.0042 ppb | 21:59:30 |
| 2 | U 409.014† | -9116.5 | -6882.0 | -219.25 ug/L | -219.25 ppb | 21:59:04 |
| 2 | V 292.402† | 32438.0 | 33156.4 | 227.97 ug/L | 227.97 ppb | 21:59:10 |
| 2 | Zn 213.857† | 43037.6 | 41490.2 | 470.74 ug/L | 470.74 ppb | 21:59:10 |
| 2 | SiO2† | 1121052.7 | 1095989.9 | 87564 ug/L | 87564 ppb | 22:00:14 |
| 3 | Sc Radial | 4147.7 | 4147.7 | 103 % | | 21:58:24 |
| 3 | Y RADIAL | 5345.3 | 5345.3 | 118.3 % | | 21:58:04 |
| 3 | Al 396.153Radial† | 56835.9 | 55355.1 | 58995 ug/L | 58995 ppb | 21:58:04 |
| 3 | Ca 317.933Radial† | 5084.4 | 4927.7 | 10012 ug/L | 10012 ppb | 21:58:04 |
| 3 | Fe 238.204 Radial† | 12079.3 | 11738.7 | 146790 ug/L | 146790 ppb | 21:58:04 |
| 3 | K 766.490 Radial† | 51594.5 | 47374.7 | 9452.7 ug/L | 9452.7 ppb | 21:58:04 |
| 3 | Mg 279.077 IEC† | 255.7 | 248.0 | 10681 ug/L | 10681 ppb | 21:58:24 |
| 3 | Na 589.592 Radial† | 2556.6 | 2947.3 | 1157.5 ug/L | 1157.5 ppb | 21:58:04 |
| 3 | Sr 421.552† | 13023.6 | 12596.0 | 107.19 ug/L | 107.19 ppb | 21:58:04 |
| 3 | Sc 361.383 | 854500.3 | 854500.3 | 101.74 % | | 21:59:36 |
| 3 | Y 371.029 | 843427.9 | 843427.9 | 117.78 % | | 21:59:36 |
| 3 | Ag 328.068† | -8896.8 | -8997.7 | 1.1115 ug/L | 1.1115 ppb | 21:59:42 |
| 3 | As 188.979† | -95.4 | -72.9 | 47.799 ug/L | 47.799 ppb | 22:00:02 |
| 3 | B 249.677† | 879.1 | 1114.2 | 6.6504 ug/L | 6.6504 ppb | 21:59:42 |
| 3 | Ba 233.527† | 46200.3 | 45390.0 | 430.55 ug/L | 430.55 ppb | 21:59:42 |
| 3 | Be 313.107† | -24217.5 | -19539.8 | 5.8212 ug/L | 5.8212 ppb | 21:59:42 |
| 3 | Cd 226.502† | 1006.7 | 1155.8 | 1.1562 ug/L | 1.1562 ppb | 22:00:02 |
| 3 | Co 228.616† | 1857.0 | 1864.1 | 33.835 ug/L | 33.835 ppb | 22:00:02 |
| 3 | Cr 267.716† | 12357.9 | 12051.1 | 172.90 ug/L | 172.90 ppb | 21:59:42 |
| 3 | Cu 324.752† | 23155.9 | 16406.3 | 61.080 ug/L | 61.080 ppb | 21:59:42 |
| 3 | Mn 257.610† | 2063867.0 | 2028042.7 | 2674.9 ug/L | 2674.9 ppb | 21:59:36 |
| 3 | Mo 202.031† | -5.4 | -19.5 | 9.7970 ug/L | 9.7970 ppb | 22:00:02 |
| 3 | Ni 231.604† | 2981.0 | 2836.3 | 88.533 ug/L | 88.533 ppb | 22:00:02 |
| 3 | P 214.914† | 1300.0 | 1109.5 | 683.32 ug/L | 683.32 ppb | 22:00:02 |
| 3 | Pb 220.353† | 478.9 | 529.5 | 72.108 ug/L | 72.108 ppb | 22:00:02 |
| 3 | S 181.975 Axial† | 200.7 | 172.9 | 292.05 ug/L | 292.05 ppb | 22:00:02 |
| 3 | Sb 206.836† | 69.5 | 41.7 | -4.8709 ug/L | -4.8709 ppb | 22:00:02 |
| 3 | Se 196.026† | -591.7 | -564.6 | 7.1809 ug/L | 7.1809 ppb | 22:00:02 |
| 3 | Si 251.611† | 1124683.2 | 1104882.3 | 41138 ug/L | 41138 ppb | 21:59:36 |
| 3 | Sn 189.927† | -28.6 | -31.2 | -13.549 ug/L | -13.549 ppb | 22:00:02 |
| 3 | Ti 334.940† | 3581640.8 | 3521339.8 | 6059.0 ug/L | 6059.0 ppb | 21:59:36 |
| 3 | Tl 190.801† | -190.2 | -161.9 | -0.2917 ug/L | -0.2917 ppb | 22:00:02 |
| 3 | U 409.014† | -9103.1 | -6911.9 | -220.46 ug/L | -220.46 ppb | 21:59:36 |
| 3 | V 292.402† | 32801.3 | 33666.7 | 231.47 ug/L | 231.47 ppb | 21:59:42 |
| 3 | Zn 213.857† | 43564.6 | 42211.5 | 478.86 ug/L | 478.86 ppb | 21:59:42 |
| 3 | SiO2† | 1133396.1 | 1113417.9 | 88957 ug/L | 88957 ppb | 22:00:20 |

Mean Data: 247899003|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Conc. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|--------|--------|----------|--------|
| Sc 361.383 | 859091.6 | 102.29 | % | 0.576 | | | | 0.56% |
| Sc Radial | 4160.2 | 103 | % | 0.3 | | | | 0.27% |
| Y 371.029 | 847740.6 | 118.39 | % | 0.622 | | | | 0.53% |
| Y RADIAL | 5324.2 | 117.8 | % | 1.25 | | | | 1.06% |
| Ag 328.068† | -8852.3 | 1.8110 | ug/L | 1.25504 | 1.8110 | ppb | 1.25504 | 69.30% |
| Al 396.153Radial† | 55257.5 | 58891 | ug/L | 1197.3 | 58891 | ppb | 1197.3 | 2.03% |
| As 188.979† | -77.7 | 45.202 | ug/L | 3.5232 | 45.202 | ppb | 3.5232 | 7.79% |
| B 249.677† | 1181.6 | 8.5134 | ug/L | 1.63548 | 8.5134 | ppb | 1.63548 | 19.21% |
| Ba 233.527† | 44663.4 | 423.72 | ug/L | 6.533 | 423.72 | ppb | 6.533 | 1.54% |
| Be 313.107† | -18948.3 | 6.0670 | ug/L | 0.25903 | 6.0670 | ppb | 0.25903 | 4.27% |
| Ca 317.933Radial† | 4916.3 | 9988.7 | ug/L | 193.69 | 9988.7 | ppb | 193.69 | 1.94% |
| Cd 226.502† | 1147.9 | 1.0502 | ug/L | 0.28966 | 1.0502 | ppb | 0.28966 | 27.58% |
| Co 228.616† | 1839.2 | 33.181 | ug/L | 0.7535 | 33.181 | ppb | 0.7535 | 2.27% |
| Cr 267.716† | 11883.0 | 170.70 | ug/L | 1.956 | 170.70 | ppb | 1.956 | 1.15% |
| Cu 324.752† | 16081.1 | 60.022 | ug/L | 0.9325 | 60.022 | ppb | 0.9325 | 1.55% |
| Fe 238.204 Radial† | 11734.0 | 146730 | ug/L | 2836.3 | 146730 | ppb | 2836.3 | 1.93% |
| K 766.490 Radial† | 47156.0 | 9409.0 | ug/L | 163.87 | 9409.0 | ppb | 163.87 | 1.74% |

| | | | | | | |
|--------------------|-----------|--------------|----------|-------------|----------|---------|
| Mg 279.077 IEC† | 248.1 | 10683 ug/L | 34.4 | 10683 ppb | 34.4 | 0.32% |
| Mn 257.610† | 2029474.6 | 2676.8 ug/L | 3.76 | 2676.8 ppb | 3.76 | 0.14% |
| Mo 202.031† | -17.8 | 9.9455 ug/L | 0.12880 | 9.9455 ppb | 0.12880 | 1.30% |
| Na 589.592 Radial† | 2917.8 | 1145.9 ug/L | 27.18 | 1145.9 ppb | 27.18 | 2.37% |
| Ni 231.604† | 2816.6 | 87.920 ug/L | 0.6320 | 87.920 ppb | 0.6320 | 0.72% |
| P 214.914† | 1101.3 | 677.68 ug/L | 6.043 | 677.68 ppb | 6.043 | 0.89% |
| Pb 220.353† | 539.3 | 73.567 ug/L | 1.2845 | 73.567 ppb | 1.2845 | 1.75% |
| S 181.975 Axial† | 177.9 | 300.71 ug/L | 8.951 | 300.71 ppb | 8.951 | 2.98% |
| Sb 206.836† | 43.2 | -4.2602 ug/L | 3.09911 | -4.2602 ppb | 3.09911 | 72.74% |
| Se 196.026† | -561.8 | 9.1663 ug/L | 19.31029 | 9.1663 ppb | 19.31029 | 210.67% |
| Si 251.611† | 1105382.7 | 41157 ug/L | 47.6 | 41157 ppb | 47.6 | 0.12% |
| Sn 189.927† | -34.6 | -14.302 ug/L | 0.7259 | -14.302 ppb | 0.7259 | 5.08% |
| Sr 421.552† | 12597.6 | 107.20 ug/L | 2.641 | 107.20 ppb | 2.641 | 2.46% |
| Ti 334.940† | 3522792.0 | 6061.5 ug/L | 4.27 | 6061.5 ppb | 4.27 | 0.07% |
| Tl 190.801† | -158.4 | 1.0688 ug/L | 1.20550 | 1.0688 ppb | 1.20550 | 112.79% |
| U 409.014† | -6894.9 | -219.95 ug/L | 0.632 | -219.95 ppb | 0.632 | 0.29% |
| V 292.402† | 33172.4 | 227.67 ug/L | 3.960 | 227.67 ppb | 3.960 | 1.74% |
| Zn 213.857† | 41548.0 | 470.99 ug/L | 7.744 | 470.99 ppb | 7.744 | 1.64% |
| SiO2† | 1100733.7 | 87943 ug/L | 886.9 | 87943 ppb | 886.9 | 1.01% |

Sequence No.: 48
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 22:02:30
 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 | 4001.4 | 4001.4 | 99.2 % | | 22:04:42 |
| 1 | Y RADIAL | 4395.0 | 4395.0 | 97.28 % | | 22:04:22 |
| 1 | Al 396.153Radial† | 4574.0 | 4690.6 | 4975.3 ug/L | 4975.3 ppb | 22:04:22 |
| 1 | Ca 317.933Radial† | 2484.3 | 2487.2 | 5053.4 ug/L | 5053.4 ppb | 22:04:42 |
| 1 | Fe 238.204 Radial† | 432.7 | 427.2 | 5356.6 ug/L | 5356.6 ppb | 22:04:42 |
| 1 | K 766.490 Radial† | 27550.6 | 24970.5 | 4978.2 ug/L | 4978.2 ppb | 22:04:22 |
| 1 | Mg 279.077 IEC† | 116.3 | 116.5 | 5088.5 ug/L | 5088.5 ppb | 22:04:42 |
| 1 | Na 589.592 Radial† | 26768.0 | 27445.6 | 10778 ug/L | 10778 ppb | 22:04:22 |
| 1 | Sr 421.552† | 59062.7 | 59470.9 | 506.39 ug/L | 506.39 ppb | 22:04:22 |
| 1 | Sc 361.383 | 839379.5 | 839379.5 | 99.943 % | | 22:05:39 |
| 1 | Y 371.029 | 706194.1 | 706194.1 | 98.620 % | | 22:05:39 |
| 1 | Ag 328.068† | 98759.4 | 98561.9 | 500.03 ug/L | 500.03 ppb | 22:05:45 |
| 1 | As 188.979† | 875.1 | 896.5 | 484.90 ug/L | 484.90 ppb | 22:06:05 |
| 1 | B 249.677† | 17031.1 | 17290.9 | 472.99 ug/L | 472.99 ppb | 22:05:45 |
| 1 | Ba 233.527† | 51853.1 | 51863.9 | 487.43 ug/L | 487.43 ppb | 22:05:45 |
| 1 | Be 313.107† | 1192099.2 | 1197037.8 | 487.11 ug/L | 487.11 ppb | 22:05:39 |
| 1 | Cd 226.502† | 34502.2 | 34688.2 | 489.10 ug/L | 489.10 ppb | 22:05:45 |
| 1 | Co 228.616† | 19153.2 | 19203.0 | 499.86 ug/L | 499.86 ppb | 22:05:45 |
| 1 | Cr 267.716† | 37365.7 | 37291.9 | 486.56 ug/L | 486.56 ppb | 22:05:45 |
| 1 | Cu 324.752† | 156302.4 | 150038.3 | 486.50 ug/L | 486.50 ppb | 22:05:45 |
| 1 | Mn 257.610† | 367594.9 | 367350.9 | 482.30 ug/L | 482.30 ppb | 22:05:45 |
| 1 | Mo 202.031† | 5581.3 | 5570.3 | 490.20 ug/L | 490.20 ppb | 22:06:05 |
| 1 | Ni 231.604† | 15881.7 | 15797.1 | 492.96 ug/L | 492.96 ppb | 22:05:45 |
| 1 | P 214.914† | 3559.3 | 3393.1 | 2343.8 ug/L | 2343.8 ppb | 22:06:05 |
| 1 | Pb 220.353† | 3162.9 | 3223.5 | 487.34 ug/L | 487.34 ppb | 22:06:05 |
| 1 | S 181.975 Axial† | 594.2 | 570.2 | 998.43 ug/L | 998.43 ppb | 22:06:05 |
| 1 | Sb 206.836† | 1206.5 | 1180.5 | 519.18 ug/L | 519.18 ppb | 22:06:05 |
| 1 | Se 196.026† | 604.9 | 622.2 | 515.11 ug/L | 515.11 ppb | 22:06:05 |
| 1 | Si 251.611† | 66967.8 | 66480.3 | 2469.2 ug/L | 2469.2 ppb | 22:05:45 |
| 1 | Sn 189.927† | 2207.8 | 2205.9 | 489.16 ug/L | 489.16 ppb | 22:06:05 |
| 1 | Ti 334.940† | 282717.0 | 283960.6 | 488.42 ug/L | 488.42 ppb | 22:05:45 |
| 1 | Tl 190.801† | 1219.2 | 1244.9 | 484.59 ug/L | 484.59 ppb | 22:06:05 |
| 1 | U 409.014† | 15395.3 | 17439.2 | 511.44 ug/L | 511.44 ppb | 22:05:45 |
| 1 | V 292.402† | 61733.8 | 63196.4 | 493.70 ug/L | 493.70 ppb | 22:05:45 |
| 1 | Zn 213.857† | 41660.3 | 41077.5 | 483.39 ug/L | 483.39 ppb | 22:05:45 |
| 1 | SiO2† | 67300.2 | 66785.0 | 5322.5 ug/L | 5322.5 ppb | 22:07:12 |
| 2 | Sc Radial | 3976.3 | 3976.3 | 98.6 % | | 22:05:07 |
| 2 | Y RADIAL | 4482.0 | 4482.0 | 99.20 % | | 22:04:47 |
| 2 | Al 396.153Radial† | 4509.2 | 4654.1 | 4936.0 ug/L | 4936.0 ppb | 22:04:47 |
| 2 | Ca 317.933Radial† | 2456.9 | 2475.3 | 5029.1 ug/L | 5029.1 ppb | 22:05:07 |
| 2 | Fe 238.204 Radial† | 424.8 | 421.9 | 5291.2 ug/L | 5291.2 ppb | 22:05:07 |
| 2 | K 766.490 Radial† | 27377.5 | 24970.3 | 4978.3 ug/L | 4978.3 ppb | 22:04:47 |
| 2 | Mg 279.077 IEC† | 120.0 | 121.0 | 5287.3 ug/L | 5287.3 ppb | 22:05:07 |
| 2 | Na 589.592 Radial† | 26323.3 | 27165.1 | 10668 ug/L | 10668 ppb | 22:04:47 |
| 2 | Sr 421.552† | 58272.7 | 59045.7 | 502.77 ug/L | 502.77 ppb | 22:04:47 |
| 2 | Sc 361.383 | 837626.8 | 837626.8 | 99.735 % | | 22:06:10 |
| 2 | Y 371.029 | 705658.3 | 705658.3 | 98.545 % | | 22:06:10 |
| 2 | Ag 328.068† | 99010.0 | 99020.0 | 502.32 ug/L | 502.32 ppb | 22:06:15 |
| 2 | As 188.979† | 878.5 | 901.6 | 487.64 ug/L | 487.64 ppb | 22:06:35 |
| 2 | B 249.677† | 17154.8 | 17450.6 | 477.39 ug/L | 477.39 ppb | 22:06:15 |
| 2 | Ba 233.527† | 51923.4 | 52043.1 | 489.11 ug/L | 489.11 ppb | 22:06:15 |
| 2 | Be 313.107† | 1191243.4 | 1198675.5 | 487.78 ug/L | 487.78 ppb | 22:06:10 |
| 2 | Cd 226.502† | 34435.5 | 34693.5 | 489.18 ug/L | 489.18 ppb | 22:06:15 |
| 2 | Co 228.616† | 19120.5 | 19210.3 | 500.07 ug/L | 500.07 ppb | 22:06:15 |
| 2 | Cr 267.716† | 37339.8 | 37344.2 | 487.24 ug/L | 487.24 ppb | 22:06:15 |
| 2 | Cu 324.752† | 156809.3 | 150873.8 | 489.21 ug/L | 489.21 ppb | 22:06:15 |
| 2 | Mn 257.610† | 367348.0 | 367873.0 | 482.97 ug/L | 482.97 ppb | 22:06:15 |
| 2 | Mo 202.031† | 5662.8 | 5663.7 | 498.40 ug/L | 498.40 ppb | 22:06:35 |
| 2 | Ni 231.604† | 15885.9 | 15834.6 | 494.13 ug/L | 494.13 ppb | 22:06:15 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3589.7 | 3431.0 | 2370.6 ug/L | 2370.6 ppb | 22:06:35 |
| 2 | Pb 220.353† | 3173.6 | 3240.9 | 489.97 ug/L | 489.97 ppb | 22:06:35 |
| 2 | S 181.975 Axial† | 580.0 | 557.1 | 975.60 ug/L | 975.60 ppb | 22:06:35 |
| 2 | Sb 206.836† | 1219.5 | 1196.1 | 526.04 ug/L | 526.04 ppb | 22:06:35 |
| 2 | Se 196.026† | 609.1 | 627.7 | 519.30 ug/L | 519.30 ppb | 22:06:35 |
| 2 | Si 251.611† | 66758.0 | 66410.1 | 2466.5 ug/L | 2466.5 ppb | 22:06:15 |
| 2 | Sn 189.927† | 2226.5 | 2229.3 | 494.34 ug/L | 494.34 ppb | 22:06:35 |
| 2 | Ti 334.940† | 282990.3 | 284826.6 | 489.89 ug/L | 489.89 ppb | 22:06:15 |
| 2 | Tl 190.801† | 1228.9 | 1257.2 | 489.35 ug/L | 489.35 ppb | 22:06:35 |
| 2 | U 409.014† | 15471.2 | 17547.5 | 514.64 ug/L | 514.64 ppb | 22:06:15 |
| 2 | V 292.402† | 61709.7 | 63301.4 | 494.64 ug/L | 494.64 ppb | 22:06:15 |
| 2 | Zn 213.857† | 41617.4 | 41121.7 | 483.92 ug/L | 483.92 ppb | 22:06:15 |
| 2 | SiO2† | 66953.4 | 66578.2 | 5305.7 ug/L | 5305.7 ppb | 22:07:17 |
| 3 | Sc Radial | 4044.5 | 4044.5 | 100 % | | 22:05:32 |
| 3 | Y RADIAL | 4435.6 | 4435.6 | 98.18 % | | 22:05:12 |
| 3 | Al 396.153Radial† | 4536.9 | 4604.6 | 4883.6 ug/L | 4883.6 ppb | 22:05:12 |
| 3 | Ca 317.933Radial† | 2474.8 | 2451.1 | 4980.0 ug/L | 4980.0 ppb | 22:05:32 |
| 3 | Fe 238.204 Radial† | 429.4 | 419.2 | 5257.2 ug/L | 5257.2 ppb | 22:05:32 |
| 3 | K 766.490 Radial† | 27646.4 | 24770.4 | 4938.4 ug/L | 4938.4 ppb | 22:05:12 |
| 3 | Mg 279.077 IEC† | 120.5 | 119.4 | 5217.7 ug/L | 5217.7 ppb | 22:05:32 |
| 3 | Na 589.592 Radial† | 26635.9 | 27026.7 | 10614 ug/L | 10614 ppb | 22:05:12 |
| 3 | Sr 421.552† | 58784.0 | 58559.2 | 498.63 ug/L | 498.63 ppb | 22:05:12 |
| 3 | Sc 361.383 | 846524.5 | 846524.5 | 100.79 % | | 22:06:41 |
| 3 | Y 371.029 | 712501.6 | 712501.6 | 99.501 % | | 22:06:41 |
| 3 | Ag 328.068† | 100109.7 | 99067.6 | 502.56 ug/L | 502.56 ppb | 22:06:46 |
| 3 | As 188.979† | 887.3 | 901.1 | 487.40 ug/L | 487.40 ppb | 22:07:06 |
| 3 | B 249.677† | 17498.3 | 17610.6 | 481.78 ug/L | 481.78 ppb | 22:06:46 |
| 3 | Ba 233.527† | 52473.8 | 52041.8 | 489.10 ug/L | 489.10 ppb | 22:06:46 |
| 3 | Be 313.107† | 1198951.6 | 1193768.8 | 485.79 ug/L | 485.79 ppb | 22:06:41 |
| 3 | Cd 226.502† | 34944.4 | 34835.5 | 491.18 ug/L | 491.18 ppb | 22:06:46 |
| 3 | Co 228.616† | 19427.0 | 19312.9 | 502.72 ug/L | 502.72 ppb | 22:06:46 |
| 3 | Cr 267.716† | 37798.1 | 37405.4 | 488.03 ug/L | 488.03 ppb | 22:06:46 |
| 3 | Cu 324.752† | 158830.0 | 151225.9 | 490.35 ug/L | 490.35 ppb | 22:06:46 |
| 3 | Mn 257.610† | 371770.9 | 368389.6 | 483.65 ug/L | 483.65 ppb | 22:06:46 |
| 3 | Mo 202.031† | 5641.3 | 5582.6 | 491.27 ug/L | 491.27 ppb | 22:07:06 |
| 3 | Ni 231.604† | 16068.2 | 15848.0 | 494.55 ug/L | 494.55 ppb | 22:06:46 |
| 3 | P 214.914† | 3588.8 | 3392.3 | 2342.5 ug/L | 2342.5 ppb | 22:07:06 |
| 3 | Pb 220.353† | 3174.7 | 3208.5 | 485.07 ug/L | 485.07 ppb | 22:07:06 |
| 3 | S 181.975 Axial† | 584.8 | 555.8 | 973.30 ug/L | 973.30 ppb | 22:07:06 |
| 3 | Sb 206.836† | 1217.1 | 1180.9 | 519.35 ug/L | 519.35 ppb | 22:07:06 |
| 3 | Se 196.026† | 607.1 | 619.3 | 512.44 ug/L | 512.44 ppb | 22:07:06 |
| 3 | Si 251.611† | 67648.7 | 66590.3 | 2473.3 ug/L | 2473.3 ppb | 22:06:46 |
| 3 | Sn 189.927† | 2224.2 | 2203.5 | 488.62 ug/L | 488.62 ppb | 22:07:06 |
| 3 | Ti 334.940† | 286616.4 | 285441.7 | 490.94 ug/L | 490.94 ppb | 22:06:46 |
| 3 | Tl 190.801† | 1228.3 | 1243.7 | 484.13 ug/L | 484.13 ppb | 22:07:06 |
| 3 | U 409.014† | 15513.8 | 17426.8 | 511.09 ug/L | 511.09 ppb | 22:06:46 |
| 3 | V 292.402† | 62578.6 | 63513.1 | 496.17 ug/L | 496.17 ppb | 22:06:46 |
| 3 | Zn 213.857† | 42187.2 | 41248.4 | 485.42 ug/L | 485.42 ppb | 22:06:46 |
| 3 | SiO2† | 67283.7 | 66200.2 | 5275.7 ug/L | 5275.7 ppb | 22:07:22 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 841176.9 | 100.16 % | 0.561 | | | 0.56% |
| Sc Radial | 4007.4 | 99.3 % | 0.85 | | | 0.86% |
| Y 371.029 | 708118.0 | 98.889 % | 0.5315 | | | 0.54% |
| Y RADIAL | 4437.5 | 98.22 % | 0.963 | | | 0.98% |
| Ag 328.068† | 98883.2 | 501.64 ug/L | 1.397 | 501.64 ppb | 1.397 | 0.28% |
| QC value within limits for Ag 328.068 Recovery = 100.33% | | | | | | |
| Al 396.153Radial† | 4649.8 | 4931.6 ug/L | 46.02 | 4931.6 ppb | 46.02 | 0.93% |
| QC value within limits for Al 396.153Radial Recovery = 98.63% | | | | | | |
| As 188.979† | 899.8 | 486.65 ug/L | 1.517 | 486.65 ppb | 1.517 | 0.31% |
| QC value within limits for As 188.979 Recovery = 97.33% | | | | | | |
| B 249.677† | 17450.7 | 477.39 ug/L | 4.398 | 477.39 ppb | 4.398 | 0.92% |
| QC value within limits for B 249.677 Recovery = 95.48% | | | | | | |
| Ba 233.527† | 51983.0 | 488.55 ug/L | 0.967 | 488.55 ppb | 0.967 | 0.20% |
| QC value within limits for Ba 233.527 Recovery = 97.71% | | | | | | |
| Be 313.107† | 1196494.0 | 486.89 ug/L | 1.013 | 486.89 ppb | 1.013 | 0.21% |
| QC value within limits for Be 313.107 Recovery = 97.38% | | | | | | |
| Ca 317.933Radial† | 2471.2 | 5020.8 ug/L | 37.42 | 5020.8 ppb | 37.42 | 0.75% |

| | | | | | | | |
|---|-----------------|----------|-------------|--------|------------|--------|-------|
| QC value within limits for Ca 317.933 Radial Recovery = 100.42% | | | | | | | |
| Cd | 226.502† | 34739.1 | 489.82 ug/L | 1.183 | 489.82 ppb | 1.183 | 0.24% |
| QC value within limits for Cd 226.502 Recovery = 97.96% | | | | | | | |
| Co | 228.616† | 19242.1 | 500.88 ug/L | 1.594 | 500.88 ppb | 1.594 | 0.32% |
| QC value within limits for Co 228.616 Recovery = 100.18% | | | | | | | |
| Cr | 267.716† | 37347.2 | 487.28 ug/L | 0.736 | 487.28 ppb | 0.736 | 0.15% |
| QC value within limits for Cr 267.716 Recovery = 97.46% | | | | | | | |
| Cu | 324.752† | 150712.7 | 488.69 ug/L | 1.975 | 488.69 ppb | 1.975 | 0.40% |
| QC value within limits for Cu 324.752 Recovery = 97.74% | | | | | | | |
| Fe | 238.204 Radial† | 422.8 | 5301.7 ug/L | 50.51 | 5301.7 ppb | 50.51 | 0.95% |
| QC value within limits for Fe 238.204 Radial Recovery = 106.03% | | | | | | | |
| K | 766.490 Radial† | 24903.7 | 4965.0 ug/L | 23.01 | 4965.0 ppb | 23.01 | 0.46% |
| QC value within limits for K 766.490 Radial Recovery = 99.30% | | | | | | | |
| Mg | 279.077 IEC† | 119.0 | 5197.8 ug/L | 100.85 | 5197.8 ppb | 100.85 | 1.94% |
| QC value within limits for Mg 279.077 IEC Recovery = 103.96% | | | | | | | |
| Mn | 257.610† | 367871.2 | 482.98 ug/L | 0.674 | 482.98 ppb | 0.674 | 0.14% |
| QC value within limits for Mn 257.610 Recovery = 96.60% | | | | | | | |
| Mo | 202.031† | 5605.5 | 493.29 ug/L | 4.459 | 493.29 ppb | 4.459 | 0.90% |
| QC value within limits for Mo 202.031 Recovery = 98.66% | | | | | | | |
| Na | 589.592 Radial† | 27212.4 | 10687 ug/L | 83.8 | 10687 ppb | 83.8 | 0.78% |
| QC value within limits for Na 589.592 Radial Recovery = 106.87% | | | | | | | |
| Ni | 231.604† | 15826.6 | 493.88 ug/L | 0.822 | 493.88 ppb | 0.822 | 0.17% |
| QC value within limits for Ni 231.604 Recovery = 98.78% | | | | | | | |
| P | 214.914† | 3405.5 | 2352.3 ug/L | 15.84 | 2352.3 ppb | 15.84 | 0.67% |
| QC value within limits for P 214.914 Recovery = 94.09% | | | | | | | |
| Pb | 220.353† | 3224.3 | 487.46 ug/L | 2.457 | 487.46 ppb | 2.457 | 0.50% |
| QC value within limits for Pb 220.353 Recovery = 97.49% | | | | | | | |
| S | 181.975 Axial† | 561.0 | 982.44 ug/L | 13.891 | 982.44 ppb | 13.891 | 1.41% |
| QC value within limits for S 181.975 Axial Recovery = 98.24% | | | | | | | |
| Sb | 206.836† | 1185.8 | 521.52 ug/L | 3.908 | 521.52 ppb | 3.908 | 0.75% |
| QC value within limits for Sb 206.836 Recovery = 104.30% | | | | | | | |
| Se | 196.026† | 623.1 | 515.62 ug/L | 3.456 | 515.62 ppb | 3.456 | 0.67% |
| QC value within limits for Se 196.026 Recovery = 103.12% | | | | | | | |
| Si | 251.611† | 66493.6 | 2469.7 ug/L | 3.42 | 2469.7 ppb | 3.42 | 0.14% |
| QC value within limits for Si 251.611 Recovery = 98.79% | | | | | | | |
| Sn | 189.927† | 2212.9 | 490.71 ug/L | 3.154 | 490.71 ppb | 3.154 | 0.64% |
| QC value within limits for Sn 189.927 Recovery = 98.14% | | | | | | | |
| Sr | 421.552† | 59025.3 | 502.60 ug/L | 3.884 | 502.60 ppb | 3.884 | 0.77% |
| QC value within limits for Sr 421.552 Recovery = 100.52% | | | | | | | |
| Ti | 334.940† | 284743.0 | 489.75 ug/L | 1.269 | 489.75 ppb | 1.269 | 0.26% |
| QC value within limits for Ti 334.940 Recovery = 97.95% | | | | | | | |
| Tl | 190.801† | 1248.6 | 486.02 ug/L | 2.887 | 486.02 ppb | 2.887 | 0.59% |
| QC value within limits for Tl 190.801 Recovery = 97.20% | | | | | | | |
| U | 409.014† | 17471.2 | 512.39 ug/L | 1.955 | 512.39 ppb | 1.955 | 0.38% |
| QC value within limits for U 409.014 Recovery = 102.48% | | | | | | | |
| V | 292.402† | 63337.0 | 494.84 ug/L | 1.247 | 494.84 ppb | 1.247 | 0.25% |
| QC value within limits for V 292.402 Recovery = 98.97% | | | | | | | |
| Zn | 213.857† | 41149.2 | 484.24 ug/L | 1.054 | 484.24 ppb | 1.054 | 0.22% |
| QC value within limits for Zn 213.857 Recovery = 96.85% | | | | | | | |
| SiO2† | | 66521.1 | 5301.3 ug/L | 23.69 | 5301.3 ppb | 23.69 | 0.45% |
| QC value within limits for SiO2 Recovery = 99.14% | | | | | | | |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 22:09:31

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 | 4152.7 | 4152.7 | 103 % | | 22:11:43 |
| 1 | Y RADIAL | 4648.0 | 4648.0 | 102.9 % | | 22:11:23 |
| 1 | Al 396.153Radial† | -74.2 | 7.5 | 8.0568 ug/L | 8.0568 ppb | 22:11:43 |
| 1 | Ca 317.933Radial† | 23.4 | 5.5 | 11.271 ug/L | 11.271 ppb | 22:11:43 |
| 1 | Fe 238.204 Radial† | 15.8 | 6.4 | 79.450 ug/L | 79.450 ppb | 22:11:43 |
| 1 | K 766.490 Radial† | 2584.0 | -293.3 | -58.565 ug/L | -58.565 ppb | 22:11:23 |
| 1 | Mg 279.077 IEC† | 4.5 | 3.7 | 161.38 ug/L | 161.38 ppb | 22:11:43 |
| 1 | Na 589.592 Radial† | -370.0 | 101.4 | 39.834 ug/L | 39.834 ppb | 22:11:23 |
| 1 | Sr 421.552† | 59.3 | -12.4 | -0.1061 ug/L | -0.1061 ppb | 22:11:23 |
| 1 | Sc 361.383 | 824304.3 | 824304.3 | 98.148 % | | 22:12:40 |
| 1 | Y 371.029 | 701365.4 | 701365.4 | 97.946 % | | 22:12:40 |
| 1 | Ag 328.068† | 142.8 | -107.9 | -0.5158 ug/L | -0.5158 ppb | 22:12:40 |
| 1 | As 188.979† | -28.3 | -8.0 | -4.2534 ug/L | -4.2534 ppb | 22:13:00 |
| 1 | B 249.677† | -242.2 | 3.4 | 0.0809 ug/L | 0.0809 ppb | 22:13:00 |
| 1 | Ba 233.527† | 16.1 | -2.1 | -0.0139 ug/L | -0.0139 ppb | 22:13:00 |
| 1 | Be 313.107† | -4453.6 | -274.9 | -0.1109 ug/L | -0.1109 ppb | 22:12:40 |
| 1 | Cd 226.502† | -169.7 | -6.5 | -0.1005 ug/L | -0.1005 ppb | 22:13:00 |
| 1 | Co 228.616† | -44.8 | -6.8 | -0.1787 ug/L | -0.1787 ppb | 22:13:00 |
| 1 | Cr 267.716† | 111.4 | 18.5 | 0.2505 ug/L | 0.2505 ppb | 22:13:00 |
| 1 | Cu 324.752† | 6419.5 | 187.8 | 0.6120 ug/L | 0.6120 ppb | 22:12:40 |
| 1 | Mn 257.610† | 1007.1 | 573.6 | 0.7539 ug/L | 0.7539 ppb | 22:13:00 |
| 1 | Mo 202.031† | 10.6 | -3.4 | -0.2957 ug/L | -0.2957 ppb | 22:13:00 |
| 1 | Ni 231.604† | 62.2 | -30.3 | -0.9453 ug/L | -0.9453 ppb | 22:13:00 |
| 1 | P 214.914† | 197.7 | 33.2 | 23.716 ug/L | 23.716 ppb | 22:13:00 |
| 1 | Pb 220.353† | -53.0 | 4.8 | 0.7119 ug/L | 0.7119 ppb | 22:13:00 |
| 1 | S 181.975 Axial† | 25.3 | 1.3 | 2.3642 ug/L | 2.3642 ppb | 22:13:00 |
| 1 | Sb 206.836† | 27.8 | 1.7 | 0.7790 ug/L | 0.7790 ppb | 22:13:00 |
| 1 | Se 196.026† | -21.6 | -5.0 | -3.7588 ug/L | -3.7588 ppb | 22:13:00 |
| 1 | Si 251.611† | 616.1 | 102.3 | 3.8114 ug/L | 3.8114 ppb | 22:13:00 |
| 1 | Sn 189.927† | 17.0 | 14.2 | 3.1522 ug/L | 3.1522 ppb | 22:13:00 |
| 1 | Ti 334.940† | -887.9 | 178.6 | 0.2946 ug/L | 0.2946 ppb | 22:12:40 |
| 1 | Tl 190.801† | -28.0 | -3.5 | -1.3440 ug/L | -1.3440 ppb | 22:13:00 |
| 1 | U 409.014† | -1921.9 | 77.0 | 2.2572 ug/L | 2.2572 ppb | 22:12:40 |
| 1 | V 292.402† | -1231.3 | 173.0 | 1.3250 ug/L | 1.3250 ppb | 22:12:40 |
| 1 | Zn 213.857† | 684.4 | 90.9 | 1.0730 ug/L | 1.0730 ppb | 22:13:00 |
| 1 | SiO2† | 618.3 | 76.6 | 6.1270 ug/L | 6.1270 ppb | 22:13:56 |
| 2 | Sc Radial | 4084.5 | 4084.5 | 101 % | | 22:12:08 |
| 2 | Y RADIAL | 4561.2 | 4561.2 | 101.0 % | | 22:11:48 |
| 2 | Al 396.153Radial† | -61.1 | 19.3 | 20.580 ug/L | 20.580 ppb | 22:12:08 |
| 2 | Ca 317.933Radial† | 24.5 | 7.0 | 14.266 ug/L | 14.266 ppb | 22:12:08 |
| 2 | Fe 238.204 Radial† | 15.8 | 6.6 | 83.080 ug/L | 83.080 ppb | 22:12:08 |
| 2 | K 766.490 Radial† | 2480.9 | -353.2 | -70.520 ug/L | -70.520 ppb | 22:11:48 |
| 2 | Mg 279.077 IEC† | 3.1 | 2.3 | 101.63 ug/L | 101.63 ppb | 22:12:08 |
| 2 | Na 589.592 Radial† | -369.6 | 95.8 | 37.641 ug/L | 37.641 ppb | 22:11:48 |
| 2 | Sr 421.552† | 70.4 | -0.5 | -0.0045 ug/L | -0.0045 ppb | 22:11:48 |
| 2 | Sc 361.383 | 822658.7 | 822658.7 | 97.952 % | | 22:13:05 |
| 2 | Y 371.029 | 701650.4 | 701650.4 | 97.986 % | | 22:13:05 |
| 2 | Ag 328.068† | 207.4 | -41.7 | -0.1887 ug/L | -0.1887 ppb | 22:13:05 |
| 2 | As 188.979† | -26.7 | -6.4 | -3.4297 ug/L | -3.4297 ppb | 22:13:25 |
| 2 | B 249.677† | -234.6 | 10.6 | 0.2805 ug/L | 0.2805 ppb | 22:13:25 |
| 2 | Ba 233.527† | 29.2 | 11.3 | 0.1080 ug/L | 0.1080 ppb | 22:13:25 |
| 2 | Be 313.107† | -4369.5 | -198.2 | -0.0799 ug/L | -0.0799 ppb | 22:13:05 |
| 2 | Cd 226.502† | -160.9 | 2.1 | 0.0225 ug/L | 0.0225 ppb | 22:13:25 |
| 2 | Co 228.616† | -54.8 | -17.0 | -0.4455 ug/L | -0.4455 ppb | 22:13:25 |
| 2 | Cr 267.716† | 117.4 | 24.8 | 0.3302 ug/L | 0.3302 ppb | 22:13:25 |
| 2 | Cu 324.752† | 6423.9 | 205.5 | 0.6682 ug/L | 0.6682 ppb | 22:13:05 |
| 2 | Mn 257.610† | 1369.1 | 945.3 | 1.2443 ug/L | 1.2443 ppb | 22:13:25 |
| 2 | Mo 202.031† | 11.0 | -3.0 | -0.2569 ug/L | -0.2569 ppb | 22:13:25 |
| 2 | Ni 231.604† | 96.2 | 4.6 | 0.1432 ug/L | 0.1432 ppb | 22:13:25 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 183.9 | 19.5 | 13.851 ug/L | 13.851 ppb | 22:13:25 |
| 2 | Pb 220.353† | -44.0 | 13.8 | 2.0794 ug/L | 2.0794 ppb | 22:13:25 |
| 2 | S 181.975 Axial† | 25.5 | 1.7 | 2.9554 ug/L | 2.9554 ppb | 22:13:25 |
| 2 | Sb 206.836† | 30.3 | 4.3 | 1.8728 ug/L | 1.8728 ppb | 22:13:25 |
| 2 | Se 196.026† | -13.5 | 3.2 | 2.7672 ug/L | 2.7672 ppb | 22:13:25 |
| 2 | Si 251.611† | 704.4 | 193.6 | 7.2129 ug/L | 7.2129 ppb | 22:13:25 |
| 2 | Sn 189.927† | 12.8 | 10.0 | 2.2132 ug/L | 2.2132 ppb | 22:13:25 |
| 2 | Ti 334.940† | -931.5 | 132.4 | 0.2193 ug/L | 0.2193 ppb | 22:13:05 |
| 2 | Tl 190.801† | -22.5 | 2.1 | 0.8035 ug/L | 0.8035 ppb | 22:13:25 |
| 2 | U 409.014† | -1846.3 | 150.3 | 4.4115 ug/L | 4.4115 ppb | 22:13:05 |
| 2 | V 292.402† | -1414.1 | -16.1 | -0.1298 ug/L | -0.1298 ppb | 22:13:05 |
| 2 | Zn 213.857† | 693.1 | 101.1 | 1.1872 ug/L | 1.1872 ppb | 22:13:25 |
| 2 | SiO2† | 562.2 | 20.5 | 1.6484 ug/L | 1.6484 ppb | 22:14:01 |
| 3 | Sc Radial | 4077.3 | 4077.3 | 101 % | | 22:12:33 |
| 3 | Y RADIAL | 4472.3 | 4472.3 | 98.99 % | | 22:12:13 |
| 3 | Al 396.153Radial† | -66.6 | 13.7 | 14.633 ug/L | 14.633 ppb | 22:12:33 |
| 3 | Ca 317.933Radial† | 19.1 | 1.7 | 3.3895 ug/L | 3.3895 ppb | 22:12:33 |
| 3 | Fe 238.204 Radial† | 12.4 | 3.2 | 40.536 ug/L | 40.536 ppb | 22:12:33 |
| 3 | K 766.490 Radial† | 2587.1 | -243.8 | -48.678 ug/L | -48.678 ppb | 22:12:13 |
| 3 | Mg 279.077 IEC† | 2.6 | 1.8 | 79.853 ug/L | 79.853 ppb | 22:12:33 |
| 3 | Na 589.592 Radial† | -393.1 | 71.9 | 28.253 ug/L | 28.253 ppb | 22:12:13 |
| 3 | Sr 421.552† | 60.8 | -9.9 | -0.0844 ug/L | -0.0844 ppb | 22:12:13 |
| 3 | Sc 361.383 | 830689.1 | 830689.1 | 98.909 % | | 22:13:31 |
| 3 | Y 371.029 | 707615.3 | 707615.3 | 98.819 % | | 22:13:31 |
| 3 | Ag 328.068† | 156.7 | -95.0 | -0.4660 ug/L | -0.4660 ppb | 22:13:31 |
| 3 | As 188.979† | -20.5 | 0.1 | 0.0762 ug/L | 0.0762 ppb | 22:13:51 |
| 3 | B 249.677† | -252.6 | -5.2 | -0.1500 ug/L | -0.1500 ppb | 22:13:51 |
| 3 | Ba 233.527† | 11.3 | -7.1 | -0.0625 ug/L | -0.0625 ppb | 22:13:51 |
| 3 | Be 313.107† | -4265.0 | -49.4 | -0.0178 ug/L | -0.0178 ppb | 22:13:31 |
| 3 | Cd 226.502† | -170.2 | -5.7 | -0.0839 ug/L | -0.0839 ppb | 22:13:51 |
| 3 | Co 228.616† | -49.4 | -11.0 | -0.2895 ug/L | -0.2895 ppb | 22:13:51 |
| 3 | Cr 267.716† | 105.3 | 11.5 | 0.1530 ug/L | 0.1530 ppb | 22:13:51 |
| 3 | Cu 324.752† | 6538.7 | 258.1 | 0.8359 ug/L | 0.8359 ppb | 22:13:31 |
| 3 | Mn 257.610† | 937.8 | 495.7 | 0.6512 ug/L | 0.6512 ppb | 22:13:51 |
| 3 | Mo 202.031† | 14.8 | 0.7 | 0.0687 ug/L | 0.0687 ppb | 22:13:51 |
| 3 | Ni 231.604† | 70.1 | -22.7 | -0.7086 ug/L | -0.7086 ppb | 22:13:51 |
| 3 | P 214.914† | 203.5 | 37.5 | 26.766 ug/L | 26.766 ppb | 22:13:51 |
| 3 | Pb 220.353† | -55.5 | 2.7 | 0.4006 ug/L | 0.4006 ppb | 22:13:51 |
| 3 | S 181.975 Axial† | 30.0 | 5.9 | 10.377 ug/L | 10.377 ppb | 22:13:51 |
| 3 | Sb 206.836† | 25.7 | -0.6 | -0.2493 ug/L | -0.2493 ppb | 22:13:51 |
| 3 | Se 196.026† | -20.5 | -3.8 | -2.8926 ug/L | -2.8926 ppb | 22:13:51 |
| 3 | Si 251.611† | 596.4 | 77.5 | 2.8857 ug/L | 2.8857 ppb | 22:13:51 |
| 3 | Sn 189.927† | 6.9 | 3.9 | 0.8578 ug/L | 0.8578 ppb | 22:13:51 |
| 3 | Ti 334.940† | -506.9 | 570.9 | 0.9736 ug/L | 0.9736 ppb | 22:13:31 |
| 3 | Tl 190.801† | -22.5 | 2.3 | 0.9081 ug/L | 0.9081 ppb | 22:13:51 |
| 3 | U 409.014† | -1818.8 | 196.3 | 5.7699 ug/L | 5.7699 ppb | 22:13:31 |
| 3 | V 292.402† | -1253.6 | 160.1 | 1.2405 ug/L | 1.2405 ppb | 22:13:31 |
| 3 | Zn 213.857† | 675.4 | 76.4 | 0.9052 ug/L | 0.9052 ppb | 22:13:51 |
| 3 | SiO2† | 685.9 | 140.1 | 11.191 ug/L | 11.191 ppb | 22:14:06 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 825884.0 | 98.336 % | | 0.5051 | | | 0.51% |
| Sc Radial | 4104.9 | 102 % | | 1.0 | | | 1.01% |
| Y 371.029 | 703543.7 | 98.250 % | | 0.4928 | | | 0.50% |
| Y RADIAL | 4560.5 | 100.9 % | | 1.94 | | | 1.93% |
| Ag 328.068† | -81.5 | -0.3902 ug/L | | 0.17625 | -0.3902 ppb | 0.17625 | 45.17% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 13.5 | 14.423 ug/L | | 6.2642 | 14.423 ppb | 6.2642 | 43.43% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -4.8 | -2.5356 ug/L | | 2.29914 | -2.5356 ppb | 2.29914 | 90.67% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | 2.9 | 0.0705 ug/L | | 0.21542 | 0.0705 ppb | 0.21542 | 305.70% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 0.7 | 0.0105 ug/L | | 0.08787 | 0.0105 ppb | 0.08787 | 834.35% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -174.2 | -0.0696 ug/L | | 0.04741 | -0.0696 ppb | 0.04741 | 68.15% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 4.7 | 9.6422 ug/L | | 5.61821 | 9.6422 ppb | 5.61821 | 58.27% |

| | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | -3.4 | -0.0540 ug/L | 0.06678 | -0.0540 ppb | 0.06678 | 123.75% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -11.6 | -0.3046 ug/L | 0.13404 | -0.3046 ppb | 0.13404 | 44.01% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 18.3 | 0.2446 ug/L | 0.08878 | 0.2446 ppb | 0.08878 | 36.30% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 217.1 | 0.7053 ug/L | 0.11646 | 0.7053 ppb | 0.11646 | 16.51% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 5.4 | 67.689 ug/L | 23.5848 | 67.689 ppb | 23.5848 | 34.84% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -296.7 | -59.254 ug/L | 10.9373 | -59.254 ppb | 10.9373 | 18.46% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 2.6 | 114.29 ug/L | 42.211 | 114.29 ppb | 42.211 | 36.93% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 671.6 | 0.8831 ug/L | 0.31701 | 0.8831 ppb | 0.31701 | 35.90% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -1.9 | -0.1613 ug/L | 0.20013 | -0.1613 ppb | 0.20013 | 124.07% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 89.7 | 35.243 ug/L | 6.1514 | 35.243 ppb | 6.1514 | 17.45% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -16.1 | -0.5036 ug/L | 0.57247 | -0.5036 ppb | 0.57247 | 113.68% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 30.1 | 21.444 ug/L | 6.7506 | 21.444 ppb | 6.7506 | 31.48% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 7.1 | 1.0640 ug/L | 0.89308 | 1.0640 ppb | 0.89308 | 83.94% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 3.0 | 5.2322 ug/L | 4.46544 | 5.2322 ppb | 4.46544 | 85.34% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 1.8 | 0.8008 ug/L | 1.06124 | 0.8008 ppb | 1.06124 | 132.52% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | -1.9 | -1.2947 ug/L | 3.54430 | -1.2947 ppb | 3.54430 | 273.75% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 124.5 | 4.6367 ug/L | 2.27860 | 4.6367 ppb | 2.27860 | 49.14% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 9.4 | 2.0744 ug/L | 1.15347 | 2.0744 ppb | 1.15347 | 55.60% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -7.6 | -0.0650 ug/L | 0.05348 | -0.0650 ppb | 0.05348 | 82.29% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 294.0 | 0.4958 ug/L | 0.41544 | 0.4958 ppb | 0.41544 | 83.79% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 0.3 | 0.1225 ug/L | 1.27115 | 0.1225 ppb | 1.27115 | >999.9% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 141.2 | 4.1462 ug/L | 1.77130 | 4.1462 ppb | 1.77130 | 42.72% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 105.7 | 0.8119 ug/L | 0.81663 | 0.8119 ppb | 0.81663 | 100.58% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 89.5 | 1.0551 ug/L | 0.14183 | 1.0551 ppb | 0.14183 | 13.44% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 79.1 | 6.3221 ug/L | 4.77432 | 6.3221 ppb | 4.77432 | 75.52% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 50

Sample ID: 247899004|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 3/25/2010 22:16:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899004|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4313.7 | 4313.7 | 107 % | | 22:18:29 |
| 1 | Y RADIAL | 5168.0 | 5168.0 | 114.4 % | | 22:18:29 |
| 1 | Al 396.153Radial† | 123080.1 | 115174.0 | 122750 ug/L | 122750 ppb | 22:18:09 |
| 1 | Ca 317.933Radial† | 15124.2 | 14125.7 | 28700 ug/L | 28700 ppb | 22:18:09 |
| 1 | Fe 238.204 Radial† | 13191.5 | 12326.6 | 154140 ug/L | 154140 ppb | 22:18:09 |
| 1 | K 766.490 Radial† | 98153.3 | 88981.6 | 17753 ug/L | 17753 ppb | 22:18:09 |
| 1 | Mg 279.077 IEC† | 572.6 | 534.7 | 23198 ug/L | 23198 ppb | 22:18:29 |
| 1 | Na 589.592 Radial† | 2386.4 | 2692.5 | 1057.4 ug/L | 1057.4 ppb | 22:18:09 |
| 1 | Sr 421.552† | 28303.1 | 26396.7 | 224.57 ug/L | 224.57 ppb | 22:18:09 |
| 1 | Sc 361.383 | 865123.8 | 865123.8 | 103.01 % | | 22:19:27 |
| 1 | Y 371.029 | 814151.8 | 814151.8 | 113.70 % | | 22:19:27 |
| 1 | Ag 328.068† | -9505.4 | -9481.2 | 0.6407 ug/L | 0.6407 ppb | 22:19:32 |
| 1 | As 188.979† | -9.5 | 11.6 | 56.690 ug/L | 56.690 ppb | 22:19:52 |
| 1 | B 249.677† | 1294.0 | 1506.3 | 16.227 ug/L | 16.227 ppb | 22:19:32 |
| 1 | Ba 233.527† | 71973.8 | 69853.1 | 660.09 ug/L | 660.09 ppb | 22:19:32 |
| 1 | Be 313.107† | 20384.6 | 24051.9 | 13.522 ug/L | 13.522 ppb | 22:19:32 |
| 1 | Cd 226.502† | 1040.3 | 1176.4 | 0.7236 ug/L | 0.7236 ppb | 22:19:52 |
| 1 | Co 228.616† | 1990.3 | 1971.1 | 45.814 ug/L | 45.814 ppb | 22:19:52 |
| 1 | Cr 267.716† | 17316.8 | 16716.1 | 234.39 ug/L | 234.39 ppb | 22:19:32 |
| 1 | Cu 324.752† | 61410.4 | 53263.9 | 180.96 ug/L | 180.96 ppb | 22:19:32 |
| 1 | Mn 257.610† | 2058096.7 | 1997531.6 | 2635.1 ug/L | 2635.1 ppb | 22:19:27 |
| 1 | Mo 202.031† | -58.7 | -71.2 | 6.0515 ug/L | 6.0515 ppb | 22:19:52 |
| 1 | Ni 231.604† | 4508.0 | 4282.8 | 133.70 ug/L | 133.70 ppb | 22:19:52 |
| 1 | P 214.914† | 1205.2 | 1001.7 | 591.96 ug/L | 591.96 ppb | 22:19:52 |
| 1 | Pb 220.353† | 855.7 | 889.5 | 139.63 ug/L | 139.63 ppb | 22:19:52 |
| 1 | S 181.975 Axial† | 264.6 | 232.5 | 384.48 ug/L | 384.48 ppb | 22:19:52 |
| 1 | Sb 206.836† | 55.4 | 27.1 | 1.3712 ug/L | 1.3712 ppb | 22:19:52 |
| 1 | Se 196.026† | -622.9 | -587.7 | 34.928 ug/L | 34.928 ppb | 22:19:52 |
| 1 | Si 251.611† | 1347931.3 | 1308035.6 | 48702 ug/L | 48702 ppb | 22:19:27 |
| 1 | Sn 189.927† | -107.6 | -107.5 | -27.561 ug/L | -27.561 ppb | 22:19:52 |
| 1 | Ti 334.940† | 989679.3 | 961856.2 | 1656.8 ug/L | 1656.8 ppb | 22:19:27 |
| 1 | Tl 190.801† | -112.3 | -83.9 | -6.8993 ug/L | -6.8993 ppb | 22:19:52 |
| 1 | U 409.014† | -7635.4 | -5377.2 | -176.28 ug/L | -176.28 ppb | 22:19:27 |
| 1 | V 292.402† | 32684.7 | 33157.5 | 231.39 ug/L | 231.39 ppb | 22:19:32 |
| 1 | Zn 213.857† | 36528.8 | 34855.4 | 389.92 ug/L | 389.92 ppb | 22:19:32 |
| 1 | SiO2† | 1338473.4 | 1298826.1 | 103770 ug/L | 103770 ppb | 22:21:01 |
| 2 | Sc Radial | 4281.7 | 4281.7 | 106 % | | 22:18:55 |
| 2 | Y RADIAL | 5149.4 | 5149.4 | 114.0 % | | 22:18:55 |
| 2 | Al 396.153Radial† | 127592.7 | 120287.0 | 128200 ug/L | 128200 ppb | 22:18:35 |
| 2 | Ca 317.933Radial† | 15578.5 | 14659.6 | 29785 ug/L | 29785 ppb | 22:18:35 |
| 2 | Fe 238.204 Radial† | 13586.4 | 12791.0 | 159950 ug/L | 159950 ppb | 22:18:35 |
| 2 | K 766.490 Radial† | 101757.3 | 93064.2 | 18567 ug/L | 18567 ppb | 22:18:35 |
| 2 | Mg 279.077 IEC† | 566.2 | 532.7 | 23102 ug/L | 23102 ppb | 22:18:55 |
| 2 | Na 589.592 Radial† | 2476.6 | 2794.1 | 1097.3 ug/L | 1097.3 ppb | 22:18:35 |
| 2 | Sr 421.552† | 29349.9 | 27581.0 | 234.65 ug/L | 234.65 ppb | 22:18:35 |
| 2 | Sc 361.383 | 867509.3 | 867509.3 | 103.29 % | | 22:19:58 |
| 2 | Y 371.029 | 816491.5 | 816491.5 | 114.02 % | | 22:19:58 |
| 2 | Ag 328.068† | -9305.9 | -9262.6 | 3.5177 ug/L | 3.5177 ppb | 22:20:03 |
| 2 | As 188.979† | -5.7 | 15.3 | 60.020 ug/L | 60.020 ppb | 22:20:23 |
| 2 | B 249.677† | 1281.6 | 1491.0 | 14.861 ug/L | 14.861 ppb | 22:20:03 |
| 2 | Ba 233.527† | 71459.9 | 69163.4 | 653.80 ug/L | 653.80 ppb | 22:20:03 |
| 2 | Be 313.107† | 20378.8 | 23991.9 | 13.496 ug/L | 13.496 ppb | 22:20:03 |
| 2 | Cd 226.502† | 1036.2 | 1169.6 | 0.0283 ug/L | 0.0283 ppb | 22:20:23 |
| 2 | Co 228.616† | 2008.4 | 1983.3 | 46.045 ug/L | 46.045 ppb | 22:20:23 |
| 2 | Cr 267.716† | 17143.0 | 16501.5 | 232.21 ug/L | 232.21 ppb | 22:20:03 |
| 2 | Cu 324.752† | 61048.0 | 52749.2 | 179.60 ug/L | 179.60 ppb | 22:20:03 |
| 2 | Mn 257.610† | 2061029.3 | 1994876.7 | 2632.2 ug/L | 2632.2 ppb | 22:19:58 |
| 2 | Mo 202.031† | -65.4 | -77.5 | 5.9576 ug/L | 5.9576 ppb | 22:20:23 |
| 2 | Ni 231.604† | 4554.9 | 4316.1 | 134.74 ug/L | 134.74 ppb | 22:20:23 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1215.5 | 1008.5 | 593.81 ug/L | 593.81 ppb | 22:20:23 |
| 2 | Pb 220.353† | 857.2 | 888.7 | 139.90 ug/L | 139.90 ppb | 22:20:23 |
| 2 | S 181.975 Axial† | 252.0 | 219.5 | 360.78 ug/L | 360.78 ppb | 22:20:23 |
| 2 | Sb 206.836† | 66.9 | 38.2 | 5.8102 ug/L | 5.8102 ppb | 22:20:23 |
| 2 | Se 196.026† | -657.7 | -619.8 | 28.638 ug/L | 28.638 ppb | 22:20:23 |
| 2 | Si 251.611† | 1349798.0 | 1306244.5 | 48636 ug/L | 48636 ppb | 22:19:58 |
| 2 | Sn 189.927† | -115.5 | -114.9 | -29.331 ug/L | -29.331 ppb | 22:20:23 |
| 2 | Ti 334.940† | 991827.2 | 961293.7 | 1656.0 ug/L | 1656.0 ppb | 22:19:58 |
| 2 | Tl 190.801† | -113.4 | -84.7 | -7.2073 ug/L | -7.2073 ppb | 22:20:23 |
| 2 | U 409.014† | -7797.2 | -5513.4 | -180.94 ug/L | -180.94 ppb | 22:19:58 |
| 2 | V 292.402† | 32467.1 | 32859.6 | 228.23 ug/L | 228.23 ppb | 22:20:03 |
| 2 | Zn 213.857† | 36224.7 | 34463.5 | 384.39 ug/L | 384.39 ppb | 22:20:03 |
| 2 | SiO2† | 1358734.4 | 1314868.1 | 105050 ug/L | 105050 ppb | 22:21:07 |
| 3 | Sc Radial | 4280.9 | 4280.9 | 106 % | | 22:19:20 |
| 3 | Y RADIAL | 5134.6 | 5134.6 | 113.6 % | | 22:19:20 |
| 3 | Al 396.153Radial† | 121797.8 | 114847.9 | 122400 ug/L | 122400 ppb | 22:19:00 |
| 3 | Ca 317.933Radial† | 14974.8 | 14093.3 | 28634 ug/L | 28634 ppb | 22:19:00 |
| 3 | Fe 238.204 Radial† | 13046.0 | 12284.1 | 153610 ug/L | 153610 ppb | 22:19:00 |
| 3 | K 766.490 Radial† | 97271.1 | 88853.8 | 17727 ug/L | 17727 ppb | 22:19:00 |
| 3 | Mg 279.077 IEC† | 565.9 | 532.5 | 23102 ug/L | 23102 ppb | 22:19:20 |
| 3 | Na 589.592 Radial† | 2311.3 | 2638.8 | 1036.3 ug/L | 1036.3 ppb | 22:19:00 |
| 3 | Sr 421.552† | 27869.0 | 26190.5 | 222.81 ug/L | 222.81 ppb | 22:19:00 |
| 3 | Sc 361.383 | 865613.4 | 865613.4 | 103.07 % | | 22:20:29 |
| 3 | Y 371.029 | 815289.1 | 815289.1 | 113.86 % | | 22:20:29 |
| 3 | Ag 328.068† | -9525.1 | -9495.0 | 0.4149 ug/L | 0.4149 ppb | 22:20:35 |
| 3 | As 188.979† | -5.7 | 15.3 | 58.524 ug/L | 58.524 ppb | 22:20:55 |
| 3 | B 249.677† | 1355.2 | 1565.1 | 17.929 ug/L | 17.929 ppb | 22:20:35 |
| 3 | Ba 233.527† | 72237.3 | 70069.2 | 662.10 ug/L | 662.10 ppb | 22:20:35 |
| 3 | Be 313.107† | 20594.5 | 24244.4 | 13.599 ug/L | 13.599 ppb | 22:20:35 |
| 3 | Cd 226.502† | 1033.6 | 1169.2 | 0.6779 ug/L | 0.6779 ppb | 22:20:55 |
| 3 | Co 228.616† | 1985.1 | 1965.0 | 45.662 ug/L | 45.662 ppb | 22:20:55 |
| 3 | Cr 267.716† | 17251.9 | 16643.5 | 233.39 ug/L | 233.39 ppb | 22:20:35 |
| 3 | Cu 324.752† | 61685.9 | 53497.5 | 181.69 ug/L | 181.69 ppb | 22:20:35 |
| 3 | Mn 257.610† | 2059362.6 | 1997630.0 | 2635.2 ug/L | 2635.2 ppb | 22:20:29 |
| 3 | Mo 202.031† | -66.1 | -78.3 | 5.3834 ug/L | 5.3834 ppb | 22:20:55 |
| 3 | Ni 231.604† | 4520.3 | 4292.2 | 133.99 ug/L | 133.99 ppb | 22:20:55 |
| 3 | P 214.914† | 1220.8 | 1016.2 | 602.54 ug/L | 602.54 ppb | 22:20:55 |
| 3 | Pb 220.353† | 853.6 | 887.1 | 139.25 ug/L | 139.25 ppb | 22:20:55 |
| 3 | S 181.975 Axial† | 263.7 | 231.5 | 382.82 ug/L | 382.82 ppb | 22:20:55 |
| 3 | Sb 206.836† | 45.3 | 17.3 | -2.8283 ug/L | -2.8283 ppb | 22:20:55 |
| 3 | Se 196.026† | -636.0 | -600.1 | 23.349 ug/L | 23.349 ppb | 22:20:55 |
| 3 | Si 251.611† | 1347918.6 | 1307283.3 | 48674 ug/L | 48674 ppb | 22:20:29 |
| 3 | Sn 189.927† | -113.1 | -112.8 | -28.722 ug/L | -28.722 ppb | 22:20:55 |
| 3 | Ti 334.940† | 989784.4 | 961414.9 | 1656.1 ug/L | 1656.1 ppb | 22:20:29 |
| 3 | Tl 190.801† | -113.3 | -84.8 | -7.2539 ug/L | -7.2539 ppb | 22:20:55 |
| 3 | U 409.014† | -7752.0 | -5486.2 | -179.42 ug/L | -179.42 ppb | 22:20:29 |
| 3 | V 292.402† | 32868.8 | 33318.3 | 232.69 ug/L | 232.69 ppb | 22:20:35 |
| 3 | Zn 213.857† | 36666.3 | 34968.8 | 391.35 ug/L | 391.35 ppb | 22:20:35 |
| 3 | SiO2† | 1352192.4 | 1311402.0 | 104770 ug/L | 104770 ppb | 22:21:13 |

Mean Data: 247899004|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Conc. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|--------|--------|----------|---------|
| Sc 361.383 | 866082.2 | 103.12 | % | 0.150 | | | | 0.15% |
| Sc Radial | 4292.1 | 106 | % | 0.5 | | | | 0.44% |
| Y 371.029 | 815310.8 | 113.86 | % | 0.163 | | | | 0.14% |
| Y RADIAL | 5150.7 | 114.0 | % | 0.37 | | | | 0.32% |
| Ag 328.068† | -9413.0 | 1.5245 | ug/L | 1.72992 | 1.5245 | ppb | 1.72992 | 113.48% |
| Al 396.153Radial† | 116769.6 | 124450 | ug/L | 3251.1 | 124450 | ppb | 3251.1 | 2.61% |
| As 188.979† | 14.1 | 58.411 | ug/L | 1.6677 | 58.411 | ppb | 1.6677 | 2.86% |
| B 249.677† | 1520.8 | 16.339 | ug/L | 1.5371 | 16.339 | ppb | 1.5371 | 9.41% |
| Ba 233.527† | 69695.2 | 658.66 | ug/L | 4.333 | 658.66 | ppb | 4.333 | 0.66% |
| Be 313.107† | 24096.1 | 13.539 | ug/L | 0.0535 | 13.539 | ppb | 0.0535 | 0.39% |
| Ca 317.933Radial† | 14292.9 | 29039 | ug/L | 646.1 | 29039 | ppb | 646.1 | 2.22% |
| Cd 226.502† | 1171.7 | 0.4766 | ug/L | 0.38892 | 0.4766 | ppb | 0.38892 | 81.60% |
| Co 228.616† | 1973.1 | 45.840 | ug/L | 0.1925 | 45.840 | ppb | 0.1925 | 0.42% |
| Cr 267.716† | 16620.4 | 233.33 | ug/L | 1.091 | 233.33 | ppb | 1.091 | 0.47% |
| Cu 324.752† | 53170.2 | 180.75 | ug/L | 1.061 | 180.75 | ppb | 1.061 | 0.59% |
| Fe 238.204 Radial† | 12467.2 | 155900 | ug/L | 3516.4 | 155900 | ppb | 3516.4 | 2.26% |
| K 766.490 Radial† | 90299.9 | 18016 | ug/L | 477.9 | 18016 | ppb | 477.9 | 2.65% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 533.3 | 23134 ug/L | 55.5 | 23134 ppb | 55.5 | 0.24% |
| Mn 257.610† | 1996679.4 | 2634.2 ug/L | 1.70 | 2634.2 ppb | 1.70 | 0.06% |
| Mo 202.031† | -75.6 | 5.7975 ug/L | 0.36170 | 5.7975 ppb | 0.36170 | 6.24% |
| Na 589.592 Radial† | 2708.5 | 1063.7 ug/L | 30.98 | 1063.7 ppb | 30.98 | 2.91% |
| Ni 231.604† | 4297.0 | 134.14 ug/L | 0.536 | 134.14 ppb | 0.536 | 0.40% |
| P 214.914† | 1008.8 | 596.10 ug/L | 5.653 | 596.10 ppb | 5.653 | 0.95% |
| Pb 220.353† | 888.4 | 139.59 ug/L | 0.325 | 139.59 ppb | 0.325 | 0.23% |
| S 181.975 Axial† | 227.8 | 376.03 ug/L | 13.227 | 376.03 ppb | 13.227 | 3.52% |
| Sb 206.836† | 27.5 | 1.4510 ug/L | 4.31978 | 1.4510 ppb | 4.31978 | 297.70% |
| Se 196.026† | -602.6 | 28.972 ug/L | 5.7969 | 28.972 ppb | 5.7969 | 20.01% |
| Si 251.611† | 1307187.8 | 48671 ug/L | 33.5 | 48671 ppb | 33.5 | 0.07% |
| Sn 189.927† | -111.7 | -28.538 ug/L | 0.8994 | -28.538 ppb | 0.8994 | 3.15% |
| Sr 421.552† | 26722.8 | 227.34 ug/L | 6.385 | 227.34 ppb | 6.385 | 2.81% |
| Ti 334.940† | 961521.6 | 1656.3 ug/L | 0.45 | 1656.3 ppb | 0.45 | 0.03% |
| Tl 190.801† | -84.5 | -7.1202 ug/L | 0.19269 | -7.1202 ppb | 0.19269 | 2.71% |
| U 409.014† | -5458.9 | -178.88 ug/L | 2.378 | -178.88 ppb | 2.378 | 1.33% |
| V 292.402† | 33111.8 | 230.77 ug/L | 2.293 | 230.77 ppb | 2.293 | 0.99% |
| Zn 213.857† | 34762.6 | 388.56 ug/L | 3.673 | 388.56 ppb | 3.673 | 0.95% |
| SiO2† | 1308365.4 | 104530 ug/L | 674.4 | 104530 ppb | 674.4 | 0.65% |

Sequence No.: 51
 Sample ID: 247899005|958053|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 3/25/2010 22:23:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247899005|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|--------------|---------------|
| 1 | Sc Radial | 4065.0 | 4065.0 | 101 % | | | 22:25:36 |
| 1 | Y RADIAL | 4869.5 | 4869.5 | 107.8 % | | | 22:25:36 |
| 1 | Al 396.153Radial† | 96029.7 | 95372.3 | 101640 ug/L | | 101640 ppb | 22:25:16 |
| 1 | Ca 317.933Radial† | 13156.0 | 13037.9 | 26490 ug/L | | 26490 ppb | 22:25:16 |
| 1 | Fe 238.204 Radial† | 10905.5 | 10812.8 | 135210 ug/L | | 135210 ppb | 22:25:16 |
| 1 | K 766.490 Radial† | 80826.4 | 77402.9 | 15442 ug/L | | 15442 ppb | 22:25:16 |
| 1 | Mg 279.077 IEC† | 465.1 | 460.9 | 19991 ug/L | | 19991 ppb | 22:25:36 |
| 1 | Na 589.592 Radial† | 1847.5 | 2294.2 | 900.97 ug/L | | 900.97 ppb | 22:25:16 |
| 1 | Sr 421.552† | 24874.0 | 24613.1 | 209.40 ug/L | | 209.40 ppb | 22:25:16 |
| 1 | Sc 361.383 | 861460.8 | 861460.8 | 102.57 % | | | 22:26:34 |
| 1 | Y 371.029 | 804984.2 | 804984.2 | 112.42 % | | | 22:26:34 |
| 1 | Ag 328.068† | -7727.7 | -7787.3 | 3.0117 ug/L | | 3.0117 ppb | 22:26:34 |
| 1 | As 188.979† | -25.2 | -3.7 | 42.172 ug/L | | 42.172 ppb | 22:26:54 |
| 1 | B 249.677† | 863.1 | 1091.6 | 7.9538 ug/L | | 7.9538 ppb | 22:26:34 |
| 1 | Ba 233.527† | 65974.3 | 64301.1 | 607.37 ug/L | | 607.37 ppb | 22:26:34 |
| 1 | Be 313.107† | 27877.3 | 31440.8 | 16.036 ug/L | | 16.036 ppb | 22:26:34 |
| 1 | Cd 226.502† | 836.7 | 982.1 | -0.0517 ug/L | | -0.0517 ppb | 22:26:54 |
| 1 | Co 228.616† | 1274.8 | 1281.7 | 28.615 ug/L | | 28.615 ppb | 22:26:54 |
| 1 | Cr 267.716† | 9478.5 | 9145.8 | 133.68 ug/L | | 133.68 ppb | 22:26:34 |
| 1 | Cu 324.752† | 101280.9 | 92388.1 | 306.71 ug/L | | 306.71 ppb | 22:26:34 |
| 1 | Mn 257.610† | 1457465.0 | 1420459.5 | 1876.2 ug/L | | 1876.2 ppb | 22:26:34 |
| 1 | Mo 202.031† | -40.0 | -53.2 | 6.1348 ug/L | | 6.1348 ppb | 22:26:54 |
| 1 | Ni 231.604† | 2921.5 | 2754.6 | 85.993 ug/L | | 85.993 ppb | 22:26:54 |
| 1 | P 214.914† | 1126.9 | 930.4 | 525.49 ug/L | | 525.49 ppb | 22:26:54 |
| 1 | Pb 220.353† | 1945.2 | 1955.3 | 298.22 ug/L | | 298.22 ppb | 22:26:54 |
| 1 | S 181.975 Axial† | 192.7 | 163.5 | 267.57 ug/L | | 267.57 ppb | 22:26:54 |
| 1 | Sb 206.836† | 47.6 | 19.7 | -0.4001 ug/L | | -0.4001 ppb | 22:26:54 |
| 1 | Se 196.026† | -527.2 | -497.0 | 43.085 ug/L | | 43.085 ppb | 22:26:54 |
| 1 | Si 251.611† | 1310906.7 | 1277503.8 | 47566 ug/L | | 47566 ppb | 22:26:34 |
| 1 | Sn 189.927† | -99.8 | -100.4 | -25.296 ug/L | | -25.296 ppb | 22:26:54 |
| 1 | Ti 334.940† | 857817.3 | 837386.6 | 1442.6 ug/L | | 1442.6 ppb | 22:26:34 |
| 1 | Tl 190.801† | -92.5 | -65.1 | -4.8407 ug/L | | -4.8407 ppb | 22:26:54 |
| 1 | U 409.014† | -587.4 | 1462.5 | 27.352 ug/L | | 27.352 ppb | 22:26:34 |
| 1 | V 292.402† | 26606.9 | 27367.2 | 190.11 ug/L | | 190.11 ppb | 22:26:34 |
| 1 | Zn 213.857† | 29211.4 | 27872.3 | 309.93 ug/L | | 309.93 ppb | 22:26:34 |
| 1 | SiO2† | 1325438.5 | 1291643.2 | 103200 ug/L | | 103200 ppb | 22:27:52 |
| 2 | Sc Radial | 4220.8 | 4220.8 | 105 % | | | 22:26:02 |
| 2 | Y RADIAL | 5012.5 | 5012.5 | 110.9 % | | | 22:26:02 |
| 2 | Al 396.153Radial† | 97004.8 | 92787.8 | 98890 ug/L | | 98890 ppb | 22:25:41 |
| 2 | Ca 317.933Radial† | 13212.1 | 12609.7 | 25620 ug/L | | 25620 ppb | 22:25:41 |
| 2 | Fe 238.204 Radial† | 11022.6 | 10525.4 | 131620 ug/L | | 131620 ppb | 22:25:41 |
| 2 | K 766.490 Radial† | 81142.6 | 74745.3 | 14912 ug/L | | 14912 ppb | 22:25:41 |
| 2 | Mg 279.077 IEC† | 473.2 | 451.5 | 19586 ug/L | | 19586 ppb | 22:26:02 |
| 2 | Na 589.592 Radial† | 1821.4 | 2201.6 | 864.62 ug/L | | 864.62 ppb | 22:25:41 |
| 2 | Sr 421.552† | 24994.0 | 23816.9 | 202.62 ug/L | | 202.62 ppb | 22:25:41 |
| 2 | Sc 361.383 | 855845.9 | 855845.9 | 101.90 % | | | 22:27:00 |
| 2 | Y 371.029 | 800803.9 | 800803.9 | 111.83 % | | | 22:27:00 |
| 2 | Ag 328.068† | -7707.0 | -7816.4 | 1.7745 ug/L | | 1.7745 ppb | 22:27:00 |
| 2 | As 188.979† | -13.3 | 7.8 | 47.487 ug/L | | 47.487 ppb | 22:27:20 |
| 2 | B 249.677† | 881.3 | 1115.0 | 9.1796 ug/L | | 9.1796 ppb | 22:27:00 |
| 2 | Ba 233.527† | 65800.2 | 64552.3 | 609.61 ug/L | | 609.61 ppb | 22:27:00 |
| 2 | Be 313.107† | 27809.8 | 31553.0 | 16.081 ug/L | | 16.081 ppb | 22:27:00 |
| 2 | Cd 226.502† | 854.0 | 1004.4 | 0.6332 ug/L | | 0.6332 ppb | 22:27:20 |
| 2 | Co 228.616† | 1269.8 | 1285.0 | 28.750 ug/L | | 28.750 ppb | 22:27:20 |
| 2 | Cr 267.716† | 9419.8 | 9148.9 | 133.34 ug/L | | 133.34 ppb | 22:27:00 |
| 2 | Cu 324.752† | 100182.0 | 91957.4 | 305.12 ug/L | | 305.12 ppb | 22:27:00 |
| 2 | Mn 257.610† | 1451046.9 | 1423483.4 | 1879.9 ug/L | | 1879.9 ppb | 22:27:00 |
| 2 | Mo 202.031† | -58.9 | -72.0 | 4.1927 ug/L | | 4.1927 ppb | 22:27:20 |
| 2 | Ni 231.604† | 2938.2 | 2789.7 | 87.088 ug/L | | 87.088 ppb | 22:27:20 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1148.3 | 958.6 | 548.26 ug/L | 548.26 ppb | 22:27:20 |
| 2 | Pb 220.353† | 1947.5 | 1969.9 | 300.32 ug/L | 300.32 ppb | 22:27:20 |
| 2 | S 181.975 Axial† | 183.1 | 155.3 | 253.65 ug/L | 253.65 ppb | 22:27:20 |
| 2 | Sb 206.836† | 59.9 | 32.1 | 4.9705 ug/L | 4.9705 ppb | 22:27:20 |
| 2 | Se 196.026† | -529.7 | -502.8 | 26.763 ug/L | 26.763 ppb | 22:27:20 |
| 2 | Si 251.611† | 1302003.5 | 1277151.6 | 47552 ug/L | 47552 ppb | 22:27:00 |
| 2 | Sn 189.927† | -94.9 | -96.3 | -24.324 ug/L | -24.324 ppb | 22:27:20 |
| 2 | Ti 334.940† | 852067.0 | 837230.5 | 1442.2 ug/L | 1442.2 ppb | 22:27:00 |
| 2 | Tl 190.801† | -92.7 | -65.9 | -5.1546 ug/L | -5.1546 ppb | 22:27:20 |
| 2 | U 409.014† | -935.3 | 1117.3 | 17.606 ug/L | 17.606 ppb | 22:27:00 |
| 2 | V 292.402† | 26464.6 | 27397.7 | 190.82 ug/L | 190.82 ppb | 22:27:00 |
| 2 | Zn 213.857† | 29112.5 | 27962.2 | 311.53 ug/L | 311.53 ppb | 22:27:00 |
| 2 | SiO2† | 1331660.6 | 1306226.7 | 104360 ug/L | 104360 ppb | 22:27:58 |
| 3 | Sc Radial | 4313.6 | 4313.6 | 107 % | | 22:26:27 |
| 3 | Y RADIAL | 5122.5 | 5122.5 | 113.4 % | | 22:26:27 |
| 3 | Al 396.153Radial† | 95503.6 | 89389.2 | 95268 ug/L | 95268 ppb | 22:26:07 |
| 3 | Ca 317.933Radial† | 13117.3 | 12249.4 | 24888 ug/L | 24888 ppb | 22:26:07 |
| 3 | Fe 238.204 Radial† | 10861.0 | 10147.6 | 126890 ug/L | 126890 ppb | 22:26:07 |
| 3 | K 766.490 Radial† | 80793.6 | 72750.3 | 14514 ug/L | 14514 ppb | 22:26:07 |
| 3 | Mg 279.077 IEC† | 474.6 | 443.1 | 19225 ug/L | 19225 ppb | 22:26:27 |
| 3 | Na 589.592 Radial† | 1839.1 | 2180.7 | 856.39 ug/L | 856.39 ppb | 22:26:07 |
| 3 | Sr 421.552† | 24740.0 | 23065.4 | 196.23 ug/L | 196.23 ppb | 22:26:07 |
| 3 | Sc 361.383 | 854652.8 | 854652.8 | 101.76 % | | 22:27:26 |
| 3 | Y 371.029 | 798972.4 | 798972.4 | 111.58 % | | 22:27:26 |
| 3 | Ag 328.068† | -7681.2 | -7801.7 | 0.3935 ug/L | 0.3935 ppb | 22:27:26 |
| 3 | As 188.979† | -17.6 | 3.5 | 44.107 ug/L | 44.107 ppb | 22:27:46 |
| 3 | B 249.677† | 893.5 | 1128.2 | 10.308 ug/L | 10.308 ppb | 22:27:26 |
| 3 | Ba 233.527† | 65664.5 | 64509.1 | 609.06 ug/L | 609.06 ppb | 22:27:26 |
| 3 | Be 313.107† | 27683.4 | 31466.8 | 16.045 ug/L | 16.045 ppb | 22:27:26 |
| 3 | Cd 226.502† | 834.9 | 986.8 | 0.8736 ug/L | 0.8736 ppb | 22:27:46 |
| 3 | Co 228.616† | 1272.6 | 1289.4 | 28.934 ug/L | 28.934 ppb | 22:27:46 |
| 3 | Cr 267.716† | 9450.9 | 9192.3 | 133.40 ug/L | 133.40 ppb | 22:27:26 |
| 3 | Cu 324.752† | 100217.1 | 92129.2 | 305.43 ug/L | 305.43 ppb | 22:27:26 |
| 3 | Mn 257.610† | 1449898.5 | 1424342.6 | 1880.6 ug/L | 1880.6 ppb | 22:27:26 |
| 3 | Mo 202.031† | -60.7 | -73.9 | 3.6528 ug/L | 3.6528 ppb | 22:27:46 |
| 3 | Ni 231.604† | 2915.2 | 2771.1 | 86.507 ug/L | 86.507 ppb | 22:27:46 |
| 3 | P 214.914† | 1134.9 | 947.0 | 542.67 ug/L | 542.67 ppb | 22:27:46 |
| 3 | Pb 220.353† | 1920.6 | 1946.2 | 296.60 ug/L | 296.60 ppb | 22:27:46 |
| 3 | S 181.975 Axial† | 197.9 | 170.0 | 280.20 ug/L | 280.20 ppb | 22:27:46 |
| 3 | Sb 206.836† | 46.4 | 19.0 | -0.5085 ug/L | -0.5085 ppb | 22:27:46 |
| 3 | Se 196.026† | -521.3 | -495.3 | 17.402 ug/L | 17.402 ppb | 22:27:46 |
| 3 | Si 251.611† | 1301155.0 | 1278101.4 | 47588 ug/L | 47588 ppb | 22:27:26 |
| 3 | Sn 189.927† | -104.3 | -105.6 | -26.249 ug/L | -26.249 ppb | 22:27:46 |
| 3 | Ti 334.940† | 850624.4 | 836980.0 | 1441.7 ug/L | 1441.7 ppb | 22:27:26 |
| 3 | Tl 190.801† | -105.4 | -78.5 | -10.029 ug/L | -10.029 ppb | 22:27:46 |
| 3 | U 409.014† | -746.5 | 1301.6 | 23.566 ug/L | 23.566 ppb | 22:27:26 |
| 3 | V 292.402† | 26427.7 | 27397.7 | 191.51 ug/L | 191.51 ppb | 22:27:26 |
| 3 | Zn 213.857† | 29110.0 | 27999.5 | 312.69 ug/L | 312.69 ppb | 22:27:26 |
| 3 | SiO2† | 1315526.0 | 1292195.7 | 103240 ug/L | 103240 ppb | 22:28:04 |

Mean Data: 247899005|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|-------------|--------|----------|------------|----------|--------|
| Sc 361.383 | 857319.8 | 102.08 % | | 0.433 | | | 0.42% |
| Sc Radial | 4199.8 | 104 % | | 3.1 | | | 2.99% |
| Y 371.029 | 801586.8 | 111.94 % | | 0.430 | | | 0.38% |
| Y RADIAL | 5001.5 | 110.7 % | | 2.81 | | | 2.54% |
| Ag 328.068† | -7801.8 | 1.7266 ug/L | | 1.30974 | 1.7266 ppb | 1.30974 | 75.86% |
| Al 396.153Radial† | 92516.4 | 98600 ug/L | | 3198.1 | 98600 ppb | 3198.1 | 3.24% |
| As 188.979† | 2.5 | 44.589 ug/L | | 2.6898 | 44.589 ppb | 2.6898 | 6.03% |
| B 249.677† | 1111.6 | 9.1470 ug/L | | 1.17723 | 9.1470 ppb | 1.17723 | 12.87% |
| Ba 233.527† | 64454.2 | 608.68 ug/L | | 1.171 | 608.68 ppb | 1.171 | 0.19% |
| Be 313.107† | 31486.9 | 16.054 ug/L | | 0.0238 | 16.054 ppb | 0.0238 | 0.15% |
| Ca 317.933Radial† | 12632.3 | 25666 ug/L | | 802.0 | 25666 ppb | 802.0 | 3.12% |
| Cd 226.502† | 991.1 | 0.4850 ug/L | | 0.48008 | 0.4850 ppb | 0.48008 | 98.98% |
| Co 228.616† | 1285.4 | 28.766 ug/L | | 0.1601 | 28.766 ppb | 0.1601 | 0.56% |
| Cr 267.716† | 9162.3 | 133.47 ug/L | | 0.179 | 133.47 ppb | 0.179 | 0.13% |
| Cu 324.752† | 92158.2 | 305.75 ug/L | | 0.839 | 305.75 ppb | 0.839 | 0.27% |
| Fe 238.204 Radial† | 10495.3 | 131240 ug/L | | 4172.1 | 131240 ppb | 4172.1 | 3.18% |
| K 766.490 Radial† | 74966.2 | 14956 ug/L | | 465.7 | 14956 ppb | 465.7 | 3.11% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 451.8 | 19601 ug/L | 383.1 | 19601 ppb | 383.1 | 1.95% |
| Mn 257.610† | 1422761.8 | 1878.9 ug/L | 2.32 | 1878.9 ppb | 2.32 | 0.12% |
| Mo 202.031† | -66.4 | 4.6601 ug/L | 1.30532 | 4.6601 ppb | 1.30532 | 28.01% |
| Na 589.592 Radial† | 2225.5 | 873.99 ug/L | 23.722 | 873.99 ppb | 23.722 | 2.71% |
| Ni 231.604† | 2771.8 | 86.530 ug/L | 0.5480 | 86.530 ppb | 0.5480 | 0.63% |
| P 214.914† | 945.3 | 538.81 ug/L | 11.866 | 538.81 ppb | 11.866 | 2.20% |
| Pb 220.353† | 1957.1 | 298.38 ug/L | 1.866 | 298.38 ppb | 1.866 | 0.63% |
| S 181.975 Axial† | 163.0 | 267.14 ug/L | 13.277 | 267.14 ppb | 13.277 | 4.97% |
| Sb 206.836† | 23.6 | 1.3540 ug/L | 3.13249 | 1.3540 ppb | 3.13249 | 231.36% |
| Se 196.026† | -498.4 | 29.083 ug/L | 12.9979 | 29.083 ppb | 12.9979 | 44.69% |
| Si 251.611† | 1277585.6 | 47569 ug/L | 17.9 | 47569 ppb | 17.9 | 0.04% |
| Sn 189.927† | -100.8 | -25.289 ug/L | 0.9625 | -25.289 ppb | 0.9625 | 3.81% |
| Sr 421.552† | 23831.8 | 202.75 ug/L | 6.584 | 202.75 ppb | 6.584 | 3.25% |
| Ti 334.940† | 837199.0 | 1442.2 ug/L | 0.43 | 1442.2 ppb | 0.43 | 0.03% |
| Tl 190.801† | -69.8 | -6.6746 ug/L | 2.90884 | -6.6746 ppb | 2.90884 | 43.58% |
| U 409.014† | 1293.8 | 22.841 ug/L | 4.9132 | 22.841 ppb | 4.9132 | 21.51% |
| V 292.402† | 27387.5 | 190.82 ug/L | 0.699 | 190.82 ppb | 0.699 | 0.37% |
| Zn 213.857† | 27944.7 | 311.38 ug/L | 1.383 | 311.38 ppb | 1.383 | 0.44% |
| SiO2† | 1296688.5 | 103600 ug/L | 660.3 | 103600 ppb | 660.3 | 0.64% |

Sequence No.: 52

Sample ID: 247899006|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 77

Date Collected: 3/25/2010 22:30:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899006|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4231.0 | 4231.0 | 105 % | | 22:32:29 |
| 1 | Y RADIAL | 5987.3 | 5987.3 | 132.5 % | | 22:32:09 |
| 1 | Al 396.153Radial† | 40927.2 | 39099.2 | 41670 ug/L | 41670 ppb | 22:32:09 |
| 1 | Ca 317.933Radial† | 6106.9 | 5805.1 | 11794 ug/L | 11794 ppb | 22:32:09 |
| 1 | Fe 238.204 Radial† | 7129.9 | 6788.6 | 84889 ug/L | 84889 ppb | 22:32:09 |
| 1 | K 766.490 Radial† | 35712.2 | 31244.4 | 6232.3 ug/L | 6232.3 ppb | 22:32:09 |
| 1 | Mg 279.077 IEC† | 198.2 | 188.3 | 8136.6 ug/L | 8136.6 ppb | 22:32:29 |
| 1 | Na 589.592 Radial† | 1378.4 | 1775.0 | 697.09 ug/L | 697.09 ppb | 22:32:09 |
| 1 | Sr 421.552† | 9310.3 | 8806.4 | 74.903 ug/L | 74.903 ppb | 22:32:09 |
| 1 | Sc 361.383 | 862411.2 | 862411.2 | 102.69 % | | 22:33:26 |
| 1 | Y 371.029 | 951324.4 | 951324.4 | 132.85 % | | 22:33:26 |
| 1 | Ag 328.068† | -5079.1 | -5199.7 | 0.4468 ug/L | 0.4468 ppb | 22:33:31 |
| 1 | As 188.979† | -30.2 | -8.6 | 34.114 ug/L | 34.114 ppb | 22:33:51 |
| 1 | B 249.677† | 654.6 | 887.7 | 10.572 ug/L | 10.572 ppb | 22:33:31 |
| 1 | Ba 233.527† | 31554.9 | 30711.1 | 290.69 ug/L | 290.69 ppb | 22:33:31 |
| 1 | Be 313.107† | 6173.9 | 10275.1 | 9.1086 ug/L | 9.1086 ppb | 22:33:31 |
| 1 | Cd 226.502† | 537.1 | 689.5 | 0.9363 ug/L | 0.9363 ppb | 22:33:51 |
| 1 | Co 228.616† | 544.8 | 569.4 | 9.1554 ug/L | 9.1554 ppb | 22:33:51 |
| 1 | Cr 267.716† | 3142.1 | 2965.0 | 47.820 ug/L | 47.820 ppb | 22:33:51 |
| 1 | Cu 324.752† | 26411.4 | 19367.9 | 67.423 ug/L | 67.423 ppb | 22:33:31 |
| 1 | Mn 257.610† | 1762790.6 | 1716233.5 | 2259.8 ug/L | 2259.8 ppb | 22:33:26 |
| 1 | Mo 202.031† | -9.0 | -22.9 | 4.7138 ug/L | 4.7138 ppb | 22:33:51 |
| 1 | Ni 231.604† | 1419.1 | 1288.4 | 40.221 ug/L | 40.221 ppb | 22:33:51 |
| 1 | P 214.914† | 1011.0 | 816.3 | 516.21 ug/L | 516.21 ppb | 22:33:51 |
| 1 | Pb 220.353† | 411.9 | 460.0 | 66.613 ug/L | 66.613 ppb | 22:33:51 |
| 1 | S 181.975 Axial† | 147.5 | 119.2 | 201.18 ug/L | 201.18 ppb | 22:33:51 |
| 1 | Sb 206.836† | 42.4 | 14.7 | -2.9460 ug/L | -2.9460 ppb | 22:33:51 |
| 1 | Se 196.026† | -347.0 | -321.0 | 11.466 ug/L | 11.466 ppb | 22:33:51 |
| 1 | Si 251.611† | 1156500.4 | 1125727.4 | 41914 ug/L | 41914 ppb | 22:33:26 |
| 1 | Sn 189.927† | -49.9 | -51.7 | -14.224 ug/L | -14.224 ppb | 22:33:51 |
| 1 | Ti 334.940† | 1296747.7 | 1263915.5 | 2175.6 ug/L | 2175.6 ppb | 22:33:26 |
| 1 | Tl 190.801† | -112.7 | -84.7 | -4.1923 ug/L | -4.1923 ppb | 22:33:51 |
| 1 | U 409.014† | -10173.3 | -7872.1 | -241.40 ug/L | -241.40 ppb | 22:33:26 |
| 1 | V 292.402† | 11063.4 | 12201.6 | 79.066 ug/L | 79.066 ppb | 22:33:31 |
| 1 | Zn 213.857† | 37705.8 | 36113.2 | 415.97 ug/L | 415.97 ppb | 22:33:31 |
| 1 | SiO2† | 1168209.4 | 1137102.3 | 90849 ug/L | 90849 ppb | 22:35:00 |
| 2 | Sc Radial | 4014.9 | 4014.9 | 99.5 % | | 22:32:54 |
| 2 | Y RADIAL | 6545.9 | 6545.9 | 144.9 % | | 22:32:34 |
| 2 | Al 396.153Radial† | 40926.0 | 41198.5 | 43908 ug/L | 43908 ppb | 22:32:34 |
| 2 | Ca 317.933Radial† | 6102.9 | 6114.4 | 12423 ug/L | 12423 ppb | 22:32:34 |
| 2 | Fe 238.204 Radial† | 7141.3 | 7165.9 | 89608 ug/L | 89608 ppb | 22:32:34 |
| 2 | K 766.490 Radial† | 35960.1 | 33326.4 | 6647.7 ug/L | 6647.7 ppb | 22:32:34 |
| 2 | Mg 279.077 IEC† | 202.0 | 202.2 | 8740.2 ug/L | 8740.2 ppb | 22:32:54 |
| 2 | Na 589.592 Radial† | 1392.0 | 1859.4 | 730.22 ug/L | 730.22 ppb | 22:32:34 |
| 2 | Sr 421.552† | 9260.4 | 9234.0 | 78.540 ug/L | 78.540 ppb | 22:32:34 |
| 2 | Sc 361.383 | 860314.2 | 860314.2 | 102.44 % | | 22:33:57 |
| 2 | Y 371.029 | 949100.5 | 949100.5 | 132.54 % | | 22:33:57 |
| 2 | Ag 328.068† | -5068.2 | -5201.1 | 1.8917 ug/L | 1.8917 ppb | 22:34:02 |
| 2 | As 188.979† | -27.2 | -5.7 | 36.793 ug/L | 36.793 ppb | 22:34:22 |
| 2 | B 249.677† | 680.2 | 914.2 | 10.536 ug/L | 10.536 ppb | 22:34:02 |
| 2 | Ba 233.527† | 31878.9 | 31102.3 | 294.50 ug/L | 294.50 ppb | 22:34:02 |
| 2 | Be 313.107† | 6132.5 | 10249.4 | 9.1013 ug/L | 9.1013 ppb | 22:34:02 |
| 2 | Cd 226.502† | 518.7 | 672.7 | 0.2135 ug/L | 0.2135 ppb | 22:34:22 |
| 2 | Co 228.616† | 532.5 | 558.7 | 8.8073 ug/L | 8.8073 ppb | 22:34:22 |
| 2 | Cr 267.716† | 3092.4 | 2923.9 | 47.786 ug/L | 47.786 ppb | 22:34:22 |
| 2 | Cu 324.752† | 26755.3 | 19766.2 | 68.963 ug/L | 68.963 ppb | 22:34:02 |
| 2 | Mn 257.610† | 1760269.1 | 1717956.3 | 2262.5 ug/L | 2262.5 ppb | 22:33:57 |
| 2 | Mo 202.031† | -11.5 | -25.4 | 4.8732 ug/L | 4.8732 ppb | 22:34:22 |
| 2 | Ni 231.604† | 1423.8 | 1296.3 | 40.468 ug/L | 40.468 ppb | 22:34:22 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 997.8 | 805.9 | 505.20 ug/L | 505.20 ppb | 22:34:22 |
| 2 | Pb 220.353† | 409.0 | 458.1 | 66.167 ug/L | 66.167 ppb | 22:34:22 |
| 2 | S 181.975 Axial† | 157.1 | 129.0 | 217.83 ug/L | 217.83 ppb | 22:34:22 |
| 2 | Sb 206.836† | 38.3 | 10.8 | -4.6925 ug/L | -4.6925 ppb | 22:34:22 |
| 2 | Se 196.026† | -347.9 | -322.7 | 24.887 ug/L | 24.887 ppb | 22:34:22 |
| 2 | Si 251.611† | 1153566.1 | 1125608.0 | 41910 ug/L | 41910 ppb | 22:33:57 |
| 2 | Sn 189.927† | -40.8 | -42.9 | -12.444 ug/L | -12.444 ppb | 22:34:22 |
| 2 | Ti 334.940† | 1294423.6 | 1264724.7 | 2177.0 ug/L | 2177.0 ppb | 22:33:57 |
| 2 | Tl 190.801† | -112.5 | -84.8 | -4.1869 ug/L | -4.1869 ppb | 22:34:22 |
| 2 | U 409.014† | -10078.0 | -7803.2 | -239.91 ug/L | -239.91 ppb | 22:33:57 |
| 2 | V 292.402† | 11135.1 | 12297.9 | 79.133 ug/L | 79.133 ppb | 22:34:02 |
| 2 | Zn 213.857† | 38018.5 | 36507.9 | 419.95 ug/L | 419.95 ppb | 22:34:02 |
| 2 | SiO2† | 1175999.1 | 1147479.7 | 91678 ug/L | 91678 ppb | 22:35:06 |
| 3 | Sc Radial | 4193.9 | 4193.9 | 104 % | | 22:33:19 |
| 3 | Y RADIAL | 6067.9 | 6067.9 | 134.3 % | | 22:32:59 |
| 3 | Al 396.153Radial† | 42408.8 | 40870.3 | 43558 ug/L | 43558 ppb | 22:32:59 |
| 3 | Ca 317.933Radial† | 6302.6 | 6045.0 | 12282 ug/L | 12282 ppb | 22:32:59 |
| 3 | Fe 238.204 Radial† | 7366.0 | 7076.0 | 88483 ug/L | 88483 ppb | 22:32:59 |
| 3 | K 766.490 Radial† | 36591.6 | 32392.2 | 6461.2 ug/L | 6461.2 ppb | 22:32:59 |
| 3 | Mg 279.077 IEC† | 197.2 | 189.0 | 8162.3 ug/L | 8162.3 ppb | 22:33:19 |
| 3 | Na 589.592 Radial† | 1489.5 | 1893.5 | 743.62 ug/L | 743.62 ppb | 22:32:59 |
| 3 | Sr 421.552† | 9632.2 | 9194.6 | 78.206 ug/L | 78.206 ppb | 22:32:59 |
| 3 | Sc 361.383 | 867990.5 | 867990.5 | 103.35 % | | 22:34:28 |
| 3 | Y 371.029 | 956686.0 | 956686.0 | 133.60 % | | 22:34:28 |
| 3 | Ag 328.068† | -5074.6 | -5163.5 | 1.7338 ug/L | 1.7338 ppb | 22:34:33 |
| 3 | As 188.979† | -21.0 | 0.6 | 39.903 ug/L | 39.903 ppb | 22:34:53 |
| 3 | B 249.677† | 646.6 | 875.8 | 9.6607 ug/L | 9.6607 ppb | 22:34:33 |
| 3 | Ba 233.527† | 32000.1 | 30944.4 | 292.99 ug/L | 292.99 ppb | 22:34:33 |
| 3 | Be 313.107† | 6119.9 | 10184.2 | 9.0807 ug/L | 9.0807 ppb | 22:34:33 |
| 3 | Cd 226.502† | 534.9 | 684.0 | 0.4881 ug/L | 0.4881 ppb | 22:34:53 |
| 3 | Co 228.616† | 555.3 | 576.3 | 9.2714 ug/L | 9.2714 ppb | 22:34:53 |
| 3 | Cr 267.716† | 3102.3 | 2906.8 | 47.443 ug/L | 47.443 ppb | 22:34:53 |
| 3 | Cu 324.752† | 26732.6 | 19513.3 | 68.083 ug/L | 68.083 ppb | 22:34:33 |
| 3 | Mn 257.610† | 1777304.1 | 1719242.0 | 2264.1 ug/L | 2264.1 ppb | 22:34:28 |
| 3 | Mo 202.031† | -25.0 | -38.4 | 3.6432 ug/L | 3.6432 ppb | 22:34:53 |
| 3 | Ni 231.604† | 1424.1 | 1284.4 | 40.096 ug/L | 40.096 ppb | 22:34:53 |
| 3 | P 214.914† | 1010.3 | 809.4 | 508.66 ug/L | 508.66 ppb | 22:34:53 |
| 3 | Pb 220.353† | 411.3 | 456.8 | 66.049 ug/L | 66.049 ppb | 22:34:53 |
| 3 | S 181.975 Axial† | 159.2 | 129.7 | 219.14 ug/L | 219.14 ppb | 22:34:53 |
| 3 | Sb 206.836† | 34.6 | 6.8 | -6.4369 ug/L | -6.4369 ppb | 22:34:53 |
| 3 | Se 196.026† | -357.0 | -328.5 | 16.794 ug/L | 16.794 ppb | 22:34:53 |
| 3 | Si 251.611† | 1166499.2 | 1128162.8 | 42005 ug/L | 42005 ppb | 22:34:28 |
| 3 | Sn 189.927† | -58.1 | -59.3 | -16.039 ug/L | -16.039 ppb | 22:34:53 |
| 3 | Ti 334.940† | 1307515.4 | 1266216.8 | 2179.6 ug/L | 2179.6 ppb | 22:34:28 |
| 3 | Tl 190.801† | -105.4 | -76.9 | -1.1158 ug/L | -1.1158 ppb | 22:34:53 |
| 3 | U 409.014† | -10152.6 | -7788.3 | -239.34 ug/L | -239.34 ppb | 22:34:28 |
| 3 | V 292.402† | 11200.1 | 12264.6 | 79.011 ug/L | 79.011 ppb | 22:34:33 |
| 3 | Zn 213.857† | 38185.5 | 36341.3 | 418.15 ug/L | 418.15 ppb | 22:34:33 |
| 3 | SiO2† | 1166203.9 | 1127849.1 | 90110 ug/L | 90110 ppb | 22:35:12 |

Mean Data: 247899006|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 863572.0 | 102.82 | % | 0.472 | | | 0.46% |
| Sc Radial | 4146.6 | 103 | % | 2.9 | | | 2.79% |
| Y 371.029 | 952370.3 | 133.00 | % | 0.545 | | | 0.41% |
| Y RADIAL | 6200.4 | 137.2 | % | 6.68 | | | 4.87% |
| Ag 328.068† | -5188.1 | 1.3574 | ug/L | 0.79255 | 1.3574 ppb | 0.79255 | 58.39% |
| Al 396.153Radial† | 40389.3 | 43045 | ug/L | 1203.5 | 43045 ppb | 1203.5 | 2.80% |
| As 188.979† | -4.6 | 36.937 | ug/L | 2.8972 | 36.937 ppb | 2.8972 | 7.84% |
| B 249.677† | 892.5 | 10.256 | ug/L | 0.5160 | 10.256 ppb | 0.5160 | 5.03% |
| Ba 233.527† | 30919.3 | 292.73 | ug/L | 1.919 | 292.73 ppb | 1.919 | 0.66% |
| Be 313.107† | 10236.2 | 9.0968 | ug/L | 0.01448 | 9.0968 ppb | 0.01448 | 0.16% |
| Ca 317.933Radial† | 5988.2 | 12166 | ug/L | 329.8 | 12166 ppb | 329.8 | 2.71% |
| Cd 226.502† | 682.1 | 0.5460 | ug/L | 0.36488 | 0.5460 ppb | 0.36488 | 66.83% |
| Co 228.616† | 568.1 | 9.0780 | ug/L | 0.24153 | 9.0780 ppb | 0.24153 | 2.66% |
| Cr 267.716† | 2931.9 | 47.683 | ug/L | 0.2085 | 47.683 ppb | 0.2085 | 0.44% |
| Cu 324.752† | 19549.1 | 68.156 | ug/L | 0.7728 | 68.156 ppb | 0.7728 | 1.13% |
| Fe 238.204 Radial† | 7010.2 | 87660 | ug/L | 2464.5 | 87660 ppb | 2464.5 | 2.81% |
| K 766.490 Radial† | 32321.0 | 6447.1 | ug/L | 208.06 | 6447.1 ppb | 208.06 | 3.23% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 193.2 | 8346.4 ug/L | 341.27 | 8346.4 ppb | 341.27 | 4.09% |
| Mn 257.610† | 1717810.6 | 2262.2 ug/L | 2.17 | 2262.2 ppb | 2.17 | 0.10% |
| Mo 202.031† | -28.9 | 4.4101 ug/L | 0.66893 | 4.4101 ppb | 0.66893 | 15.17% |
| Na 589.592 Radial† | 1842.7 | 723.64 ug/L | 23.955 | 723.64 ppb | 23.955 | 3.31% |
| Ni 231.604† | 1289.7 | 40.262 ug/L | 0.1896 | 40.262 ppb | 0.1896 | 0.47% |
| P 214.914† | 810.5 | 510.02 ug/L | 5.629 | 510.02 ppb | 5.629 | 1.10% |
| Pb 220.353† | 458.3 | 66.276 ug/L | 0.2975 | 66.276 ppb | 0.2975 | 0.45% |
| S 181.975 Axial† | 126.0 | 212.72 ug/L | 10.014 | 212.72 ppb | 10.014 | 4.71% |
| Sb 206.836† | 10.7 | -4.6918 ug/L | 1.74542 | -4.6918 ppb | 1.74542 | 37.20% |
| Se 196.026† | -324.1 | 17.716 ug/L | 6.7579 | 17.716 ppb | 6.7579 | 38.15% |
| Si 251.611† | 1126499.4 | 41943 ug/L | 53.7 | 41943 ppb | 53.7 | 0.13% |
| Sn 189.927† | -51.3 | -14.236 ug/L | 1.7975 | -14.236 ppb | 1.7975 | 12.63% |
| Sr 421.552† | 9078.3 | 77.216 ug/L | 2.0102 | 77.216 ppb | 2.0102 | 2.60% |
| Ti 334.940† | 1264952.3 | 2177.4 ug/L | 2.04 | 2177.4 ppb | 2.04 | 0.09% |
| Tl 190.801† | -82.1 | -3.1650 ug/L | 1.77464 | -3.1650 ppb | 1.77464 | 56.07% |
| U 409.014† | -7821.2 | -240.21 ug/L | 1.062 | -240.21 ppb | 1.062 | 0.44% |
| V 292.402† | 12254.7 | 79.070 ug/L | 0.0609 | 79.070 ppb | 0.0609 | 0.08% |
| Zn 213.857† | 36320.8 | 418.02 ug/L | 1.993 | 418.02 ppb | 1.993 | 0.48% |
| SiO2† | 1137477.0 | 90879 ug/L | 784.6 | 90879 ppb | 784.6 | 0.86% |

Sequence No.: 53

Sample ID: 247899007|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 78

Date Collected: 3/25/2010 22:37:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899007|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4242.0 | 4242.0 | 105 % | | 22:39:35 |
| 1 | Y RADIAL | 5150.4 | 5150.4 | 114.0 % | | 22:39:35 |
| 1 | Al 396.153Radial† | 52387.9 | 49896.5 | 53178 ug/L | 53178 ppb | 22:39:15 |
| 1 | Ca 317.933Radial† | 9233.6 | 8763.3 | 17805 ug/L | 17805 ppb | 22:39:15 |
| 1 | Fe 238.204 Radial† | 15296.3 | 14536.7 | 181780 ug/L | 181780 ppb | 22:39:15 |
| 1 | K 766.490 Radial† | 79489.2 | 72785.0 | 14523 ug/L | 14523 ppb | 22:39:15 |
| 1 | Mg 279.077 IEC† | 568.4 | 539.8 | 23390 ug/L | 23390 ppb | 22:39:35 |
| 1 | Na 589.592 Radial† | 5082.4 | 5293.9 | 2079.0 ug/L | 2079.0 ppb | 22:39:15 |
| 1 | Sr 421.552† | 14944.0 | 14140.6 | 120.28 ug/L | 120.28 ppb | 22:39:15 |
| 1 | Sc 361.383 | 855798.8 | 855798.8 | 101.90 % | | 22:40:34 |
| 1 | Y 371.029 | 819008.0 | 819008.0 | 114.37 % | | 22:40:34 |
| 1 | Ag 328.068† | -10919.0 | -10969.0 | 2.0969 ug/L | 2.0969 ppb | 22:40:39 |
| 1 | As 188.979† | -105.9 | -83.1 | 46.354 ug/L | 46.354 ppb | 22:40:59 |
| 1 | B 249.677† | 1044.8 | 1275.5 | 5.4144 ug/L | 5.4144 ppb | 22:40:39 |
| 1 | Ba 233.527† | 47903.8 | 46992.8 | 446.76 ug/L | 446.76 ppb | 22:40:39 |
| 1 | Be 313.107† | -24751.7 | -20027.8 | 4.5314 ug/L | 4.5314 ppb | 22:40:39 |
| 1 | Cd 226.502† | 1227.6 | 1371.2 | 0.5659 ug/L | 0.5659 ppb | 22:40:59 |
| 1 | Co 228.616† | 1676.1 | 1683.7 | 29.679 ug/L | 29.679 ppb | 22:40:59 |
| 1 | Cr 267.716† | 8561.5 | 8307.0 | 127.93 ug/L | 127.93 ppb | 22:40:39 |
| 1 | Cu 324.752† | 17177.1 | 10504.4 | 43.778 ug/L | 43.778 ppb | 22:40:39 |
| 1 | Mn 257.610† | 1766687.8 | 1733322.3 | 2291.2 ug/L | 2291.2 ppb | 22:40:34 |
| 1 | Mo 202.031† | 24.6 | 10.0 | 15.201 ug/L | 15.201 ppb | 22:40:59 |
| 1 | Ni 231.604† | 1990.5 | 1859.8 | 58.046 ug/L | 58.046 ppb | 22:40:59 |
| 1 | P 214.914† | 6626.1 | 6334.5 | 4413.1 ug/L | 4413.1 ppb | 22:40:59 |
| 1 | Pb 220.353† | 558.1 | 606.5 | 77.581 ug/L | 77.581 ppb | 22:40:59 |
| 1 | S 181.975 Axial† | 167.6 | 140.1 | 235.63 ug/L | 235.63 ppb | 22:40:59 |
| 1 | Sb 206.836† | 56.0 | 28.3 | -8.9927 ug/L | -8.9927 ppb | 22:40:59 |
| 1 | Se 196.026† | -722.4 | -692.0 | 6.9593 ug/L | 6.9593 ppb | 22:40:59 |
| 1 | Si 251.611† | 935540.5 | 917586.1 | 34165 ug/L | 34165 ppb | 22:40:34 |
| 1 | Sn 189.927† | -23.0 | -25.7 | -12.955 ug/L | -12.955 ppb | 22:40:59 |
| 1 | Ti 334.940† | 3302295.9 | 3241858.0 | 5578.1 ug/L | 5578.1 ppb | 22:40:34 |
| 1 | Tl 190.801† | -166.0 | -137.8 | 3.0651 ug/L | 3.0651 ppb | 22:40:59 |
| 1 | U 409.014† | -8058.0 | -5872.7 | -193.77 ug/L | -193.77 ppb | 22:40:34 |
| 1 | V 292.402† | 40527.7 | 41200.2 | 285.32 ug/L | 285.32 ppb | 22:40:39 |
| 1 | Zn 213.857† | 66250.5 | 64409.8 | 737.56 ug/L | 737.56 ppb | 22:40:39 |
| 1 | SiO2† | 939507.1 | 921450.9 | 73619 ug/L | 73619 ppb | 22:42:10 |
| 2 | Sc Radial | 4254.4 | 4254.4 | 105 % | | 22:40:01 |
| 2 | Y RADIAL | 5155.4 | 5155.4 | 114.1 % | | 22:40:01 |
| 2 | Al 396.153Radial† | 52550.6 | 49905.4 | 53187 ug/L | 53187 ppb | 22:39:40 |
| 2 | Ca 317.933Radial† | 9263.5 | 8766.0 | 17810 ug/L | 17810 ppb | 22:39:40 |
| 2 | Fe 238.204 Radial† | 15414.4 | 14606.1 | 182650 ug/L | 182650 ppb | 22:39:40 |
| 2 | K 766.490 Radial† | 79782.7 | 72842.6 | 14534 ug/L | 14534 ppb | 22:39:40 |
| 2 | Mg 279.077 IEC† | 578.1 | 547.4 | 23722 ug/L | 23722 ppb | 22:40:01 |
| 2 | Na 589.592 Radial† | 5019.5 | 5220.1 | 2050.0 ug/L | 2050.0 ppb | 22:39:40 |
| 2 | Sr 421.552† | 14906.7 | 14063.7 | 119.63 ug/L | 119.63 ppb | 22:39:40 |
| 2 | Sc 361.383 | 863201.7 | 863201.7 | 102.78 % | | 22:41:06 |
| 2 | Y 371.029 | 825927.7 | 825927.7 | 115.34 % | | 22:41:06 |
| 2 | Ag 328.068† | -11028.5 | -10983.6 | 2.2830 ug/L | 2.2830 ppb | 22:41:11 |
| 2 | As 188.979† | -111.0 | -87.2 | 44.458 ug/L | 44.458 ppb | 22:41:31 |
| 2 | B 249.677† | 1037.3 | 1259.4 | 4.8310 ug/L | 4.8310 ppb | 22:41:11 |
| 2 | Ba 233.527† | 48221.5 | 46898.8 | 445.91 ug/L | 445.91 ppb | 22:41:11 |
| 2 | Be 313.107† | -25164.7 | -20221.4 | 4.4816 ug/L | 4.4816 ppb | 22:41:11 |
| 2 | Cd 226.502† | 1259.5 | 1391.8 | 0.7688 ug/L | 0.7688 ppb | 22:41:31 |
| 2 | Co 228.616† | 1701.4 | 1694.3 | 29.913 ug/L | 29.913 ppb | 22:41:31 |
| 2 | Cr 267.716† | 8627.9 | 8299.6 | 127.92 ug/L | 127.92 ppb | 22:41:11 |
| 2 | Cu 324.752† | 17167.6 | 10350.6 | 43.322 ug/L | 43.322 ppb | 22:41:11 |
| 2 | Mn 257.610† | 1785415.9 | 1736674.8 | 2295.7 ug/L | 2295.7 ppb | 22:41:06 |
| 2 | Mo 202.031† | 17.8 | 3.2 | 14.668 ug/L | 14.668 ppb | 22:41:31 |
| 2 | Ni 231.604† | 2008.9 | 1861.0 | 58.083 ug/L | 58.083 ppb | 22:41:31 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 6697.9 | 6348.6 | 4422.6 ug/L | 4422.6 ppb | 22:41:31 |
| 2 | Pb 220.353† | 572.0 | 615.3 | 78.783 ug/L | 78.783 ppb | 22:41:31 |
| 2 | S 181.975 Axial† | 164.8 | 136.0 | 228.35 ug/L | 228.35 ppb | 22:41:31 |
| 2 | Sb 206.836† | 70.0 | 41.5 | -3.4951 ug/L | -3.4951 ppb | 22:41:31 |
| 2 | Se 196.026† | -734.6 | -697.8 | 4.9529 ug/L | 4.9529 ppb | 22:41:31 |
| 2 | Si 251.611† | 946480.8 | 920356.7 | 34268 ug/L | 34268 ppb | 22:41:06 |
| 2 | Sn 189.927† | -35.8 | -37.9 | -15.719 ug/L | -15.719 ppb | 22:41:31 |
| 2 | Ti 334.940† | 3338452.1 | 3249243.1 | 5590.8 ug/L | 5590.8 ppb | 22:41:06 |
| 2 | Tl 190.801† | -166.9 | -137.4 | 3.3783 ug/L | 3.3783 ppb | 22:41:31 |
| 2 | U 409.014† | -7924.0 | -5674.6 | -188.03 ug/L | -188.03 ppb | 22:41:06 |
| 2 | V 292.402† | 40736.9 | 41062.7 | 284.13 ug/L | 284.13 ppb | 22:41:11 |
| 2 | Zn 213.857† | 66756.2 | 64344.2 | 736.65 ug/L | 736.65 ppb | 22:41:11 |
| 2 | SiO2† | 936671.0 | 910784.3 | 72767 ug/L | 72767 ppb | 22:42:15 |
| 3 | Sc Radial | 4247.9 | 4247.9 | 105 % | | 22:40:26 |
| 3 | Y RADIAL | 5150.2 | 5150.2 | 114.0 % | | 22:40:26 |
| 3 | Al 396.153Radial† | 52757.3 | 50178.8 | 53478 ug/L | 53478 ppb | 22:40:06 |
| 3 | Ca 317.933Radial† | 9281.5 | 8796.7 | 17873 ug/L | 17873 ppb | 22:40:06 |
| 3 | Fe 238.204 Radial† | 15438.2 | 14651.4 | 183210 ug/L | 183210 ppb | 22:40:06 |
| 3 | K 766.490 Radial† | 79746.4 | 72925.2 | 14551 ug/L | 14551 ppb | 22:40:06 |
| 3 | Mg 279.077 IEC† | 569.3 | 540.0 | 23396 ug/L | 23396 ppb | 22:40:26 |
| 3 | Na 589.592 Radial† | 5081.4 | 5286.3 | 2076.0 ug/L | 2076.0 ppb | 22:40:06 |
| 3 | Sr 421.552† | 14969.0 | 14144.7 | 120.32 ug/L | 120.32 ppb | 22:40:06 |
| 3 | Sc 361.383 | 859077.1 | 859077.1 | 102.29 % | | 22:41:38 |
| 3 | Y 371.029 | 821762.7 | 821762.7 | 114.76 % | | 22:41:38 |
| 3 | Ag 328.068† | -11027.2 | -11033.9 | 2.2161 ug/L | 2.2161 ppb | 22:41:43 |
| 3 | As 188.979† | -111.8 | -88.5 | 43.940 ug/L | 43.940 ppb | 22:42:03 |
| 3 | B 249.677† | 960.1 | 1188.7 | 2.7972 ug/L | 2.7972 ppb | 22:41:43 |
| 3 | Ba 233.527† | 48208.1 | 47111.0 | 447.91 ug/L | 447.91 ppb | 22:41:43 |
| 3 | Be 313.107† | -24788.4 | -19971.1 | 4.5942 ug/L | 4.5942 ppb | 22:41:43 |
| 3 | Cd 226.502† | 1261.1 | 1399.3 | 0.8134 ug/L | 0.8134 ppb | 22:42:03 |
| 3 | Co 228.616† | 1694.3 | 1695.3 | 29.920 ug/L | 29.920 ppb | 22:42:03 |
| 3 | Cr 267.716† | 8620.9 | 8333.1 | 128.42 ug/L | 128.42 ppb | 22:41:43 |
| 3 | Cu 324.752† | 17172.4 | 10435.4 | 43.632 ug/L | 43.632 ppb | 22:41:43 |
| 3 | Mn 257.610† | 1779937.3 | 1739659.1 | 2299.7 ug/L | 2299.7 ppb | 22:41:38 |
| 3 | Mo 202.031† | 13.9 | -0.6 | 14.387 ug/L | 14.387 ppb | 22:42:03 |
| 3 | Ni 231.604† | 1994.4 | 1856.2 | 57.933 ug/L | 57.933 ppb | 22:42:03 |
| 3 | P 214.914† | 6689.2 | 6371.3 | 4438.6 ug/L | 4438.6 ppb | 22:42:03 |
| 3 | Pb 220.353† | 551.4 | 597.9 | 76.140 ug/L | 76.140 ppb | 22:42:03 |
| 3 | S 181.975 Axial† | 167.6 | 139.4 | 234.35 ug/L | 234.35 ppb | 22:42:03 |
| 3 | Sb 206.836† | 67.4 | 39.3 | -4.4257 ug/L | -4.4257 ppb | 22:42:03 |
| 3 | Se 196.026† | -717.5 | -684.5 | 17.307 ug/L | 17.307 ppb | 22:42:03 |
| 3 | Si 251.611† | 942576.5 | 920961.1 | 34290 ug/L | 34290 ppb | 22:41:38 |
| 3 | Sn 189.927† | -18.9 | -21.6 | -12.123 ug/L | -12.123 ppb | 22:42:03 |
| 3 | Ti 334.940† | 3325380.8 | 3252059.2 | 5595.7 ug/L | 5595.7 ppb | 22:41:38 |
| 3 | Tl 190.801† | -181.1 | -152.0 | -2.2062 ug/L | -2.2062 ppb | 22:42:03 |
| 3 | U 409.014† | -8186.5 | -5968.1 | -196.74 ug/L | -196.74 ppb | 22:41:38 |
| 3 | V 292.402† | 40718.2 | 41234.6 | 285.34 ug/L | 285.34 ppb | 22:41:43 |
| 3 | Zn 213.857† | 66511.2 | 64416.6 | 737.43 ug/L | 737.43 ppb | 22:41:43 |
| 3 | SiO2† | 940576.9 | 918978.3 | 73422 ug/L | 73422 ppb | 22:42:21 |

Mean Data: 247899007|958053|1

| Analyte | Mean Corrected | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD |
|--------------------|----------------|-------------|--------|----------|-------------|--------|----------|--------|
| Sc 361.383 | 859359.2 | 102.32 % | | 0.442 | | | | 0.43% |
| Sc Radial | 4248.1 | 105 % | | 0.2 | | | | 0.15% |
| Y 371.029 | 822232.8 | 114.82 % | | 0.486 | | | | 0.42% |
| Y RADIAL | 5152.0 | 114.0 % | | 0.06 | | | | 0.06% |
| Ag 328.068† | -10995.5 | 2.1987 ug/L | | 0.09423 | 2.1987 ppb | | 0.09423 | 4.29% |
| Al 396.153Radial† | 49993.6 | 53281 ug/L | | 171.0 | 53281 ppb | | 171.0 | 0.32% |
| As 188.979† | -86.3 | 44.917 ug/L | | 1.2707 | 44.917 ppb | | 1.2707 | 2.83% |
| B 249.677† | 1241.2 | 4.3475 ug/L | | 1.37392 | 4.3475 ppb | | 1.37392 | 31.60% |
| Ba 233.527† | 47000.9 | 446.86 ug/L | | 1.008 | 446.86 ppb | | 1.008 | 0.23% |
| Be 313.107† | -20073.5 | 4.5357 ug/L | | 0.05645 | 4.5357 ppb | | 0.05645 | 1.24% |
| Ca 317.933Radial† | 8775.3 | 17829 ug/L | | 37.7 | 17829 ppb | | 37.7 | 0.21% |
| Cd 226.502† | 1387.4 | 0.7160 ug/L | | 0.13195 | 0.7160 ppb | | 0.13195 | 18.43% |
| Co 228.616† | 1691.1 | 29.837 ug/L | | 0.1372 | 29.837 ppb | | 0.1372 | 0.46% |
| Cr 267.716† | 8313.2 | 128.09 ug/L | | 0.287 | 128.09 ppb | | 0.287 | 0.22% |
| Cu 324.752† | 10430.1 | 43.577 ug/L | | 0.2329 | 43.577 ppb | | 0.2329 | 0.53% |
| Fe 238.204 Radial† | 14598.1 | 182540 ug/L | | 722.6 | 182540 ppb | | 722.6 | 0.40% |
| K 766.490 Radial† | 72850.9 | 14536 ug/L | | 14.1 | 14536 ppb | | 14.1 | 0.10% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 542.4 | 23503 ug/L | 190.1 | 23503 ppb | 190.1 | 0.81% |
| Mn 257.610† | 1736552.0 | 2295.5 ug/L | 4.23 | 2295.5 ppb | 4.23 | 0.18% |
| Mo 202.031† | 4.2 | 14.752 ug/L | 0.4134 | 14.752 ppb | 0.4134 | 2.80% |
| Na 589.592 Radial† | 5266.8 | 2068.3 ug/L | 15.93 | 2068.3 ppb | 15.93 | 0.77% |
| Ni 231.604† | 1859.0 | 58.020 ug/L | 0.0780 | 58.020 ppb | 0.0780 | 0.13% |
| P 214.914† | 6351.5 | 4424.8 ug/L | 12.86 | 4424.8 ppb | 12.86 | 0.29% |
| Pb 220.353† | 606.6 | 77.501 ug/L | 1.3232 | 77.501 ppb | 1.3232 | 1.71% |
| S 181.975 Axial† | 138.5 | 232.78 ug/L | 3.890 | 232.78 ppb | 3.890 | 1.67% |
| Sb 206.836† | 36.3 | -5.6379 ug/L | 2.94242 | -5.6379 ppb | 2.94242 | 52.19% |
| Se 196.026† | -691.4 | 9.7396 ug/L | 6.62957 | 9.7396 ppb | 6.62957 | 68.07% |
| Si 251.611† | 919634.6 | 34241 ug/L | 67.0 | 34241 ppb | 67.0 | 0.20% |
| Sn 189.927† | -28.4 | -13.599 ug/L | 1.8827 | -13.599 ppb | 1.8827 | 13.84% |
| Sr 421.552† | 14116.3 | 120.08 ug/L | 0.389 | 120.08 ppb | 0.389 | 0.32% |
| Ti 334.940† | 3247720.1 | 5588.2 ug/L | 9.06 | 5588.2 ppb | 9.06 | 0.16% |
| Tl 190.801† | -142.4 | 1.4124 ug/L | 3.13768 | 1.4124 ppb | 3.13768 | 222.16% |
| U 409.014† | -5838.5 | -192.85 ug/L | 4.424 | -192.85 ppb | 4.424 | 2.29% |
| V 292.402† | 41165.8 | 284.93 ug/L | 0.693 | 284.93 ppb | 0.693 | 0.24% |
| Zn 213.857† | 64390.2 | 737.21 ug/L | 0.491 | 737.21 ppb | 0.491 | 0.07% |
| SiO2† | 917071.2 | 73269 ug/L | 446.1 | 73269 ppb | 446.1 | 0.61% |

Sequence No.: 54

Sample ID: 247899008|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 79

Date Collected: 3/25/2010 22:44:33

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899008|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4162.9 | 4162.9 | 103 % | | 22:46:46 |
| 1 | Y RADIAL | 4935.8 | 4935.8 | 109.2 % | | 22:46:26 |
| 1 | Al 396.153Radial† | 28541.0 | 27735.9 | 29560 ug/L | 29560 ppb | 22:46:26 |
| 1 | Ca 317.933Radial† | 5956.1 | 5754.2 | 11691 ug/L | 11691 ppb | 22:46:26 |
| 1 | Fe 238.204 Radial† | 5248.8 | 5077.0 | 63487 ug/L | 63487 ppb | 22:46:26 |
| 1 | K 766.490 Radial† | 32399.9 | 28592.2 | 5702.8 ug/L | 5702.8 ppb | 22:46:26 |
| 1 | Mg 279.077 IEC† | 135.3 | 130.4 | 5630.1 ug/L | 5630.1 ppb | 22:46:46 |
| 1 | Na 589.592 Radial† | 1948.9 | 2349.3 | 922.61 ug/L | 922.61 ppb | 22:46:26 |
| 1 | Sr 421.552† | 10970.5 | 10560.4 | 89.840 ug/L | 89.840 ppb | 22:46:26 |
| 1 | Sc 361.383 | 849854.8 | 849854.8 | 101.19 % | | 22:47:43 |
| 1 | Y 371.029 | 778009.0 | 778009.0 | 108.65 % | | 22:47:43 |
| 1 | Ag 328.068† | -3659.0 | -3869.4 | 0.3579 ug/L | 0.3579 ppb | 22:47:48 |
| 1 | As 188.979† | -44.5 | -23.2 | 21.178 ug/L | 21.178 ppb | 22:48:08 |
| 1 | B 249.677† | 474.4 | 719.0 | 9.3777 ug/L | 9.3777 ppb | 22:47:48 |
| 1 | Ba 233.527† | 45833.9 | 45276.1 | 426.60 ug/L | 426.60 ppb | 22:47:48 |
| 1 | Be 313.107† | -10412.0 | -6026.8 | 2.4619 ug/L | 2.4619 ppb | 22:47:48 |
| 1 | Cd 226.502† | 332.5 | 495.0 | 0.5121 ug/L | 0.5121 ppb | 22:48:08 |
| 1 | Co 228.616† | 980.8 | 1008.2 | 20.882 ug/L | 20.882 ppb | 22:48:08 |
| 1 | Cr 267.716† | 20637.0 | 20299.2 | 271.14 ug/L | 271.14 ppb | 22:47:48 |
| 1 | Cu 324.752† | 19453.1 | 12871.4 | 45.082 ug/L | 45.082 ppb | 22:47:48 |
| 1 | Mn 257.610† | 1633307.7 | 1613637.8 | 2123.2 ug/L | 2123.2 ppb | 22:47:43 |
| 1 | Mo 202.031† | 25.1 | 10.6 | 6.0009 ug/L | 6.0009 ppb | 22:48:08 |
| 1 | Ni 231.604† | 4376.0 | 4230.9 | 132.09 ug/L | 132.09 ppb | 22:48:08 |
| 1 | P 214.914† | 1248.2 | 1065.3 | 713.50 ug/L | 713.50 ppb | 22:48:08 |
| 1 | Pb 220.353† | 1610.2 | 1650.1 | 246.42 ug/L | 246.42 ppb | 22:48:08 |
| 1 | S 181.975 Axial† | 278.8 | 251.1 | 434.63 ug/L | 434.63 ppb | 22:48:08 |
| 1 | Sb 206.836† | 53.6 | 26.3 | 2.6554 ug/L | 2.6554 ppb | 22:48:08 |
| 1 | Se 196.026† | -243.2 | -223.4 | 21.234 ug/L | 21.234 ppb | 22:48:08 |
| 1 | Si 251.611† | 836882.2 | 826510.1 | 30774 ug/L | 30774 ppb | 22:47:43 |
| 1 | Sn 189.927† | -84.9 | -86.9 | -20.825 ug/L | -20.825 ppb | 22:48:08 |
| 1 | Ti 334.940† | 1270592.0 | 1256725.6 | 2163.2 ug/L | 2163.2 ppb | 22:47:43 |
| 1 | Tl 190.801† | -106.0 | -79.7 | -3.0441 ug/L | -3.0441 ppb | 22:48:08 |
| 1 | U 409.014† | -1170.1 | 878.8 | 18.030 ug/L | 18.030 ppb | 22:47:48 |
| 1 | V 292.402† | 11936.8 | 13223.8 | 90.480 ug/L | 90.480 ppb | 22:47:48 |
| 1 | Zn 213.857† | 22917.4 | 22041.4 | 251.45 ug/L | 251.45 ppb | 22:47:48 |
| 1 | SiO2† | 842805.3 | 832335.5 | 66499 ug/L | 66499 ppb | 22:49:17 |
| 2 | Sc Radial | 4128.1 | 4128.1 | 102 % | | 22:47:11 |
| 2 | Y RADIAL | 4917.4 | 4917.4 | 108.8 % | | 22:46:51 |
| 2 | Al 396.153Radial† | 28369.0 | 27800.9 | 29629 ug/L | 29629 ppb | 22:46:51 |
| 2 | Ca 317.933Radial† | 5925.6 | 5773.2 | 11730 ug/L | 11730 ppb | 22:46:51 |
| 2 | Fe 238.204 Radial† | 5217.8 | 5089.7 | 63646 ug/L | 63646 ppb | 22:46:51 |
| 2 | K 766.490 Radial† | 32266.7 | 28726.8 | 5729.7 ug/L | 5729.7 ppb | 22:46:51 |
| 2 | Mg 279.077 IEC† | 135.1 | 131.3 | 5669.0 ug/L | 5669.0 ppb | 22:47:11 |
| 2 | Na 589.592 Radial† | 1941.7 | 2358.2 | 926.11 ug/L | 926.11 ppb | 22:46:51 |
| 2 | Sr 421.552† | 10920.8 | 10601.4 | 90.190 ug/L | 90.190 ppb | 22:46:51 |
| 2 | Sc 361.383 | 845496.7 | 845496.7 | 100.67 % | | 22:48:14 |
| 2 | Y 371.029 | 774421.6 | 774421.6 | 108.15 % | | 22:48:14 |
| 2 | Ag 328.068† | -3555.9 | -3785.6 | 0.8320 ug/L | 0.8320 ppb | 22:48:20 |
| 2 | As 188.979† | -50.1 | -28.9 | 18.131 ug/L | 18.131 ppb | 22:48:40 |
| 2 | B 249.677† | 469.4 | 716.4 | 9.2806 ug/L | 9.2806 ppb | 22:48:20 |
| 2 | Ba 233.527† | 46165.3 | 45838.8 | 431.88 ug/L | 431.88 ppb | 22:48:20 |
| 2 | Be 313.107† | -10326.0 | -5994.4 | 2.4721 ug/L | 2.4721 ppb | 22:48:20 |
| 2 | Cd 226.502† | 331.0 | 495.2 | 0.5007 ug/L | 0.5007 ppb | 22:48:40 |
| 2 | Co 228.616† | 996.3 | 1028.6 | 21.416 ug/L | 21.416 ppb | 22:48:40 |
| 2 | Cr 267.716† | 20731.4 | 20498.2 | 273.75 ug/L | 273.75 ppb | 22:48:20 |
| 2 | Cu 324.752† | 19609.4 | 13125.8 | 45.915 ug/L | 45.915 ppb | 22:48:20 |
| 2 | Mn 257.610† | 1627724.1 | 1616411.1 | 2126.9 ug/L | 2126.9 ppb | 22:48:14 |
| 2 | Mo 202.031† | 28.0 | 13.7 | 6.2808 ug/L | 6.2808 ppb | 22:48:40 |
| 2 | Ni 231.604† | 4426.5 | 4303.3 | 134.36 ug/L | 134.36 ppb | 22:48:40 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1254.9 | 1078.3 | 722.57 ug/L | 722.57 ppb | 22:48:40 |
| 2 | Pb 220.353† | 1626.7 | 1674.7 | 250.12 ug/L | 250.12 ppb | 22:48:40 |
| 2 | S 181.975 Axial† | 273.9 | 247.7 | 428.66 ug/L | 428.66 ppb | 22:48:40 |
| 2 | Sb 206.836† | 54.8 | 27.8 | 3.2796 ug/L | 3.2796 ppb | 22:48:40 |
| 2 | Se 196.026† | -254.6 | -236.0 | 11.700 ug/L | 11.700 ppb | 22:48:40 |
| 2 | Si 251.611† | 832281.3 | 826202.7 | 30762 ug/L | 30762 ppb | 22:48:14 |
| 2 | Sn 189.927† | -88.7 | -91.2 | -21.761 ug/L | -21.761 ppb | 22:48:40 |
| 2 | Ti 334.940† | 1263327.5 | 1255981.6 | 2161.9 ug/L | 2161.9 ppb | 22:48:14 |
| 2 | Tl 190.801† | -103.3 | -77.5 | -2.2238 ug/L | -2.2238 ppb | 22:48:40 |
| 2 | U 409.014† | -1161.6 | 881.3 | 18.080 ug/L | 18.080 ppb | 22:48:20 |
| 2 | V 292.402† | 11976.0 | 13323.7 | 91.231 ug/L | 91.231 ppb | 22:48:20 |
| 2 | Zn 213.857† | 23083.7 | 22323.3 | 254.76 ug/L | 254.76 ppb | 22:48:20 |
| 2 | SiO2† | 842357.2 | 836183.4 | 66807 ug/L | 66807 ppb | 22:49:23 |
| 3 | Sc Radial | 4124.3 | 4124.3 | 102 % | | 22:47:36 |
| 3 | Y RADIAL | 5043.4 | 5043.4 | 111.6 % | | 22:47:16 |
| 3 | Al 396.153Radial† | 29012.3 | 28455.8 | 30327 ug/L | 30327 ppb | 22:47:16 |
| 3 | Ca 317.933Radial† | 6046.2 | 5896.4 | 11980 ug/L | 11980 ppb | 22:47:16 |
| 3 | Fe 238.204 Radial† | 5326.5 | 5200.7 | 65033 ug/L | 65033 ppb | 22:47:16 |
| 3 | K 766.490 Radial† | 32769.4 | 29247.6 | 5833.6 ug/L | 5833.6 ppb | 22:47:16 |
| 3 | Mg 279.077 IEC† | 135.6 | 131.9 | 5694.6 ug/L | 5694.6 ppb | 22:47:36 |
| 3 | Na 589.592 Radial† | 1920.4 | 2339.1 | 918.61 ug/L | 918.61 ppb | 22:47:16 |
| 3 | Sr 421.552† | 11209.2 | 10893.4 | 92.674 ug/L | 92.674 ppb | 22:47:16 |
| 3 | Sc 361.383 | 848647.2 | 848647.2 | 101.05 % | | 22:48:45 |
| 3 | Y 371.029 | 776248.3 | 776248.3 | 108.40 % | | 22:48:45 |
| 3 | Ag 328.068† | -3501.8 | -3718.9 | 1.5931 ug/L | 1.5931 ppb | 22:48:51 |
| 3 | As 188.979† | -51.4 | -30.1 | 17.838 ug/L | 17.838 ppb | 22:49:11 |
| 3 | B 249.677† | 426.6 | 672.3 | 7.8440 ug/L | 7.8440 ppb | 22:48:51 |
| 3 | Ba 233.527† | 45917.9 | 45423.7 | 428.03 ug/L | 428.03 ppb | 22:48:51 |
| 3 | Be 313.107† | -10278.3 | -5909.1 | 2.5096 ug/L | 2.5096 ppb | 22:48:51 |
| 3 | Cd 226.502† | 347.9 | 510.7 | 0.5746 ug/L | 0.5746 ppb | 22:49:11 |
| 3 | Co 228.616† | 981.1 | 1009.8 | 20.905 ug/L | 20.905 ppb | 22:49:11 |
| 3 | Cr 267.716† | 20616.4 | 20307.9 | 271.42 ug/L | 271.42 ppb | 22:48:51 |
| 3 | Cu 324.752† | 19574.6 | 13019.0 | 45.644 ug/L | 45.644 ppb | 22:48:51 |
| 3 | Mn 257.610† | 1637118.9 | 1619706.2 | 2131.3 ug/L | 2131.3 ppb | 22:48:45 |
| 3 | Mo 202.031† | 34.7 | 20.2 | 6.9658 ug/L | 6.9658 ppb | 22:49:11 |
| 3 | Ni 231.604† | 4425.0 | 4285.5 | 133.80 ug/L | 133.80 ppb | 22:49:11 |
| 3 | P 214.914† | 1237.8 | 1056.8 | 706.22 ug/L | 706.22 ppb | 22:49:11 |
| 3 | Pb 220.353† | 1638.4 | 1680.2 | 250.92 ug/L | 250.92 ppb | 22:49:11 |
| 3 | S 181.975 Axial† | 280.9 | 253.6 | 438.85 ug/L | 438.85 ppb | 22:49:11 |
| 3 | Sb 206.836† | 50.3 | 23.1 | 1.2826 ug/L | 1.2826 ppb | 22:49:11 |
| 3 | Se 196.026† | -253.7 | -234.1 | 17.563 ug/L | 17.563 ppb | 22:49:11 |
| 3 | Si 251.611† | 836169.9 | 826981.9 | 30791 ug/L | 30791 ppb | 22:48:45 |
| 3 | Sn 189.927† | -80.5 | -82.8 | -19.938 ug/L | -19.938 ppb | 22:49:11 |
| 3 | Ti 334.940† | 1268765.4 | 1256704.6 | 2163.2 ug/L | 2163.2 ppb | 22:48:45 |
| 3 | Tl 190.801† | -108.9 | -82.7 | -4.1933 ug/L | -4.1933 ppb | 22:49:11 |
| 3 | U 409.014† | -1238.8 | 809.2 | 15.805 ug/L | 15.805 ppb | 22:48:51 |
| 3 | V 292.402† | 11951.4 | 13255.1 | 90.504 ug/L | 90.504 ppb | 22:48:51 |
| 3 | Zn 213.857† | 22975.2 | 22130.7 | 252.27 ug/L | 252.27 ppb | 22:48:51 |
| 3 | SiO2† | 832746.4 | 823566.0 | 65799 ug/L | 65799 ppb | 22:49:29 |

Mean Data: 247899008|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Conc. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|--------|--------|----------|--------|
| Sc 361.383 | 847999.6 | 100.97 | % | 0.268 | | | | 0.27% |
| Sc Radial | 4138.4 | 103 | % | 0.5 | | | | 0.51% |
| Y 371.029 | 776226.3 | 108.40 | % | 0.251 | | | | 0.23% |
| Y RADIAL | 4965.5 | 109.9 | % | 1.51 | | | | 1.37% |
| Ag 328.068† | -3791.3 | 0.9277 | ug/L | 0.62314 | 0.9277 | ppb | 0.62314 | 67.17% |
| Al 396.153Radial† | 27997.5 | 29838 | ug/L | 424.3 | 29838 | ppb | 424.3 | 1.42% |
| As 188.979† | -27.4 | 19.049 | ug/L | 1.8498 | 19.049 | ppb | 1.8498 | 9.71% |
| B 249.677† | 702.6 | 8.8341 | ug/L | 0.85880 | 8.8341 | ppb | 0.85880 | 9.72% |
| Ba 233.527† | 45512.9 | 428.83 | ug/L | 2.732 | 428.83 | ppb | 2.732 | 0.64% |
| Be 313.107† | -5976.8 | 2.4812 | ug/L | 0.02511 | 2.4812 | ppb | 0.02511 | 1.01% |
| Ca 317.933Radial† | 5807.9 | 11800 | ug/L | 156.9 | 11800 | ppb | 156.9 | 1.33% |
| Cd 226.502† | 500.3 | 0.5292 | ug/L | 0.03981 | 0.5292 | ppb | 0.03981 | 7.52% |
| Co 228.616† | 1015.5 | 21.068 | ug/L | 0.3018 | 21.068 | ppb | 0.3018 | 1.43% |
| Cr 267.716† | 20368.4 | 272.10 | ug/L | 1.432 | 272.10 | ppb | 1.432 | 0.53% |
| Cu 324.752† | 13005.4 | 45.547 | ug/L | 0.4249 | 45.547 | ppb | 0.4249 | 0.93% |
| Fe 238.204 Radial† | 5122.5 | 64055 | ug/L | 850.6 | 64055 | ppb | 850.6 | 1.33% |
| K 766.490 Radial† | 28855.5 | 5755.3 | ug/L | 69.05 | 5755.3 | ppb | 69.05 | 1.20% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 131.2 | 5664.5 ug/L | 32.49 | 5664.5 ppb | 32.49 | 0.57% |
| Mn 257.610† | 1616585.1 | 2127.1 ug/L | 4.06 | 2127.1 ppb | 4.06 | 0.19% |
| Mo 202.031† | 14.8 | 6.4158 ug/L | 0.49641 | 6.4158 ppb | 0.49641 | 7.74% |
| Na 589.592 Radial† | 2348.9 | 922.45 ug/L | 3.755 | 922.45 ppb | 3.755 | 0.41% |
| Ni 231.604† | 4273.2 | 133.42 ug/L | 1.179 | 133.42 ppb | 1.179 | 0.88% |
| P 214.914† | 1066.8 | 714.09 ug/L | 8.191 | 714.09 ppb | 8.191 | 1.15% |
| Pb 220.353† | 1668.3 | 249.16 ug/L | 2.399 | 249.16 ppb | 2.399 | 0.96% |
| S 181.975 Axial† | 250.8 | 434.05 ug/L | 5.125 | 434.05 ppb | 5.125 | 1.18% |
| Sb 206.836† | 25.7 | 2.4059 ug/L | 1.02163 | 2.4059 ppb | 1.02163 | 42.46% |
| Se 196.026† | -231.2 | 16.833 ug/L | 4.8087 | 16.833 ppb | 4.8087 | 28.57% |
| Si 251.611† | 826564.9 | 30776 ug/L | 14.6 | 30776 ppb | 14.6 | 0.05% |
| Sn 189.927† | -87.0 | -20.841 ug/L | 0.9117 | -20.841 ppb | 0.9117 | 4.37% |
| Sr 421.552† | 10685.1 | 90.901 ug/L | 1.5451 | 90.901 ppb | 1.5451 | 1.70% |
| Ti 334.940† | 1256470.6 | 2162.8 ug/L | 0.74 | 2162.8 ppb | 0.74 | 0.03% |
| Tl 190.801† | -80.0 | -3.1537 ug/L | 0.98933 | -3.1537 ppb | 0.98933 | 31.37% |
| U 409.014† | 856.4 | 17.305 ug/L | 1.2994 | 17.305 ppb | 1.2994 | 7.51% |
| V 292.402† | 13267.5 | 90.738 ug/L | 0.4269 | 90.738 ppb | 0.4269 | 0.47% |
| Zn 213.857† | 22165.1 | 252.82 ug/L | 1.724 | 252.82 ppb | 1.724 | 0.68% |
| SiO2† | 830695.0 | 66368 ug/L | 516.7 | 66368 ppb | 516.7 | 0.78% |

Sequence No.: 55
 Sample ID: 247899009|958053|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 3/25/2010 22:51:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247899009|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Conc. Units | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|----------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4239.0 | 4239.0 | 105 % | | | 22:53:33 |
| 1 | Y RADIAL | 5175.3 | 5175.3 | 114.5 % | | | 22:53:33 |
| 1 | Al 396.153Radial† | 36055.1 | 34389.7 | 36651 ug/L | 36651 ppb | | 22:53:33 |
| 1 | Ca 317.933Radial† | 6810.1 | 6463.3 | 13132 ug/L | 13132 ppb | | 22:53:33 |
| 1 | Fe 238.204 Radial† | 8715.3 | 8284.5 | 103600 ug/L | 103600 ppb | | 22:53:33 |
| 1 | K 766.490 Radial† | 38949.8 | 34261.3 | 6833.6 ug/L | 6833.6 ppb | | 22:53:33 |
| 1 | Mg 279.077 IEC† | 168.0 | 159.2 | 6845.5 ug/L | 6845.5 ppb | | 22:53:53 |
| 1 | Na 589.592 Radial† | 2015.0 | 2378.4 | 934.01 ug/L | 934.01 ppb | | 22:53:33 |
| 1 | Sr 421.552† | 11691.6 | 11055.7 | 94.047 ug/L | 94.047 ppb | | 22:53:33 |
| 1 | Sc 361.383 | 853034.4 | 853034.4 | 101.57 % | | | 22:54:50 |
| 1 | Y 371.029 | 810751.2 | 810751.2 | 113.22 % | | | 22:54:50 |
| 1 | Ag 328.068† | 278.5 | 20.7 | 32.453 ug/L | 32.453 ppb | | 22:54:55 |
| 1 | As 188.979† | -62.3 | -40.5 | 31.684 ug/L | 31.684 ppb | | 22:55:15 |
| 1 | B 249.677† | 593.8 | 834.8 | 6.0331 ug/L | 6.0331 ppb | | 22:54:55 |
| 1 | Ba 233.527† | 53297.5 | 52455.5 | 495.18 ug/L | 495.18 ppb | | 22:54:55 |
| 1 | Be 313.107† | 6685.3 | 10844.7 | 12.032 ug/L | 12.032 ppb | | 22:54:55 |
| 1 | Cd 226.502† | 671.8 | 827.8 | 1.0108 ug/L | 1.0108 ppb | | 22:55:15 |
| 1 | Co 228.616† | 1178.0 | 1198.8 | 22.877 ug/L | 22.877 ppb | | 22:55:15 |
| 1 | Cr 267.716† | 4460.8 | 4296.9 | 67.084 ug/L | 67.084 ppb | | 22:55:15 |
| 1 | Cu 324.752† | 65555.3 | 58189.8 | 194.14 ug/L | 194.14 ppb | | 22:54:55 |
| 1 | Mn 257.610† | 2551091.9 | 2511226.3 | 3304.8 ug/L | 3304.8 ppb | | 22:54:50 |
| 1 | Mo 202.031† | 18.2 | 3.7 | 8.5235 ug/L | 8.5235 ppb | | 22:55:15 |
| 1 | Ni 231.604† | 1455.0 | 1338.9 | 41.789 ug/L | 41.789 ppb | | 22:55:15 |
| 1 | P 214.914† | 1310.3 | 1121.9 | 694.59 ug/L | 694.59 ppb | | 22:55:15 |
| 1 | Pb 220.353† | 1094.7 | 1136.6 | 164.81 ug/L | 164.81 ppb | | 22:55:15 |
| 1 | S 181.975 Axial† | 250.0 | 221.7 | 381.76 ug/L | 381.76 ppb | | 22:55:15 |
| 1 | Sb 206.836† | 64.1 | 36.4 | 2.6065 ug/L | 2.6065 ppb | | 22:55:15 |
| 1 | Se 196.026† | -409.2 | -385.9 | 13.148 ug/L | 13.148 ppb | | 22:55:15 |
| 1 | Si 251.611† | 938878.5 | 923847.8 | 34398 ug/L | 34398 ppb | | 22:54:50 |
| 1 | Sn 189.927† | -8.9 | -11.9 | -6.2448 ug/L | -6.2448 ppb | | 22:55:15 |
| 1 | Ti 334.940† | 1982753.0 | 1953203.7 | 3361.7 ug/L | 3361.7 ppb | | 22:54:50 |
| 1 | Tl 190.801† | -153.0 | -125.5 | -5.2832 ug/L | -5.2832 ppb | | 22:55:15 |
| 1 | U 409.014† | -411.3 | 1630.3 | 36.035 ug/L | 36.035 ppb | | 22:54:50 |
| 1 | V 292.402† | 15795.7 | 16979.2 | 112.45 ug/L | 112.45 ppb | | 22:54:55 |
| 1 | Zn 213.857† | 36722.5 | 35548.7 | 406.29 ug/L | 406.29 ppb | | 22:54:55 |
| 1 | SiO2† | 936241.3 | 921223.5 | 73601 ug/L | 73601 ppb | | 22:56:24 |
| 2 | Sc Radial | 4244.0 | 4244.0 | 105 % | | | 22:53:58 |
| 2 | Y RADIAL | 5127.4 | 5127.4 | 113.5 % | | | 22:53:58 |
| 2 | Al 396.153Radial† | 35711.1 | 34022.4 | 36260 ug/L | 36260 ppb | | 22:53:58 |
| 2 | Ca 317.933Radial† | 6719.7 | 6369.7 | 12942 ug/L | 12942 ppb | | 22:53:58 |
| 2 | Fe 238.204 Radial† | 8665.1 | 8227.0 | 102880 ug/L | 102880 ppb | | 22:53:58 |
| 2 | K 766.490 Radial† | 38866.2 | 34138.4 | 6809.1 ug/L | 6809.1 ppb | | 22:53:58 |
| 2 | Mg 279.077 IEC† | 165.0 | 156.1 | 6711.7 ug/L | 6711.7 ppb | | 22:54:18 |
| 2 | Na 589.592 Radial† | 2026.8 | 2387.3 | 937.52 ug/L | 937.52 ppb | | 22:53:58 |
| 2 | Sr 421.552† | 11568.4 | 10925.5 | 92.940 ug/L | 92.940 ppb | | 22:53:58 |
| 2 | Sc 361.383 | 847248.9 | 847248.9 | 100.88 % | | | 22:55:21 |
| 2 | Y 371.029 | 805388.1 | 805388.1 | 112.47 % | | | 22:55:21 |
| 2 | Ag 328.068† | 152.8 | -101.9 | 31.626 ug/L | 31.626 ppb | | 22:55:26 |
| 2 | As 188.979† | -60.5 | -39.1 | 32.234 ug/L | 32.234 ppb | | 22:55:47 |
| 2 | B 249.677† | 638.8 | 883.4 | 7.4842 ug/L | 7.4842 ppb | | 22:55:26 |
| 2 | Ba 233.527† | 54777.7 | 54281.2 | 512.29 ug/L | 512.29 ppb | | 22:55:26 |
| 2 | Be 313.107† | 7267.5 | 11466.8 | 12.282 ug/L | 12.282 ppb | | 22:55:26 |
| 2 | Cd 226.502† | 644.9 | 805.7 | 0.7739 ug/L | 0.7739 ppb | | 22:55:47 |
| 2 | Co 228.616† | 1199.3 | 1227.8 | 23.655 ug/L | 23.655 ppb | | 22:55:47 |
| 2 | Cr 267.716† | 4457.2 | 4323.4 | 67.355 ug/L | 67.355 ppb | | 22:55:47 |
| 2 | Cu 324.752† | 66871.7 | 59935.4 | 199.76 ug/L | 199.76 ppb | | 22:55:26 |
| 2 | Mn 257.610† | 2534949.0 | 2512375.4 | 3306.2 ug/L | 3306.2 ppb | | 22:55:21 |
| 2 | Mo 202.031† | 28.5 | 14.1 | 9.3785 ug/L | 9.3785 ppb | | 22:55:47 |
| 2 | Ni 231.604† | 1431.5 | 1325.4 | 41.366 ug/L | 41.366 ppb | | 22:55:47 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1289.5 | 1110.0 | 685.41 ug/L | 685.41 ppb | 22:55:47 |
| 2 | Pb 220.353† | 1087.8 | 1137.1 | 164.90 ug/L | 164.90 ppb | 22:55:47 |
| 2 | S 181.975 Axial† | 253.7 | 227.1 | 391.25 ug/L | 391.25 ppb | 22:55:47 |
| 2 | Sb 206.836† | 64.1 | 36.9 | 2.8647 ug/L | 2.8647 ppb | 22:55:47 |
| 2 | Se 196.026† | -402.9 | -382.5 | 13.635 ug/L | 13.635 ppb | 22:55:47 |
| 2 | Si 251.611† | 933133.4 | 924465.0 | 34421 ug/L | 34421 ppb | 22:55:21 |
| 2 | Sn 189.927† | -11.4 | -14.4 | -6.7960 ug/L | -6.7960 ppb | 22:55:47 |
| 2 | Ti 334.940† | 1968521.3 | 1952426.5 | 3360.3 ug/L | 3360.3 ppb | 22:55:21 |
| 2 | Tl 190.801† | -158.6 | -132.2 | -7.8647 ug/L | -7.8647 ppb | 22:55:47 |
| 2 | U 409.014† | -176.8 | 1859.9 | 42.872 ug/L | 42.872 ppb | 22:55:21 |
| 2 | V 292.402† | 16235.0 | 17520.9 | 116.76 ug/L | 116.76 ppb | 22:55:26 |
| 2 | Zn 213.857† | 37470.8 | 36537.3 | 418.14 ug/L | 418.14 ppb | 22:55:26 |
| 2 | SiO2† | 931943.1 | 923257.1 | 73764 ug/L | 73764 ppb | 22:56:30 |
| 3 | Sc Radial | 4190.6 | 4190.6 | 104 % | | 22:54:23 |
| 3 | Y RADIAL | 5083.3 | 5083.3 | 112.5 % | | 22:54:23 |
| 3 | Al 396.153Radial† | 35230.1 | 33992.2 | 36227 ug/L | 36227 ppb | 22:54:23 |
| 3 | Ca 317.933Radial† | 6635.3 | 6370.0 | 12942 ug/L | 12942 ppb | 22:54:23 |
| 3 | Fe 238.204 Radial† | 8525.6 | 8197.8 | 102510 ug/L | 102510 ppb | 22:54:23 |
| 3 | K 766.490 Radial† | 38119.3 | 33890.4 | 6759.6 ug/L | 6759.6 ppb | 22:54:23 |
| 3 | Mg 279.077 IEC† | 165.3 | 158.4 | 6811.0 ug/L | 6811.0 ppb | 22:54:43 |
| 3 | Na 589.592 Radial† | 1984.9 | 2371.6 | 931.35 ug/L | 931.35 ppb | 22:54:23 |
| 3 | Sr 421.552† | 11437.7 | 10939.9 | 93.062 ug/L | 93.062 ppb | 22:54:23 |
| 3 | Sc 361.383 | 857189.2 | 857189.2 | 102.06 % | | 22:55:52 |
| 3 | Y 371.029 | 814041.5 | 814041.5 | 113.68 % | | 22:55:52 |
| 3 | Ag 328.068† | 220.1 | -37.7 | 31.830 ug/L | 31.830 ppb | 22:55:58 |
| 3 | As 188.979† | -62.7 | -40.6 | 31.360 ug/L | 31.360 ppb | 22:56:18 |
| 3 | B 249.677† | 626.9 | 864.4 | 7.0247 ug/L | 7.0247 ppb | 22:55:58 |
| 3 | Ba 233.527† | 54230.9 | 53115.7 | 501.34 ug/L | 501.34 ppb | 22:55:58 |
| 3 | Be 313.107† | 6912.6 | 11035.5 | 12.105 ug/L | 12.105 ppb | 22:55:58 |
| 3 | Cd 226.502† | 663.4 | 816.4 | 0.9625 ug/L | 0.9625 ppb | 22:56:18 |
| 3 | Co 228.616† | 1177.3 | 1192.4 | 22.736 ug/L | 22.736 ppb | 22:56:18 |
| 3 | Cr 267.716† | 4425.2 | 4240.8 | 66.239 ug/L | 66.239 ppb | 22:56:18 |
| 3 | Cu 324.752† | 66619.1 | 58919.2 | 196.44 ug/L | 196.44 ppb | 22:55:58 |
| 3 | Mn 257.610† | 2560633.7 | 2508400.9 | 3301.0 ug/L | 3301.0 ppb | 22:55:52 |
| 3 | Mo 202.031† | 21.9 | 7.3 | 8.7512 ug/L | 8.7512 ppb | 22:56:18 |
| 3 | Ni 231.604† | 1440.3 | 1317.5 | 41.122 ug/L | 41.122 ppb | 22:56:18 |
| 3 | P 214.914† | 1310.5 | 1115.8 | 690.51 ug/L | 690.51 ppb | 22:56:18 |
| 3 | Pb 220.353† | 1075.0 | 1112.1 | 161.16 ug/L | 161.16 ppb | 22:56:18 |
| 3 | S 181.975 Axial† | 250.0 | 220.5 | 379.73 ug/L | 379.73 ppb | 22:56:18 |
| 3 | Sb 206.836† | 59.1 | 31.2 | 0.4507 ug/L | 0.4507 ppb | 22:56:18 |
| 3 | Se 196.026† | -408.4 | -383.2 | 11.941 ug/L | 11.941 ppb | 22:56:18 |
| 3 | Si 251.611† | 943631.3 | 924024.0 | 34404 ug/L | 34404 ppb | 22:55:52 |
| 3 | Sn 189.927† | -6.4 | -9.3 | -5.6512 ug/L | -5.6512 ppb | 22:56:18 |
| 3 | Ti 334.940† | 1991142.1 | 1951961.1 | 3359.5 ug/L | 3359.5 ppb | 22:55:52 |
| 3 | Tl 190.801† | -146.5 | -118.5 | -2.5919 ug/L | -2.5919 ppb | 22:56:18 |
| 3 | U 409.014† | -250.5 | 1789.7 | 40.852 ug/L | 40.852 ppb | 22:55:52 |
| 3 | V 292.402† | 16155.2 | 17256.1 | 114.76 ug/L | 114.76 ppb | 22:55:58 |
| 3 | Zn 213.857† | 37168.8 | 35810.8 | 409.56 ug/L | 409.56 ppb | 22:55:58 |
| 3 | SiO2† | 945046.9 | 925383.0 | 73934 ug/L | 73934 ppb | 22:56:36 |

Mean Data: 247899009|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 852490.8 | 101.50 % | | 0.594 | | | 0.59% |
| Sc Radial | 4224.5 | 105 % | | 0.7 | | | 0.70% |
| Y 371.029 | 810060.3 | 113.13 % | | 0.610 | | | 0.54% |
| Y RADIAL | 5128.6 | 113.5 % | | 1.02 | | | 0.90% |
| Ag 328.068† | -39.6 | 31.969 ug/L | | 0.4307 | 31.969 ppb | 0.4307 | 1.35% |
| Al 396.153Radial† | 34134.8 | 36379 ug/L | | 235.8 | 36379 ppb | 235.8 | 0.65% |
| As 188.979† | -40.0 | 31.759 ug/L | | 0.4420 | 31.759 ppb | 0.4420 | 1.39% |
| B 249.677† | 860.8 | 6.8473 ug/L | | 0.74164 | 6.8473 ppb | 0.74164 | 10.83% |
| Ba 233.527† | 53284.2 | 502.94 ug/L | | 8.662 | 502.94 ppb | 8.662 | 1.72% |
| Be 313.107† | 11115.7 | 12.140 ug/L | | 0.1283 | 12.140 ppb | 0.1283 | 1.06% |
| Ca 317.933Radial† | 6401.0 | 13005 ug/L | | 109.6 | 13005 ppb | 109.6 | 0.84% |
| Cd 226.502† | 816.6 | 0.9157 ug/L | | 0.12517 | 0.9157 ppb | 0.12517 | 13.67% |
| Co 228.616† | 1206.3 | 23.089 ug/L | | 0.4954 | 23.089 ppb | 0.4954 | 2.15% |
| Cr 267.716† | 4287.0 | 66.893 ug/L | | 0.5821 | 66.893 ppb | 0.5821 | 0.87% |
| Cu 324.752† | 59014.8 | 196.78 ug/L | | 2.824 | 196.78 ppb | 2.824 | 1.44% |
| Fe 238.204 Radial† | 8236.4 | 102990 ug/L | | 551.7 | 102990 ppb | 551.7 | 0.54% |
| K 766.490 Radial† | 34096.7 | 6800.8 ug/L | | 37.69 | 6800.8 ppb | 37.69 | 0.55% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 157.9 | 6789.4 ug/L | 69.44 | 6789.4 ppb | 69.44 | 1.02% |
| Mn 257.610† | 2510667.5 | 3304.0 ug/L | 2.72 | 3304.0 ppb | 2.72 | 0.08% |
| Mo 202.031† | 8.4 | 8.8844 ug/L | 0.44282 | 8.8844 ppb | 0.44282 | 4.98% |
| Na 589.592 Radial† | 2379.1 | 934.30 ug/L | 3.094 | 934.30 ppb | 3.094 | 0.33% |
| Ni 231.604† | 1327.3 | 41.426 ug/L | 0.3378 | 41.426 ppb | 0.3378 | 0.82% |
| P 214.914† | 1115.9 | 690.17 ug/L | 4.599 | 690.17 ppb | 4.599 | 0.67% |
| Pb 220.353† | 1128.6 | 163.62 ug/L | 2.131 | 163.62 ppb | 2.131 | 1.30% |
| S 181.975 Axial† | 223.1 | 384.25 ug/L | 6.148 | 384.25 ppb | 6.148 | 1.60% |
| Sb 206.836† | 34.9 | 1.9740 ug/L | 1.32548 | 1.9740 ppb | 1.32548 | 67.15% |
| Se 196.026† | -383.9 | 12.908 ug/L | 0.8719 | 12.908 ppb | 0.8719 | 6.75% |
| Si 251.611† | 924112.3 | 34408 ug/L | 11.8 | 34408 ppb | 11.8 | 0.03% |
| Sn 189.927† | -11.9 | -6.2307 ug/L | 0.57250 | -6.2307 ppb | 0.57250 | 9.19% |
| Sr 421.552† | 10973.7 | 93.350 ug/L | 0.6069 | 93.350 ppb | 0.6069 | 0.65% |
| Ti 334.940† | 1952530.4 | 3360.5 ug/L | 1.09 | 3360.5 ppb | 1.09 | 0.03% |
| Tl 190.801† | -125.4 | -5.2466 ug/L | 2.63658 | -5.2466 ppb | 2.63658 | 50.25% |
| U 409.014† | 1760.0 | 39.919 ug/L | 3.5129 | 39.919 ppb | 3.5129 | 8.80% |
| V 292.402† | 17252.0 | 114.66 ug/L | 2.154 | 114.66 ppb | 2.154 | 1.88% |
| Zn 213.857† | 35965.6 | 411.33 ug/L | 6.118 | 411.33 ppb | 6.118 | 1.49% |
| SiO2† | 923287.9 | 73766 ug/L | 166.2 | 73766 ppb | 166.2 | 0.23% |

Sequence No.: 56

Sample ID: 247899010|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 81

Date Collected: 3/25/2010 22:58:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899010|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4110.8 | 4110.8 | 102 % | | 23:01:00 |
| 1 | Y RADIAL | 5277.1 | 5277.1 | 116.8 % | | 23:00:40 |
| 1 | Al 396.153Radial† | 48963.2 | 48125.7 | 51290 ug/L | 51290 ppb | 23:00:40 |
| 1 | Ca 317.933Radial† | 7302.6 | 7148.6 | 14524 ug/L | 14524 ppb | 23:00:40 |
| 1 | Fe 238.204 Radial† | 9305.2 | 9121.8 | 114070 ug/L | 114070 ppb | 23:00:40 |
| 1 | K 766.490 Radial† | 43306.3 | 39691.8 | 7917.5 ug/L | 7917.5 ppb | 23:00:40 |
| 1 | Mg 279.077 IEC† | 221.7 | 216.8 | 9353.0 ug/L | 9353.0 ppb | 23:01:00 |
| 1 | Na 589.592 Radial† | 2326.4 | 2743.7 | 1077.5 ug/L | 1077.5 ppb | 23:00:40 |
| 1 | Sr 421.552† | 13330.9 | 13011.1 | 110.69 ug/L | 110.69 ppb | 23:00:40 |
| 1 | Sc 361.383 | 864904.1 | 864904.1 | 102.98 % | | 23:01:57 |
| 1 | Y 371.029 | 840781.0 | 840781.0 | 117.42 % | | 23:01:57 |
| 1 | Ag 328.068† | -6680.2 | -6740.1 | 1.8066 ug/L | 1.8066 ppb | 23:02:02 |
| 1 | As 188.979† | -50.7 | -28.4 | 39.403 ug/L | 39.403 ppb | 23:02:22 |
| 1 | B 249.677† | 688.6 | 918.8 | 6.6423 ug/L | 6.6423 ppb | 23:02:02 |
| 1 | Ba 233.527† | 44632.9 | 43321.8 | 409.91 ug/L | 409.91 ppb | 23:02:02 |
| 1 | Be 313.107† | -3765.3 | 606.5 | 7.5588 ug/L | 7.5588 ppb | 23:02:02 |
| 1 | Cd 226.502† | 746.5 | 891.3 | 0.7966 ug/L | 0.7966 ppb | 23:02:22 |
| 1 | Co 228.616† | 1201.1 | 1205.3 | 23.132 ug/L | 23.132 ppb | 23:02:22 |
| 1 | Cr 267.716† | 7174.1 | 6871.4 | 101.81 ug/L | 101.81 ppb | 23:02:02 |
| 1 | Cu 324.752† | 29116.7 | 21920.7 | 77.201 ug/L | 77.201 ppb | 23:02:02 |
| 1 | Mn 257.610† | 1997008.0 | 1938719.7 | 2554.6 ug/L | 2554.6 ppb | 23:01:57 |
| 1 | Mo 202.031† | 27.6 | 12.6 | 10.138 ug/L | 10.138 ppb | 23:02:22 |
| 1 | Ni 231.604† | 2094.8 | 1940.5 | 60.575 ug/L | 60.575 ppb | 23:02:22 |
| 1 | P 214.914† | 969.1 | 772.8 | 462.16 ug/L | 462.16 ppb | 23:02:22 |
| 1 | Pb 220.353† | 482.6 | 527.5 | 74.808 ug/L | 74.808 ppb | 23:02:22 |
| 1 | S 181.975 Axial† | 225.5 | 194.6 | 331.54 ug/L | 331.54 ppb | 23:02:22 |
| 1 | Sb 206.836† | 56.9 | 28.6 | -0.8950 ug/L | -0.8950 ppb | 23:02:22 |
| 1 | Se 196.026† | -461.9 | -431.6 | 13.359 ug/L | 13.359 ppb | 23:02:22 |
| 1 | Si 251.611† | 1103236.8 | 1070760.2 | 39868 ug/L | 39868 ppb | 23:01:57 |
| 1 | Sn 189.927† | -67.4 | -68.5 | -19.148 ug/L | -19.148 ppb | 23:02:22 |
| 1 | Ti 334.940† | 1926855.8 | 1872134.9 | 3222.2 ug/L | 3222.2 ppb | 23:01:57 |
| 1 | Tl 190.801† | -145.7 | -116.4 | -6.5477 ug/L | -6.5477 ppb | 23:02:22 |
| 1 | U 409.014† | -7455.7 | -5204.6 | -166.35 ug/L | -166.35 ppb | 23:01:57 |
| 1 | V 292.402† | 17852.8 | 18763.3 | 124.49 ug/L | 124.49 ppb | 23:02:02 |
| 1 | Zn 213.857† | 38919.6 | 37186.0 | 424.21 ug/L | 424.21 ppb | 23:02:02 |
| 1 | SiO2† | 1093806.9 | 1061575.5 | 84815 ug/L | 84815 ppb | 23:03:31 |
| 2 | Sc Radial | 4109.4 | 4109.4 | 102 % | | 23:01:25 |
| 2 | Y RADIAL | 5317.9 | 5317.9 | 117.7 % | | 23:01:05 |
| 2 | Al 396.153Radial† | 49855.5 | 49019.0 | 52242 ug/L | 52242 ppb | 23:01:05 |
| 2 | Ca 317.933Radial† | 7457.1 | 7302.9 | 14838 ug/L | 14838 ppb | 23:01:05 |
| 2 | Fe 238.204 Radial† | 9492.5 | 9309.1 | 116410 ug/L | 116410 ppb | 23:01:05 |
| 2 | K 766.490 Radial† | 43838.3 | 40229.5 | 8024.7 ug/L | 8024.7 ppb | 23:01:05 |
| 2 | Mg 279.077 IEC† | 222.5 | 217.7 | 9390.1 ug/L | 9390.1 ppb | 23:01:25 |
| 2 | Na 589.592 Radial† | 2372.6 | 2789.9 | 1095.6 ug/L | 1095.6 ppb | 23:01:05 |
| 2 | Sr 421.552† | 13601.2 | 13281.2 | 112.99 ug/L | 112.99 ppb | 23:01:05 |
| 2 | Sc 361.383 | 863223.4 | 863223.4 | 102.78 % | | 23:02:28 |
| 2 | Y 371.029 | 839716.4 | 839716.4 | 117.27 % | | 23:02:28 |
| 2 | Ag 328.068† | -6783.3 | -6853.1 | 1.9600 ug/L | 1.9600 ppb | 23:02:33 |
| 2 | As 188.979† | -49.5 | -27.4 | 40.475 ug/L | 40.475 ppb | 23:02:54 |
| 2 | B 249.677† | 670.9 | 902.9 | 5.8232 ug/L | 5.8232 ppb | 23:02:33 |
| 2 | Ba 233.527† | 44715.1 | 43486.1 | 411.52 ug/L | 411.52 ppb | 23:02:33 |
| 2 | Be 313.107† | -3817.6 | 548.5 | 7.5282 ug/L | 7.5282 ppb | 23:02:33 |
| 2 | Cd 226.502† | 737.7 | 884.1 | 0.4544 ug/L | 0.4544 ppb | 23:02:54 |
| 2 | Co 228.616† | 1237.5 | 1242.9 | 24.081 ug/L | 24.081 ppb | 23:02:54 |
| 2 | Cr 267.716† | 7126.5 | 6838.6 | 101.63 ug/L | 101.63 ppb | 23:02:33 |
| 2 | Cu 324.752† | 29128.2 | 21987.0 | 77.540 ug/L | 77.540 ppb | 23:02:33 |
| 2 | Mn 257.610† | 1991805.0 | 1937433.2 | 2553.1 ug/L | 2553.1 ppb | 23:02:28 |
| 2 | Mo 202.031† | 3.6 | -10.7 | 8.2731 ug/L | 8.2731 ppb | 23:02:54 |
| 2 | Ni 231.604† | 2088.1 | 1938.0 | 60.494 ug/L | 60.494 ppb | 23:02:54 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 979.0 | 784.3 | 468.69 ug/L | 468.69 ppb | 23:02:54 |
| 2 | Pb 220.353† | 492.6 | 538.1 | 76.283 ug/L | 76.283 ppb | 23:02:54 |
| 2 | S 181.975 Axial† | 234.6 | 203.9 | 347.63 ug/L | 347.63 ppb | 23:02:54 |
| 2 | Sb 206.836† | 60.0 | 31.7 | 0.3650 ug/L | 0.3650 ppb | 23:02:54 |
| 2 | Se 196.026† | -449.7 | -420.6 | 29.437 ug/L | 29.437 ppb | 23:02:54 |
| 2 | Si 251.611† | 1101112.7 | 1070779.5 | 39868 ug/L | 39868 ppb | 23:02:28 |
| 2 | Sn 189.927† | -60.7 | -62.1 | -17.809 ug/L | -17.809 ppb | 23:02:54 |
| 2 | Ti 334.940† | 1921248.9 | 1870322.9 | 3219.2 ug/L | 3219.2 ppb | 23:02:28 |
| 2 | Tl 190.801† | -136.3 | -107.5 | -3.1355 ug/L | -3.1355 ppb | 23:02:54 |
| 2 | U 409.014† | -7451.7 | -5214.8 | -166.91 ug/L | -166.91 ppb | 23:02:28 |
| 2 | V 292.402† | 17905.6 | 18848.4 | 124.78 ug/L | 124.78 ppb | 23:02:33 |
| 2 | Zn 213.857† | 39001.8 | 37339.6 | 425.69 ug/L | 425.69 ppb | 23:02:33 |
| 2 | SiO2† | 1082708.9 | 1052845.9 | 84117 ug/L | 84117 ppb | 23:03:37 |
| 3 | Sc Radial | 4086.5 | 4086.5 | 101 % | | 23:01:50 |
| 3 | Y RADIAL | 5231.6 | 5231.6 | 115.8 % | | 23:01:30 |
| 3 | Al 396.153Radial† | 48860.3 | 48310.1 | 51487 ug/L | 51487 ppb | 23:01:30 |
| 3 | Ca 317.933Radial† | 7281.9 | 7170.8 | 14569 ug/L | 14569 ppb | 23:01:30 |
| 3 | Fe 238.204 Radial† | 9327.9 | 9198.7 | 115030 ug/L | 115030 ppb | 23:01:30 |
| 3 | K 766.490 Radial† | 43106.4 | 39747.4 | 7928.6 ug/L | 7928.6 ppb | 23:01:30 |
| 3 | Mg 279.077 IEC† | 225.2 | 221.6 | 9561.4 ug/L | 9561.4 ppb | 23:01:50 |
| 3 | Na 589.592 Radial† | 2317.2 | 2748.2 | 1079.3 ug/L | 1079.3 ppb | 23:01:30 |
| 3 | Sr 421.552† | 13274.5 | 13033.4 | 110.88 ug/L | 110.88 ppb | 23:01:30 |
| 3 | Sc 361.383 | 860409.6 | 860409.6 | 102.45 % | | 23:02:59 |
| 3 | Y 371.029 | 836324.0 | 836324.0 | 116.79 % | | 23:02:59 |
| 3 | Ag 328.068† | -6839.8 | -6929.8 | 1.1594 ug/L | 1.1594 ppb | 23:03:05 |
| 3 | As 188.979† | -53.4 | -31.3 | 38.033 ug/L | 38.033 ppb | 23:03:25 |
| 3 | B 249.677† | 839.4 | 1069.5 | 10.627 ug/L | 10.627 ppb | 23:03:05 |
| 3 | Ba 233.527† | 45385.3 | 44282.6 | 418.95 ug/L | 418.95 ppb | 23:03:05 |
| 3 | Be 313.107† | -3623.5 | 725.7 | 7.5988 ug/L | 7.5988 ppb | 23:03:05 |
| 3 | Cd 226.502† | 741.0 | 889.7 | 0.6749 ug/L | 0.6749 ppb | 23:03:25 |
| 3 | Co 228.616† | 1202.2 | 1212.4 | 23.316 ug/L | 23.316 ppb | 23:03:25 |
| 3 | Cr 267.716† | 7279.0 | 7010.1 | 103.72 ug/L | 103.72 ppb | 23:03:05 |
| 3 | Cu 324.752† | 29651.2 | 22590.1 | 79.424 ug/L | 79.424 ppb | 23:03:05 |
| 3 | Mn 257.610† | 1983810.0 | 1935966.5 | 2551.1 ug/L | 2551.1 ppb | 23:02:59 |
| 3 | Mo 202.031† | 26.6 | 11.8 | 10.138 ug/L | 10.138 ppb | 23:03:25 |
| 3 | Ni 231.604† | 2070.3 | 1927.2 | 60.158 ug/L | 60.158 ppb | 23:03:25 |
| 3 | P 214.914† | 973.0 | 781.6 | 467.27 ug/L | 467.27 ppb | 23:03:25 |
| 3 | Pb 220.353† | 517.1 | 563.5 | 80.151 ug/L | 80.151 ppb | 23:03:25 |
| 3 | S 181.975 Axial† | 234.7 | 204.8 | 349.25 ug/L | 349.25 ppb | 23:03:25 |
| 3 | Sb 206.836† | 53.5 | 25.6 | -2.1673 ug/L | -2.1673 ppb | 23:03:25 |
| 3 | Se 196.026† | -465.4 | -437.3 | 11.709 ug/L | 11.709 ppb | 23:03:25 |
| 3 | Si 251.611† | 1095895.0 | 1069189.8 | 39809 ug/L | 39809 ppb | 23:02:59 |
| 3 | Sn 189.927† | -65.7 | -67.2 | -18.892 ug/L | -18.892 ppb | 23:03:25 |
| 3 | Ti 334.940† | 1914640.8 | 1869985.4 | 3218.5 ug/L | 3218.5 ppb | 23:02:59 |
| 3 | Tl 190.801† | -137.9 | -109.5 | -3.9286 ug/L | -3.9286 ppb | 23:03:25 |
| 3 | U 409.014† | -7528.2 | -5313.2 | -169.65 ug/L | -169.65 ppb | 23:02:59 |
| 3 | V 292.402† | 18090.1 | 19085.5 | 126.84 ug/L | 126.84 ppb | 23:03:05 |
| 3 | Zn 213.857† | 39544.3 | 37993.2 | 433.66 ug/L | 433.66 ppb | 23:03:05 |
| 3 | SiO2† | 1102644.4 | 1075750.0 | 85947 ug/L | 85947 ppb | 23:03:43 |

Mean Data: 247899010|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------------|----------|--------------------|----------|--------|
| Sc 361.383 | 862845.7 | 102.74 | % | 0.270 | | | 0.26% |
| Sc Radial | 4102.2 | 102 | % | 0.3 | | | 0.33% |
| Y 371.029 | 838940.5 | 117.16 | % | 0.325 | | | 0.28% |
| Y RADIAL | 5275.5 | 116.8 | % | 0.95 | | | 0.82% |
| Ag 328.068† | -6841.0 | 1.6420 | ug/L | 0.42491 | 1.6420 ppb | 0.42491 | 25.88% |
| Al 396.153Radial† | 48484.9 | 51673 | ug/L | 502.7 | 51673 ppb | 502.7 | 0.97% |
| As 188.979† | -29.0 | 39.304 | ug/L | 1.2241 | 39.304 ppb | 1.2241 | 3.11% |
| B 249.677† | 963.7 | 7.6976 | ug/L | 2.57001 | 7.6976 ppb | 2.57001 | 33.39% |
| Ba 233.527† | 43696.8 | 413.46 | ug/L | 4.822 | 413.46 ppb | 4.822 | 1.17% |
| Be 313.107† | 626.9 | 7.5619 | ug/L | 0.03542 | 7.5619 ppb | 0.03542 | 0.47% |
| Ca 317.933Radial† | 7207.4 | 14644 | ug/L | 169.4 | 14644 ppb | 169.4 | 1.16% |
| Cd 226.502† | 888.4 | 0.6420 | ug/L | 0.17344 | 0.6420 ppb | 0.17344 | 27.02% |
| Co 228.616† | 1220.2 | 23.510 | ug/L | 0.5032 | 23.510 ppb | 0.5032 | 2.14% |
| Cr 267.716† | 6906.7 | 102.39 | ug/L | 1.159 | 102.39 ppb | 1.159 | 1.13% |
| Cu 324.752† | 22165.9 | 78.055 | ug/L | 1.1978 | 78.055 ppb | 1.1978 | 1.53% |
| Fe 238.204 Radial† | 9209.9 | 115170 | ug/L | 1176.9 | 115170 ppb | 1176.9 | 1.02% |
| K 766.490 Radial† | 39889.6 | 7956.9 | ug/L | 58.97 | 7956.9 ppb | 58.97 | 0.74% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 218.7 | 9434.8 ug/L | 111.17 | 9434.8 ppb | 111.17 | 1.18% |
| Mn 257.610† | 1937373.1 | 2552.9 ug/L | 1.77 | 2552.9 ppb | 1.77 | 0.07% |
| Mo 202.031† | 4.6 | 9.5165 ug/L | 1.07679 | 9.5165 ppb | 1.07679 | 11.32% |
| Na 589.592 Radial† | 2760.6 | 1084.1 ug/L | 10.00 | 1084.1 ppb | 10.00 | 0.92% |
| Ni 231.604† | 1935.3 | 60.409 ug/L | 0.2208 | 60.409 ppb | 0.2208 | 0.37% |
| P 214.914† | 779.6 | 466.04 ug/L | 3.436 | 466.04 ppb | 3.436 | 0.74% |
| Pb 220.353† | 543.0 | 77.081 ug/L | 2.7594 | 77.081 ppb | 2.7594 | 3.58% |
| S 181.975 Axial† | 201.1 | 342.81 ug/L | 9.787 | 342.81 ppb | 9.787 | 2.86% |
| Sb 206.836† | 28.6 | -0.8991 ug/L | 1.26613 | -0.8991 ppb | 1.26613 | 140.82% |
| Se 196.026† | -429.8 | 18.168 ug/L | 9.7940 | 18.168 ppb | 9.7940 | 53.91% |
| Si 251.611† | 1070243.2 | 39848 ug/L | 34.0 | 39848 ppb | 34.0 | 0.09% |
| Sn 189.927† | -65.9 | -18.616 ug/L | 0.7109 | -18.616 ppb | 0.7109 | 3.82% |
| Sr 421.552† | 13108.6 | 111.52 ug/L | 1.275 | 111.52 ppb | 1.275 | 1.14% |
| Ti 334.940† | 1870814.4 | 3220.0 ug/L | 1.98 | 3220.0 ppb | 1.98 | 0.06% |
| Tl 190.801† | -111.2 | -4.5373 ug/L | 1.78566 | -4.5373 ppb | 1.78566 | 39.36% |
| U 409.014† | -5244.2 | -167.64 ug/L | 1.769 | -167.64 ppb | 1.769 | 1.06% |
| V 292.402† | 18899.1 | 125.37 ug/L | 1.278 | 125.37 ppb | 1.278 | 1.02% |
| Zn 213.857† | 37506.2 | 427.85 ug/L | 5.081 | 427.85 ppb | 5.081 | 1.19% |
| SiO2† | 1063390.5 | 84960 ug/L | 923.5 | 84960 ppb | 923.5 | 1.09% |

Sequence No.: 57
 Sample ID: 247899011|958053|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 3/25/2010 23:05:54
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247899011|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4533.6 | 4533.6 | 112 % | | 23:07:47 |
| 1 | Y RADIAL | 5120.1 | 5120.1 | 113.3 % | | 23:07:47 |
| 1 | Al 396.153Radial† | 28758.4 | 25668.0 | 27356 ug/L | 27356 ppb | 23:07:47 |
| 1 | Ca 317.933Radial† | 9062.9 | 8046.7 | 16349 ug/L | 16349 ppb | 23:07:47 |
| 1 | Fe 238.204 Radial† | 3505.7 | 3110.3 | 38893 ug/L | 38893 ppb | 23:08:07 |
| 1 | K 766.490 Radial† | 37098.7 | 30206.1 | 6023.5 ug/L | 6023.5 ppb | 23:07:47 |
| 1 | Mg 279.077 IEC† | 166.0 | 147.0 | 6379.2 ug/L | 6379.2 ppb | 23:08:07 |
| 1 | Na 589.592 Radial† | 2657.9 | 2825.8 | 1109.7 ug/L | 1109.7 ppb | 23:07:47 |
| 1 | Sr 421.552† | 12111.7 | 10706.6 | 91.050 ug/L | 91.050 ppb | 23:07:47 |
| 1 | Sc 361.383 | 849387.7 | 849387.7 | 101.13 % | | 23:09:04 |
| 1 | Y 371.029 | 761555.5 | 761555.5 | 106.35 % | | 23:09:04 |
| 1 | Ag 328.068† | -1741.1 | -1974.9 | 0.5035 ug/L | 0.5035 ppb | 23:09:09 |
| 1 | As 188.979† | -16.9 | 4.1 | 20.783 ug/L | 20.783 ppb | 23:09:29 |
| 1 | B 249.677† | 474.6 | 719.4 | 13.413 ug/L | 13.413 ppb | 23:09:09 |
| 1 | Ba 233.527† | 72453.6 | 71622.0 | 672.74 ug/L | 672.74 ppb | 23:09:09 |
| 1 | Be 313.107† | 73066.8 | 76509.5 | 33.547 ug/L | 33.547 ppb | 23:09:09 |
| 1 | Cd 226.502† | 346.8 | 509.3 | 3.5749 ug/L | 3.5749 ppb | 23:09:29 |
| 1 | Co 228.616† | 573.7 | 606.2 | 13.221 ug/L | 13.221 ppb | 23:09:29 |
| 1 | Cr 267.716† | 4227.2 | 4084.8 | 56.615 ug/L | 56.615 ppb | 23:09:29 |
| 1 | Cu 324.752† | 429707.6 | 418532.4 | 1358.1 ug/L | 1358.1 ppb | 23:09:04 |
| 1 | Mn 257.610† | 1435810.2 | 1419244.2 | 1865.7 ug/L | 1865.7 ppb | 23:09:04 |
| 1 | Mo 202.031† | -0.1 | -14.3 | 1.9588 ug/L | 1.9588 ppb | 23:09:29 |
| 1 | Ni 231.604† | 1622.2 | 1510.4 | 47.153 ug/L | 47.153 ppb | 23:09:29 |
| 1 | P 214.914† | 2078.8 | 1887.3 | 1062.4 ug/L | 1062.4 ppb | 23:09:29 |
| 1 | Pb 220.353† | 5038.6 | 5040.9 | 759.95 ug/L | 759.95 ppb | 23:09:29 |
| 1 | S 181.975 Axial† | 497.2 | 467.2 | 813.80 ug/L | 813.80 ppb | 23:09:29 |
| 1 | Sb 206.836† | 99.7 | 72.0 | 25.846 ug/L | 25.846 ppb | 23:09:29 |
| 1 | Se 196.026† | -171.0 | -152.1 | 4.4011 ug/L | 4.4011 ppb | 23:09:29 |
| 1 | Si 251.611† | 1091841.0 | 1079062.2 | 40177 ug/L | 40177 ppb | 23:09:04 |
| 1 | Sn 189.927† | -35.2 | -37.9 | -7.7195 ug/L | -7.7195 ppb | 23:09:29 |
| 1 | Ti 334.940† | 641961.0 | 635839.9 | 1094.8 ug/L | 1094.8 ppb | 23:09:04 |
| 1 | Tl 190.801† | -82.7 | -56.7 | -4.1119 ug/L | -4.1119 ppb | 23:09:29 |
| 1 | U 409.014† | 64845.9 | 66153.4 | 1942.0 ug/L | 1942.0 ppb | 23:09:09 |
| 1 | V 292.402† | 6471.5 | 7826.5 | 57.322 ug/L | 57.322 ppb | 23:09:09 |
| 1 | Zn 213.857† | 35410.4 | 34406.6 | 400.79 ug/L | 400.79 ppb | 23:09:09 |
| 1 | SiO2† | 1077575.6 | 1064929.0 | 85083 ug/L | 85083 ppb | 23:10:38 |
| 2 | Sc Radial | 4019.5 | 4019.5 | 99.6 % | | 23:08:12 |
| 2 | Y RADIAL | 4605.9 | 4605.9 | 101.9 % | | 23:08:12 |
| 2 | Al 396.153Radial† | 29364.9 | 29549.3 | 31492 ug/L | 31492 ppb | 23:08:12 |
| 2 | Ca 317.933Radial† | 9235.7 | 9251.5 | 18797 ug/L | 18797 ppb | 23:08:12 |
| 2 | Fe 238.204 Radial† | 3451.4 | 3454.7 | 43200 ug/L | 43200 ppb | 23:08:32 |
| 2 | K 766.490 Radial† | 37417.3 | 34747.6 | 6929.2 ug/L | 6929.2 ppb | 23:08:12 |
| 2 | Mg 279.077 IEC† | 162.8 | 162.7 | 7061.8 ug/L | 7061.8 ppb | 23:08:32 |
| 2 | Na 589.592 Radial† | 2680.8 | 3151.2 | 1237.5 ug/L | 1237.5 ppb | 23:08:12 |
| 2 | Sr 421.552† | 12334.8 | 12308.7 | 104.68 ug/L | 104.68 ppb | 23:08:12 |
| 2 | Sc 361.383 | 852463.2 | 852463.2 | 101.50 % | | 23:09:35 |
| 2 | Y 371.029 | 762390.6 | 762390.6 | 106.47 % | | 23:09:35 |
| 2 | Ag 328.068† | -1676.4 | -1905.0 | 2.1590 ug/L | 2.1590 ppb | 23:09:40 |
| 2 | As 188.979† | -19.5 | 1.6 | 20.453 ug/L | 20.453 ppb | 23:10:01 |
| 2 | B 249.677† | 409.9 | 654.0 | 10.917 ug/L | 10.917 ppb | 23:09:40 |
| 2 | Ba 233.527† | 72308.5 | 71220.6 | 669.10 ug/L | 669.10 ppb | 23:09:40 |
| 2 | Be 313.107† | 72880.5 | 76065.3 | 33.368 ug/L | 33.368 ppb | 23:09:40 |
| 2 | Cd 226.502† | 342.6 | 504.0 | 3.0525 ug/L | 3.0525 ppb | 23:10:01 |
| 2 | Co 228.616† | 573.0 | 603.4 | 13.084 ug/L | 13.084 ppb | 23:10:01 |
| 2 | Cr 267.716† | 4204.0 | 4046.8 | 56.580 ug/L | 56.580 ppb | 23:10:01 |
| 2 | Cu 324.752† | 431528.2 | 418793.2 | 1359.2 ug/L | 1359.2 ppb | 23:09:35 |
| 2 | Mn 257.610† | 1444284.7 | 1422471.5 | 1870.3 ug/L | 1870.3 ppb | 23:09:35 |
| 2 | Mo 202.031† | 2.2 | -12.0 | 2.5212 ug/L | 2.5212 ppb | 23:10:01 |
| 2 | Ni 231.604† | 1601.8 | 1484.5 | 46.343 ug/L | 46.343 ppb | 23:10:01 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 2065.6 | 1866.8 | 1045.1 ug/L | 1045.1 ppb | 23:10:01 |
| 2 | Pb 220.353† | 5035.0 | 5019.3 | 757.03 ug/L | 757.03 ppb | 23:10:01 |
| 2 | S 181.975 Axial† | 493.9 | 462.2 | 804.30 ug/L | 804.30 ppb | 23:10:01 |
| 2 | Sb 206.836† | 98.4 | 70.4 | 24.988 ug/L | 24.988 ppb | 23:10:01 |
| 2 | Se 196.026† | -170.0 | -150.5 | 20.003 ug/L | 20.003 ppb | 23:10:01 |
| 2 | Si 251.611† | 1097719.1 | 1080958.5 | 40247 ug/L | 40247 ppb | 23:09:35 |
| 2 | Sn 189.927† | -38.7 | -41.2 | -8.2690 ug/L | -8.2690 ppb | 23:10:01 |
| 2 | Ti 334.940† | 644789.9 | 636336.8 | 1095.9 ug/L | 1095.9 ppb | 23:09:35 |
| 2 | Tl 190.801† | -84.7 | -58.4 | -4.7632 ug/L | -4.7632 ppb | 23:10:01 |
| 2 | U 409.014† | 64770.5 | 65847.7 | 1932.5 ug/L | 1932.5 ppb | 23:09:40 |
| 2 | V 292.402† | 6389.8 | 7722.9 | 55.894 ug/L | 55.894 ppb | 23:09:40 |
| 2 | Zn 213.857† | 35324.8 | 34196.0 | 397.65 ug/L | 397.65 ppb | 23:09:40 |
| 2 | SiO2† | 1106708.4 | 1089787.0 | 87069 ug/L | 87069 ppb | 23:10:44 |
| 3 | Sc Radial | 4099.4 | 4099.4 | 102 % | | 23:08:37 |
| 3 | Y RADIAL | 4697.0 | 4697.0 | 104.0 % | | 23:08:37 |
| 3 | Al 396.153Radial† | 29662.6 | 29267.9 | 31193 ug/L | 31193 ppb | 23:08:37 |
| 3 | Ca 317.933Radial† | 9308.2 | 9142.2 | 18575 ug/L | 18575 ppb | 23:08:37 |
| 3 | Fe 238.204 Radial† | 3437.3 | 3373.3 | 42182 ug/L | 42182 ppb | 23:08:57 |
| 3 | K 766.490 Radial† | 37715.4 | 34309.0 | 6841.8 ug/L | 6841.8 ppb | 23:08:37 |
| 3 | Mg 279.077 IEC† | 159.3 | 156.0 | 6772.4 ug/L | 6772.4 ppb | 23:08:57 |
| 3 | Na 589.592 Radial† | 2698.7 | 3116.4 | 1223.8 ug/L | 1223.8 ppb | 23:08:37 |
| 3 | Sr 421.552† | 12464.3 | 12194.9 | 103.71 ug/L | 103.71 ppb | 23:08:37 |
| 3 | Sc 361.383 | 847245.5 | 847245.5 | 100.88 % | | 23:10:07 |
| 3 | Y 371.029 | 759453.8 | 759453.8 | 106.06 % | | 23:10:07 |
| 3 | Ag 328.068† | -1714.5 | -1953.0 | 1.6065 ug/L | 1.6065 ppb | 23:10:12 |
| 3 | As 188.979† | -15.6 | 5.4 | 22.220 ug/L | 22.220 ppb | 23:10:32 |
| 3 | B 249.677† | 444.6 | 690.9 | 12.095 ug/L | 12.095 ppb | 23:10:12 |
| 3 | Ba 233.527† | 71612.2 | 70969.0 | 666.71 ug/L | 666.71 ppb | 23:10:12 |
| 3 | Be 313.107† | 72311.4 | 75943.4 | 33.313 ug/L | 33.313 ppb | 23:10:12 |
| 3 | Cd 226.502† | 344.6 | 508.0 | 3.2134 ug/L | 3.2134 ppb | 23:10:32 |
| 3 | Co 228.616† | 568.1 | 602.1 | 13.067 ug/L | 13.067 ppb | 23:10:32 |
| 3 | Cr 267.716† | 4202.6 | 4070.9 | 56.787 ug/L | 56.787 ppb | 23:10:32 |
| 3 | Cu 324.752† | 428056.3 | 417969.8 | 1356.4 ug/L | 1356.4 ppb | 23:10:07 |
| 3 | Mn 257.610† | 1430133.6 | 1417206.9 | 1863.3 ug/L | 1863.3 ppb | 23:10:07 |
| 3 | Mo 202.031† | 3.5 | -10.7 | 2.5519 ug/L | 2.5519 ppb | 23:10:32 |
| 3 | Ni 231.604† | 1625.9 | 1518.1 | 47.394 ug/L | 47.394 ppb | 23:10:32 |
| 3 | P 214.914† | 2048.0 | 1862.0 | 1042.9 ug/L | 1042.9 ppb | 23:10:32 |
| 3 | Pb 220.353† | 5023.2 | 5038.2 | 759.96 ug/L | 759.96 ppb | 23:10:32 |
| 3 | S 181.975 Axial† | 480.0 | 451.4 | 785.40 ug/L | 785.40 ppb | 23:10:32 |
| 3 | Sb 206.836† | 108.9 | 81.3 | 29.657 ug/L | 29.657 ppb | 23:10:32 |
| 3 | Se 196.026† | -176.1 | -157.6 | 11.192 ug/L | 11.192 ppb | 23:10:32 |
| 3 | Si 251.611† | 1087212.6 | 1077204.0 | 40108 ug/L | 40108 ppb | 23:10:07 |
| 3 | Sn 189.927† | -38.8 | -41.5 | -8.3209 ug/L | -8.3209 ppb | 23:10:32 |
| 3 | Ti 334.940† | 639295.1 | 634802.2 | 1093.2 ug/L | 1093.2 ppb | 23:10:07 |
| 3 | Tl 190.801† | -92.8 | -66.9 | -8.1065 ug/L | -8.1065 ppb | 23:10:32 |
| 3 | U 409.014† | 64203.9 | 65679.1 | 1927.6 ug/L | 1927.6 ppb | 23:10:12 |
| 3 | V 292.402† | 6259.6 | 7632.6 | 55.336 ug/L | 55.336 ppb | 23:10:12 |
| 3 | Zn 213.857† | 34984.6 | 34073.0 | 396.33 ug/L | 396.33 ppb | 23:10:12 |
| 3 | SiO2† | 1102989.8 | 1092815.6 | 87311 ug/L | 87311 ppb | 23:10:50 |

Mean Data: 247899011|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 849698.8 | 101.17 % | | 0.312 | | | 0.31% |
| Sc Radial | 4217.5 | 105 % | | 6.9 | | | 6.56% |
| Y 371.029 | 761133.3 | 106.29 % | | 0.211 | | | 0.20% |
| Y RADIAL | 4807.7 | 106.4 % | | 6.07 | | | 5.71% |
| Ag 328.068† | -1944.3 | 1.4230 ug/L | | 0.84286 | 1.4230 ppb | 0.84286 | 59.23% |
| Al 396.153Radial† | 28161.7 | 30014 ug/L | | 2306.5 | 30014 ppb | 2306.5 | 7.68% |
| As 188.979† | 3.7 | 21.152 ug/L | | 0.9393 | 21.152 ppb | 0.9393 | 4.44% |
| B 249.677† | 688.1 | 12.142 ug/L | | 1.2489 | 12.142 ppb | 1.2489 | 10.29% |
| Ba 233.527† | 71270.5 | 669.52 ug/L | | 3.034 | 669.52 ppb | 3.034 | 0.45% |
| Be 313.107† | 76172.7 | 33.409 ug/L | | 0.1222 | 33.409 ppb | 0.1222 | 0.37% |
| Ca 317.933Radial† | 8813.5 | 17907 ug/L | | 1353.7 | 17907 ppb | 1353.7 | 7.56% |
| Cd 226.502† | 507.1 | 3.2802 ug/L | | 0.26752 | 3.2802 ppb | 0.26752 | 8.16% |
| Co 228.616† | 603.9 | 13.124 ug/L | | 0.0845 | 13.124 ppb | 0.0845 | 0.64% |
| Cr 267.716† | 4067.5 | 56.660 ug/L | | 0.1108 | 56.660 ppb | 0.1108 | 0.20% |
| Cu 324.752† | 418431.8 | 1357.9 ug/L | | 1.37 | 1357.9 ppb | 1.37 | 0.10% |
| Fe 238.204 Radial† | 3312.8 | 41425 ug/L | | 2251.3 | 41425 ppb | 2251.3 | 5.43% |
| K 766.490 Radial† | 33087.6 | 6598.2 ug/L | | 499.61 | 6598.2 ppb | 499.61 | 7.57% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 155.2 | 6737.8 ug/L | 342.63 | 6737.8 ppb | 342.63 | 5.09% |
| Mn 257.610† | 1419640.9 | 1866.5 ug/L | 3.56 | 1866.5 ppb | 3.56 | 0.19% |
| Mo 202.031† | -12.3 | 2.3440 ug/L | 0.33394 | 2.3440 ppb | 0.33394 | 14.25% |
| Na 589.592 Radial† | 3031.1 | 1190.4 ug/L | 70.18 | 1190.4 ppb | 70.18 | 5.90% |
| Ni 231.604† | 1504.3 | 46.963 ug/L | 0.5503 | 46.963 ppb | 0.5503 | 1.17% |
| P 214.914† | 1872.0 | 1050.1 ug/L | 10.69 | 1050.1 ppb | 10.69 | 1.02% |
| Pb 220.353† | 5032.8 | 758.98 ug/L | 1.686 | 758.98 ppb | 1.686 | 0.22% |
| S 181.975 Axial† | 460.3 | 801.17 ug/L | 14.455 | 801.17 ppb | 14.455 | 1.80% |
| Sb 206.836† | 74.5 | 26.830 ug/L | 2.4851 | 26.830 ppb | 2.4851 | 9.26% |
| Se 196.026† | -153.4 | 11.865 ug/L | 7.8226 | 11.865 ppb | 7.8226 | 65.93% |
| Si 251.611† | 1079074.9 | 40177 ug/L | 69.9 | 40177 ppb | 69.9 | 0.17% |
| Sn 189.927† | -40.2 | -8.1031 ug/L | 0.33322 | -8.1031 ppb | 0.33322 | 4.11% |
| Sr 421.552† | 11736.7 | 99.811 ug/L | 7.6026 | 99.811 ppb | 7.6026 | 7.62% |
| Ti 334.940† | 635659.7 | 1094.6 ug/L | 1.33 | 1094.6 ppb | 1.33 | 0.12% |
| Tl 190.801† | -60.7 | -5.6605 ug/L | 2.14314 | -5.6605 ppb | 2.14314 | 37.86% |
| U 409.014† | 65893.4 | 1934.0 ug/L | 7.29 | 1934.0 ppb | 7.29 | 0.38% |
| V 292.402† | 7727.3 | 56.184 ug/L | 1.0244 | 56.184 ppb | 1.0244 | 1.82% |
| Zn 213.857† | 34225.2 | 398.26 ug/L | 2.289 | 398.26 ppb | 2.289 | 0.57% |
| SiO2† | 1082510.5 | 86487 ug/L | 1222.5 | 86487 ppb | 1222.5 | 1.41% |

Sequence No.: 58
 Sample ID: 247899012|958053|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 3/25/2010 23:13:02
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247899012|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4196.4 | 4196.4 | 104 % | | 23:14:55 |
| 1 | Y RADIAL | 5330.5 | 5330.5 | 118.0 % | | 23:14:55 |
| 1 | Al 396.153Radial† | 35406.0 | 34114.3 | 36358 ug/L | 36358 ppb | 23:14:55 |
| 1 | Ca 317.933Radial† | 6717.5 | 6440.2 | 13085 ug/L | 13085 ppb | 23:14:55 |
| 1 | Fe 238.204 Radial† | 8188.8 | 7862.6 | 98320 ug/L | 98320 ppb | 23:14:55 |
| 1 | K 766.490 Radial† | 38919.4 | 34608.7 | 6903.2 ug/L | 6903.2 ppb | 23:14:55 |
| 1 | Mg 279.077 IEC† | 174.7 | 167.2 | 7202.7 ug/L | 7202.7 ppb | 23:15:15 |
| 1 | Na 589.592 Radial† | 2083.3 | 2463.4 | 967.43 ug/L | 967.43 ppb | 23:14:55 |
| 1 | Sr 421.552† | 12175.5 | 11633.9 | 98.972 ug/L | 98.972 ppb | 23:14:55 |
| 1 | Sc 361.383 | 848198.9 | 848198.9 | 100.99 % | | 23:16:12 |
| 1 | Y 371.029 | 846076.1 | 846076.1 | 118.15 % | | 23:16:12 |
| 1 | Ag 328.068† | -5622.3 | -5820.4 | 1.3230 ug/L | 1.3230 ppb | 23:16:17 |
| 1 | As 188.979† | -48.5 | -27.2 | 35.477 ug/L | 35.477 ppb | 23:16:37 |
| 1 | B 249.677† | 594.6 | 838.9 | 7.0104 ug/L | 7.0104 ppb | 23:16:17 |
| 1 | Ba 233.527† | 46307.0 | 45833.0 | 432.92 ug/L | 432.92 ppb | 23:16:17 |
| 1 | Be 313.107† | 8262.9 | 12444.4 | 12.140 ug/L | 12.140 ppb | 23:16:17 |
| 1 | Cd 226.502† | 616.7 | 777.1 | 0.8505 ug/L | 0.8505 ppb | 23:16:37 |
| 1 | Co 228.616† | 1085.3 | 1113.5 | 21.197 ug/L | 21.197 ppb | 23:16:37 |
| 1 | Cr 267.716† | 5987.1 | 5833.2 | 86.507 ug/L | 86.507 ppb | 23:16:37 |
| 1 | Cu 324.752† | 58150.3 | 51225.5 | 171.27 ug/L | 171.27 ppb | 23:16:17 |
| 1 | Mn 257.610† | 2047532.3 | 2026938.8 | 2668.9 ug/L | 2668.9 ppb | 23:16:12 |
| 1 | Mo 202.031† | 26.7 | 12.2 | 8.8621 ug/L | 8.8621 ppb | 23:16:37 |
| 1 | Ni 231.604† | 1829.7 | 1718.1 | 53.629 ug/L | 53.629 ppb | 23:16:37 |
| 1 | P 214.914† | 1222.2 | 1042.0 | 645.71 ug/L | 645.71 ppb | 23:16:37 |
| 1 | Pb 220.353† | 936.6 | 986.2 | 142.83 ug/L | 142.83 ppb | 23:16:37 |
| 1 | S 181.975 Axial† | 282.9 | 255.8 | 441.50 ug/L | 441.50 ppb | 23:16:37 |
| 1 | Sb 206.836† | 65.3 | 38.1 | 3.9691 ug/L | 3.9691 ppb | 23:16:37 |
| 1 | Se 196.026† | -380.1 | -359.5 | 18.511 ug/L | 18.511 ppb | 23:16:37 |
| 1 | Si 251.611† | 994983.4 | 984670.6 | 36662 ug/L | 36662 ppb | 23:16:12 |
| 1 | Sn 189.927† | -60.6 | -63.1 | -17.297 ug/L | -17.297 ppb | 23:16:37 |
| 1 | Ti 334.940† | 1831588.2 | 1814654.6 | 3123.2 ug/L | 3123.2 ppb | 23:16:12 |
| 1 | Tl 190.801† | -125.7 | -99.4 | -0.1669 ug/L | -0.1669 ppb | 23:16:37 |
| 1 | U 409.014† | 127.2 | 2161.1 | 52.210 ug/L | 52.210 ppb | 23:16:12 |
| 1 | V 292.402† | 14478.2 | 15763.3 | 104.14 ug/L | 104.14 ppb | 23:16:17 |
| 1 | Zn 213.857† | 37279.9 | 36306.8 | 416.04 ug/L | 416.04 ppb | 23:16:17 |
| 1 | SiO2† | 1005728.3 | 995281.9 | 79518 ug/L | 79518 ppb | 23:17:46 |
| 2 | Sc Radial | 4191.1 | 4191.1 | 104 % | | 23:15:20 |
| 2 | Y RADIAL | 5373.0 | 5373.0 | 118.9 % | | 23:15:20 |
| 2 | Al 396.153Radial† | 35193.4 | 33952.2 | 36185 ug/L | 36185 ppb | 23:15:20 |
| 2 | Ca 317.933Radial† | 6669.5 | 6402.0 | 13007 ug/L | 13007 ppb | 23:15:20 |
| 2 | Fe 238.204 Radial† | 8110.6 | 7797.2 | 97502 ug/L | 97502 ppb | 23:15:20 |
| 2 | K 766.490 Radial† | 38604.2 | 34352.1 | 6852.0 ug/L | 6852.0 ppb | 23:15:20 |
| 2 | Mg 279.077 IEC† | 174.3 | 167.1 | 7195.9 ug/L | 7195.9 ppb | 23:15:40 |
| 2 | Na 589.592 Radial† | 1974.4 | 2361.2 | 927.27 ug/L | 927.27 ppb | 23:15:20 |
| 2 | Sr 421.552† | 12097.5 | 11573.5 | 98.458 ug/L | 98.458 ppb | 23:15:20 |
| 2 | Sc 361.383 | 855978.8 | 855978.8 | 101.92 % | | 23:16:43 |
| 2 | Y 371.029 | 852990.6 | 852990.6 | 119.12 % | | 23:16:43 |
| 2 | Ag 328.068† | -5607.1 | -5754.8 | 1.4010 ug/L | 1.4010 ppb | 23:16:48 |
| 2 | As 188.979† | -52.2 | -30.4 | 33.421 ug/L | 33.421 ppb | 23:17:09 |
| 2 | B 249.677† | 588.0 | 827.1 | 6.8181 ug/L | 6.8181 ppb | 23:16:48 |
| 2 | Ba 233.527† | 46038.2 | 45152.5 | 426.51 ug/L | 426.51 ppb | 23:16:48 |
| 2 | Be 313.107† | 8288.1 | 12394.7 | 12.082 ug/L | 12.082 ppb | 23:16:48 |
| 2 | Cd 226.502† | 612.4 | 767.3 | 0.7958 ug/L | 0.7958 ppb | 23:17:09 |
| 2 | Co 228.616† | 1084.0 | 1102.5 | 20.957 ug/L | 20.957 ppb | 23:17:09 |
| 2 | Cr 267.716† | 5989.7 | 5781.9 | 85.753 ug/L | 85.753 ppb | 23:17:09 |
| 2 | Cu 324.752† | 57855.0 | 50412.4 | 168.59 ug/L | 168.59 ppb | 23:16:48 |
| 2 | Mn 257.610† | 2053467.3 | 2014335.3 | 2652.2 ug/L | 2652.2 ppb | 23:16:43 |
| 2 | Mo 202.031† | 39.1 | 24.2 | 9.8521 ug/L | 9.8521 ppb | 23:17:09 |
| 2 | Ni 231.604† | 1827.1 | 1699.1 | 53.037 ug/L | 53.037 ppb | 23:17:09 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1216.6 | 1025.4 | 634.99 ug/L | 634.99 ppb | 23:17:09 |
| 2 | Pb 220.353† | 928.9 | 970.2 | 140.50 ug/L | 140.50 ppb | 23:17:09 |
| 2 | S 181.975 Axial† | 283.9 | 254.2 | 438.75 ug/L | 438.75 ppb | 23:17:09 |
| 2 | Sb 206.836† | 59.7 | 31.9 | 1.5329 ug/L | 1.5329 ppb | 23:17:09 |
| 2 | Se 196.026† | -381.0 | -356.9 | 18.080 ug/L | 18.080 ppb | 23:17:09 |
| 2 | Si 251.611† | 998303.1 | 978973.4 | 36450 ug/L | 36450 ppb | 23:16:43 |
| 2 | Sn 189.927† | -39.6 | -42.0 | -12.585 ug/L | -12.585 ppb | 23:17:09 |
| 2 | Ti 334.940† | 1838355.9 | 1804811.6 | 3106.3 ug/L | 3106.3 ppb | 23:16:43 |
| 2 | Tl 190.801† | -130.8 | -103.3 | -1.8758 ug/L | -1.8758 ppb | 23:17:09 |
| 2 | U 409.014† | -10.9 | 2024.4 | 48.285 ug/L | 48.285 ppb | 23:16:43 |
| 2 | V 292.402† | 14477.3 | 15632.1 | 103.27 ug/L | 103.27 ppb | 23:16:48 |
| 2 | Zn 213.857† | 37011.4 | 35707.8 | 409.05 ug/L | 409.05 ppb | 23:16:48 |
| 2 | SiO2† | 1002766.5 | 983324.8 | 78563 ug/L | 78563 ppb | 23:17:52 |
| 3 | Sc Radial | 4175.6 | 4175.6 | 104 % | | 23:15:45 |
| 3 | Y RADIAL | 5337.1 | 5337.1 | 118.1 % | | 23:15:45 |
| 3 | Al 396.153Radial† | 35128.9 | 34015.6 | 36252 ug/L | 36252 ppb | 23:15:45 |
| 3 | Ca 317.933Radial† | 6673.3 | 6429.5 | 13063 ug/L | 13063 ppb | 23:15:45 |
| 3 | Fe 238.204 Radial† | 8081.3 | 7797.9 | 97511 ug/L | 97511 ppb | 23:15:45 |
| 3 | K 766.490 Radial† | 38567.5 | 34454.6 | 6872.5 ug/L | 6872.5 ppb | 23:15:45 |
| 3 | Mg 279.077 IEC† | 175.7 | 169.0 | 7281.8 ug/L | 7281.8 ppb | 23:16:05 |
| 3 | Na 589.592 Radial† | 1929.0 | 2324.3 | 912.80 ug/L | 912.80 ppb | 23:15:45 |
| 3 | Sr 421.552† | 11979.1 | 11502.3 | 97.851 ug/L | 97.851 ppb | 23:15:45 |
| 3 | Sc 361.383 | 864811.1 | 864811.1 | 102.97 % | | 23:17:14 |
| 3 | Y 371.029 | 863170.5 | 863170.5 | 120.54 % | | 23:17:14 |
| 3 | Ag 328.068† | -5665.8 | -5755.7 | 1.3887 ug/L | 1.3887 ppb | 23:17:20 |
| 3 | As 188.979† | -53.7 | -31.3 | 32.813 ug/L | 32.813 ppb | 23:17:40 |
| 3 | B 249.677† | 608.8 | 841.4 | 7.2097 ug/L | 7.2097 ppb | 23:17:20 |
| 3 | Ba 233.527† | 45956.3 | 44611.7 | 421.44 ug/L | 421.44 ppb | 23:17:20 |
| 3 | Be 313.107† | 8199.1 | 12225.2 | 11.972 ug/L | 11.972 ppb | 23:17:20 |
| 3 | Cd 226.502† | 629.3 | 777.5 | 0.9399 ug/L | 0.9399 ppb | 23:17:40 |
| 3 | Co 228.616† | 1099.9 | 1107.1 | 21.113 ug/L | 21.113 ppb | 23:17:40 |
| 3 | Cr 267.716† | 5934.2 | 5668.0 | 84.267 ug/L | 84.267 ppb | 23:17:40 |
| 3 | Cu 324.752† | 57728.7 | 49710.1 | 166.31 ug/L | 166.31 ppb | 23:17:20 |
| 3 | Mn 257.610† | 2058026.5 | 1998186.0 | 2631.0 ug/L | 2631.0 ppb | 23:17:14 |
| 3 | Mo 202.031† | 41.5 | 26.1 | 10.017 ug/L | 10.017 ppb | 23:17:40 |
| 3 | Ni 231.604† | 1846.8 | 1699.9 | 53.063 ug/L | 53.063 ppb | 23:17:40 |
| 3 | P 214.914† | 1198.7 | 995.9 | 614.17 ug/L | 614.17 ppb | 23:17:40 |
| 3 | Pb 220.353† | 945.3 | 976.9 | 141.52 ug/L | 141.52 ppb | 23:17:40 |
| 3 | S 181.975 Axial† | 290.0 | 257.3 | 444.15 ug/L | 444.15 ppb | 23:17:40 |
| 3 | Sb 206.836† | 58.0 | 29.7 | 0.5712 ug/L | 0.5712 ppb | 23:17:40 |
| 3 | Se 196.026† | -395.8 | -367.4 | 9.7520 ug/L | 9.7520 ppb | 23:17:40 |
| 3 | Si 251.611† | 1003080.1 | 973609.0 | 36250 ug/L | 36250 ppb | 23:17:14 |
| 3 | Sn 189.927† | -54.4 | -55.9 | -15.664 ug/L | -15.664 ppb | 23:17:40 |
| 3 | Ti 334.940† | 1846411.4 | 1794213.2 | 3088.1 ug/L | 3088.1 ppb | 23:17:14 |
| 3 | Tl 190.801† | -125.4 | -96.7 | 0.4030 ug/L | 0.4030 ppb | 23:17:40 |
| 3 | U 409.014† | 90.8 | 2123.3 | 51.196 ug/L | 51.196 ppb | 23:17:14 |
| 3 | V 292.402† | 14374.0 | 15386.8 | 101.41 ug/L | 101.41 ppb | 23:17:20 |
| 3 | Zn 213.857† | 37100.0 | 35422.9 | 405.67 ug/L | 405.67 ppb | 23:17:20 |
| 3 | SiO2† | 1003984.7 | 974459.6 | 77854 ug/L | 77854 ppb | 23:17:58 |

Mean Data: 247899012|958053|1

| Analyte | Mean Corrected | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|-------------|----------|-------------|----------|-------|
| | Intensity | Conc. Units | | Conc. Units | | |
| Sc 361.383 | 856329.6 | 101.96 % | 0.990 | | | 0.97% |
| Sc Radial | 4187.7 | 104 % | 0.3 | | | 0.26% |
| Y 371.029 | 854079.1 | 119.27 % | 1.201 | | | 1.01% |
| Y RADIAL | 5346.9 | 118.3 % | 0.51 | | | 0.43% |
| Ag 328.068† | -5777.0 | 1.3709 ug/L | 0.04195 | 1.3709 ppb | 0.04195 | 3.06% |
| Al 396.153Radial† | 34027.4 | 36265 ug/L | 87.1 | 36265 ppb | 87.1 | 0.24% |
| As 188.979† | -29.6 | 33.904 ug/L | 1.3963 | 33.904 ppb | 1.3963 | 4.12% |
| B 249.677† | 835.8 | 7.0127 ug/L | 0.19581 | 7.0127 ppb | 0.19581 | 2.79% |
| Ba 233.527† | 45199.0 | 426.96 ug/L | 5.753 | 426.96 ppb | 5.753 | 1.35% |
| Be 313.107† | 12354.8 | 12.065 ug/L | 0.0857 | 12.065 ppb | 0.0857 | 0.71% |
| Ca 317.933Radial† | 6423.9 | 13052 ug/L | 40.0 | 13052 ppb | 40.0 | 0.31% |
| Cd 226.502† | 774.0 | 0.8621 ug/L | 0.07273 | 0.8621 ppb | 0.07273 | 8.44% |
| Co 228.616† | 1107.7 | 21.089 ug/L | 0.1220 | 21.089 ppb | 0.1220 | 0.58% |
| Cr 267.716† | 5761.0 | 85.509 ug/L | 1.1399 | 85.509 ppb | 1.1399 | 1.33% |
| Cu 324.752† | 50449.3 | 168.73 ug/L | 2.481 | 168.73 ppb | 2.481 | 1.47% |
| Fe 238.204 Radial† | 7819.2 | 97778 ug/L | 469.5 | 97778 ppb | 469.5 | 0.48% |
| K 766.490 Radial† | 34471.8 | 6875.9 ug/L | 25.77 | 6875.9 ppb | 25.77 | 0.37% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 167.8 | 7226.8 ug/L | 47.76 | 7226.8 ppb | 47.76 | 0.66% |
| Mn 257.610† | 2013153.4 | 2650.7 ug/L | 18.95 | 2650.7 ppb | 18.95 | 0.71% |
| Mo 202.031† | 20.8 | 9.5771 ug/L | 0.62472 | 9.5771 ppb | 0.62472 | 6.52% |
| Na 589.592 Radial† | 2383.0 | 935.83 ug/L | 28.304 | 935.83 ppb | 28.304 | 3.02% |
| Ni 231.604† | 1705.7 | 53.243 ug/L | 0.3350 | 53.243 ppb | 0.3350 | 0.63% |
| P 214.914† | 1021.1 | 631.62 ug/L | 16.037 | 631.62 ppb | 16.037 | 2.54% |
| Pb 220.353† | 977.8 | 141.62 ug/L | 1.166 | 141.62 ppb | 1.166 | 0.82% |
| S 181.975 Axial† | 255.7 | 441.46 ug/L | 2.701 | 441.46 ppb | 2.701 | 0.61% |
| Sb 206.836† | 33.2 | 2.0244 ug/L | 1.75146 | 2.0244 ppb | 1.75146 | 86.52% |
| Se 196.026† | -361.2 | 15.448 ug/L | 4.9373 | 15.448 ppb | 4.9373 | 31.96% |
| Si 251.611† | 979084.3 | 36454 ug/L | 206.0 | 36454 ppb | 206.0 | 0.57% |
| Sn 189.927† | -53.7 | -15.182 ug/L | 2.3929 | -15.182 ppb | 2.3929 | 15.76% |
| Sr 421.552† | 11569.9 | 98.427 ug/L | 0.5611 | 98.427 ppb | 0.5611 | 0.57% |
| Ti 334.940† | 1804559.8 | 3105.9 ug/L | 17.59 | 3105.9 ppb | 17.59 | 0.57% |
| Tl 190.801† | -99.8 | -0.5466 ug/L | 1.18590 | -0.5466 ppb | 1.18590 | 216.98% |
| U 409.014† | 2102.9 | 50.564 ug/L | 2.0377 | 50.564 ppb | 2.0377 | 4.03% |
| V 292.402† | 15594.1 | 102.94 ug/L | 1.395 | 102.94 ppb | 1.395 | 1.36% |
| Zn 213.857† | 35812.5 | 410.25 ug/L | 5.288 | 410.25 ppb | 5.288 | 1.29% |
| SiO2† | 984355.4 | 78645 ug/L | 834.9 | 78645 ppb | 834.9 | 1.06% |

Sequence No.: 59

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 23:20:08

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 | 3978.3 | 3978.3 | 98.6 % | | 23:22:20 |
| 1 | Y RADIAL | 4504.8 | 4504.8 | 99.71 % | | 23:22:00 |
| 1 | Al 396.153Radial† | 4368.7 | 4509.3 | 4781.7 ug/L | 4781.7 ppb | 23:22:00 |
| 1 | Ca 317.933Radial† | 2422.5 | 2439.1 | 4955.6 ug/L | 4955.6 ppb | 23:22:20 |
| 1 | Fe 238.204 Radial† | 403.1 | 399.7 | 5013.1 ug/L | 5013.1 ppb | 23:22:20 |
| 1 | K 766.490 Radial† | 26505.5 | 24072.1 | 4799.3 ug/L | 4799.3 ppb | 23:22:00 |
| 1 | Mg 279.077 IEC† | 113.7 | 114.6 | 5004.8 ug/L | 5004.8 ppb | 23:22:20 |
| 1 | Na 589.592 Radial† | 24350.4 | 25151.1 | 9877.2 ug/L | 9877.2 ppb | 23:22:00 |
| 1 | Sr 421.552† | 55059.5 | 55757.7 | 474.77 ug/L | 474.77 ppb | 23:22:00 |
| 1 | Sc 361.383 | 843509.8 | 843509.8 | 100.44 % | | 23:23:18 |
| 1 | Y 371.029 | 709207.5 | 709207.5 | 99.041 % | | 23:23:18 |
| 1 | Ag 328.068† | 99691.6 | 99006.3 | 502.19 ug/L | 502.19 ppb | 23:23:23 |
| 1 | As 188.979† | 888.1 | 905.1 | 489.46 ug/L | 489.46 ppb | 23:23:43 |
| 1 | B 249.677† | 17148.8 | 17324.6 | 473.95 ug/L | 473.95 ppb | 23:23:23 |
| 1 | Ba 233.527† | 52539.1 | 52292.9 | 491.45 ug/L | 491.45 ppb | 23:23:23 |
| 1 | Be 313.107† | 1217695.7 | 1216682.8 | 495.09 ug/L | 495.09 ppb | 23:23:18 |
| 1 | Cd 226.502† | 35139.8 | 35154.0 | 495.70 ug/L | 495.70 ppb | 23:23:23 |
| 1 | Co 228.616† | 19513.4 | 19467.8 | 506.77 ug/L | 506.77 ppb | 23:23:23 |
| 1 | Cr 267.716† | 37920.1 | 37660.9 | 491.34 ug/L | 491.34 ppb | 23:23:23 |
| 1 | Cu 324.752† | 157772.5 | 150736.2 | 488.75 ug/L | 488.75 ppb | 23:23:23 |
| 1 | Mn 257.610† | 383451.9 | 381338.2 | 500.62 ug/L | 500.62 ppb | 23:23:18 |
| 1 | Mo 202.031† | 5691.1 | 5652.2 | 497.37 ug/L | 497.37 ppb | 23:23:43 |
| 1 | Ni 231.604† | 16138.4 | 15974.9 | 498.51 ug/L | 498.51 ppb | 23:23:23 |
| 1 | P 214.914† | 3631.7 | 3447.8 | 2382.9 ug/L | 2382.9 ppb | 23:23:43 |
| 1 | Pb 220.353† | 3244.5 | 3289.2 | 497.27 ug/L | 497.27 ppb | 23:23:43 |
| 1 | S 181.975 Axial† | 594.7 | 567.7 | 994.25 ug/L | 994.25 ppb | 23:23:43 |
| 1 | Sb 206.836† | 1220.2 | 1188.2 | 522.74 ug/L | 522.74 ppb | 23:23:43 |
| 1 | Se 196.026† | 617.3 | 631.6 | 521.51 ug/L | 521.51 ppb | 23:23:43 |
| 1 | Si 251.611† | 67764.1 | 66945.0 | 2486.5 ug/L | 2486.5 ppb | 23:23:23 |
| 1 | Sn 189.927† | 2253.1 | 2240.3 | 496.77 ug/L | 496.77 ppb | 23:23:43 |
| 1 | Ti 334.940† | 285754.4 | 285599.7 | 491.23 ug/L | 491.23 ppb | 23:23:23 |
| 1 | Tl 190.801† | 1230.0 | 1249.8 | 486.53 ug/L | 486.53 ppb | 23:23:43 |
| 1 | U 409.014† | 15362.6 | 17331.3 | 508.30 ug/L | 508.30 ppb | 23:23:23 |
| 1 | V 292.402† | 62530.2 | 63686.8 | 497.62 ug/L | 497.62 ppb | 23:23:23 |
| 1 | Zn 213.857† | 42218.9 | 41429.6 | 487.59 ug/L | 487.59 ppb | 23:23:23 |
| 1 | SiO2† | 69063.1 | 68210.5 | 5436.1 ug/L | 5436.1 ppb | 23:24:50 |
| 2 | Sc Radial | 3970.1 | 3970.1 | 98.4 % | | 23:22:45 |
| 2 | Y RADIAL | 4323.2 | 4323.2 | 95.69 % | | 23:22:25 |
| 2 | Al 396.153Radial† | 4456.2 | 4607.3 | 4885.9 ug/L | 4885.9 ppb | 23:22:25 |
| 2 | Ca 317.933Radial† | 2453.4 | 2475.6 | 5029.8 ug/L | 5029.8 ppb | 23:22:45 |
| 2 | Fe 238.204 Radial† | 407.2 | 404.7 | 5076.1 ug/L | 5076.1 ppb | 23:22:45 |
| 2 | K 766.490 Radial† | 27039.7 | 24670.4 | 4918.6 ug/L | 4918.6 ppb | 23:22:25 |
| 2 | Mg 279.077 IEC† | 114.5 | 115.6 | 5050.4 ug/L | 5050.4 ppb | 23:22:45 |
| 2 | Na 589.592 Radial† | 24731.0 | 25588.7 | 10049 ug/L | 10049 ppb | 23:22:25 |
| 2 | Sr 421.552† | 56372.3 | 57206.8 | 487.11 ug/L | 487.11 ppb | 23:22:25 |
| 2 | Sc 361.383 | 829873.2 | 829873.2 | 98.811 % | | 23:23:49 |
| 2 | Y 371.029 | 698250.0 | 698250.0 | 97.511 % | | 23:23:49 |
| 2 | Ag 328.068† | 100391.2 | 101345.4 | 514.02 ug/L | 514.02 ppb | 23:23:54 |
| 2 | As 188.979† | 886.0 | 917.5 | 496.20 ug/L | 496.20 ppb | 23:24:14 |
| 2 | B 249.677† | 17377.3 | 17836.5 | 487.99 ug/L | 487.99 ppb | 23:23:54 |
| 2 | Ba 233.527† | 52858.8 | 53476.1 | 502.57 ug/L | 502.57 ppb | 23:23:54 |
| 2 | Be 313.107† | 1196126.9 | 1214777.4 | 494.34 ug/L | 494.34 ppb | 23:23:49 |
| 2 | Cd 226.502† | 35235.7 | 35826.0 | 505.18 ug/L | 505.18 ppb | 23:23:54 |
| 2 | Co 228.616† | 19520.4 | 19794.1 | 515.25 ug/L | 515.25 ppb | 23:23:54 |
| 2 | Cr 267.716† | 38044.2 | 38406.9 | 501.06 ug/L | 501.06 ppb | 23:23:54 |
| 2 | Cu 324.752† | 158886.3 | 154444.7 | 500.77 ug/L | 500.77 ppb | 23:23:54 |
| 2 | Mn 257.610† | 377677.0 | 381767.5 | 501.19 ug/L | 501.19 ppb | 23:23:49 |
| 2 | Mo 202.031† | 5675.9 | 5730.0 | 504.22 ug/L | 504.22 ppb | 23:24:14 |
| 2 | Ni 231.604† | 16169.6 | 16270.5 | 507.74 ug/L | 507.74 ppb | 23:23:54 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3609.1 | 3484.3 | 2406.8 ug/L | 2406.8 ppb | 23:24:14 |
| 2 | Pb 220.353† | 3210.6 | 3308.0 | 500.13 ug/L | 500.13 ppb | 23:24:14 |
| 2 | S 181.975 Axial† | 593.7 | 576.5 | 1009.5 ug/L | 1009.5 ppb | 23:24:14 |
| 2 | Sb 206.836† | 1229.0 | 1217.2 | 535.29 ug/L | 535.29 ppb | 23:24:14 |
| 2 | Se 196.026† | 608.3 | 632.6 | 522.54 ug/L | 522.54 ppb | 23:24:14 |
| 2 | Si 251.611† | 67926.8 | 68218.4 | 2533.8 ug/L | 2533.8 ppb | 23:23:54 |
| 2 | Sn 189.927† | 2255.0 | 2279.0 | 505.35 ug/L | 505.35 ppb | 23:24:14 |
| 2 | Ti 334.940† | 287249.1 | 291787.6 | 501.87 ug/L | 501.87 ppb | 23:23:54 |
| 2 | Tl 190.801† | 1230.3 | 1270.1 | 494.45 ug/L | 494.45 ppb | 23:24:14 |
| 2 | U 409.014† | 15673.2 | 17896.9 | 524.91 ug/L | 524.91 ppb | 23:23:54 |
| 2 | V 292.402† | 62794.2 | 64977.1 | 507.67 ug/L | 507.67 ppb | 23:23:54 |
| 2 | Zn 213.857† | 42457.6 | 42361.8 | 498.58 ug/L | 498.58 ppb | 23:23:54 |
| 2 | SiO2† | 67986.3 | 68250.7 | 5439.2 ug/L | 5439.2 ppb | 23:24:55 |
| 3 | Sc Radial | 3989.0 | 3989.0 | 98.9 % | | 23:23:10 |
| 3 | Y RADIAL | 4429.4 | 4429.4 | 98.04 % | | 23:22:50 |
| 3 | Al 396.153Radial† | 4499.1 | 4629.2 | 4909.5 ug/L | 4909.5 ppb | 23:22:50 |
| 3 | Ca 317.933Radial† | 2462.0 | 2472.5 | 5023.5 ug/L | 5023.5 ppb | 23:23:10 |
| 3 | Fe 238.204 Radial† | 406.9 | 402.5 | 5048.1 ug/L | 5048.1 ppb | 23:23:10 |
| 3 | K 766.490 Radial† | 27032.1 | 24532.4 | 4891.1 ug/L | 4891.1 ppb | 23:22:50 |
| 3 | Mg 279.077 IEC† | 114.3 | 114.9 | 5017.8 ug/L | 5017.8 ppb | 23:23:10 |
| 3 | Na 589.592 Radial† | 24651.7 | 25389.4 | 9970.8 ug/L | 9970.8 ppb | 23:22:50 |
| 3 | Sr 421.552† | 56313.6 | 56875.9 | 484.29 ug/L | 484.29 ppb | 23:22:50 |
| 3 | Sc 361.383 | 842604.3 | 842604.3 | 100.33 % | | 23:24:20 |
| 3 | Y 371.029 | 709818.2 | 709818.2 | 99.126 % | | 23:24:20 |
| 3 | Ag 328.068† | 100834.1 | 100251.8 | 508.49 ug/L | 508.49 ppb | 23:24:25 |
| 3 | As 188.979† | 896.2 | 914.1 | 494.35 ug/L | 494.35 ppb | 23:24:45 |
| 3 | B 249.677† | 17440.4 | 17633.6 | 482.43 ug/L | 482.43 ppb | 23:24:25 |
| 3 | Ba 233.527† | 52842.0 | 52651.1 | 494.82 ug/L | 494.82 ppb | 23:24:25 |
| 3 | Be 313.107† | 1214791.6 | 1215091.2 | 494.46 ug/L | 494.46 ppb | 23:24:20 |
| 3 | Cd 226.502† | 35345.5 | 35396.6 | 499.13 ug/L | 499.13 ppb | 23:24:25 |
| 3 | Co 228.616† | 19563.5 | 19538.6 | 508.60 ug/L | 508.60 ppb | 23:24:25 |
| 3 | Cr 267.716† | 38105.4 | 37886.1 | 494.28 ug/L | 494.28 ppb | 23:24:25 |
| 3 | Cu 324.752† | 160043.0 | 153168.2 | 496.63 ug/L | 496.63 ppb | 23:24:25 |
| 3 | Mn 257.610† | 382288.1 | 380588.5 | 499.64 ug/L | 499.64 ppb | 23:24:20 |
| 3 | Mo 202.031† | 5681.5 | 5648.8 | 497.08 ug/L | 497.08 ppb | 23:24:45 |
| 3 | Ni 231.604† | 16180.6 | 16034.2 | 500.36 ug/L | 500.36 ppb | 23:24:25 |
| 3 | P 214.914† | 3627.2 | 3447.1 | 2380.9 ug/L | 2380.9 ppb | 23:24:45 |
| 3 | Pb 220.353† | 3222.0 | 3270.3 | 494.43 ug/L | 494.43 ppb | 23:24:45 |
| 3 | S 181.975 Axial† | 595.7 | 569.4 | 997.04 ug/L | 997.04 ppb | 23:24:45 |
| 3 | Sb 206.836† | 1222.6 | 1192.0 | 524.32 ug/L | 524.32 ppb | 23:24:45 |
| 3 | Se 196.026† | 600.9 | 615.9 | 509.15 ug/L | 509.15 ppb | 23:24:45 |
| 3 | Si 251.611† | 68136.5 | 67388.8 | 2503.0 ug/L | 2503.0 ppb | 23:24:25 |
| 3 | Sn 189.927† | 2247.0 | 2236.6 | 495.96 ug/L | 495.96 ppb | 23:24:45 |
| 3 | Ti 334.940† | 288521.9 | 288664.0 | 496.50 ug/L | 496.50 ppb | 23:24:25 |
| 3 | Tl 190.801† | 1237.1 | 1258.2 | 489.80 ug/L | 489.80 ppb | 23:24:45 |
| 3 | U 409.014† | 15865.1 | 17848.5 | 523.50 ug/L | 523.50 ppb | 23:24:25 |
| 3 | V 292.402† | 63178.2 | 64399.6 | 503.13 ug/L | 503.13 ppb | 23:24:25 |
| 3 | Zn 213.857† | 42580.9 | 41835.6 | 492.38 ug/L | 492.38 ppb | 23:24:25 |
| 3 | SiO2† | 67620.8 | 66846.8 | 5327.2 ug/L | 5327.2 ppb | 23:25:00 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Sc 361.383 | 838662.4 | 99.858 % | | 0.9079 | | | 0.91% |
| Sc Radial | 3979.2 | 98.6 % | | 0.24 | | | 0.24% |
| Y 371.029 | 705758.6 | 98.559 % | | 0.9091 | | | 0.92% |
| Y RADIAL | 4419.1 | 97.81 % | | 2.020 | | | 2.07% |
| Ag 328.068† | 100201.1 | 508.23 ug/L | | 5.923 | 508.23 ppb | 5.923 | 1.17% |
| QC value within limits for Ag 328.068 Recovery = 101.65% | | | | | | | |
| Al 396.153Radial† | 4581.9 | 4859.0 ug/L | | 68.02 | 4859.0 ppb | 68.02 | 1.40% |
| QC value within limits for Al 396.153Radial Recovery = 97.18% | | | | | | | |
| As 188.979† | 912.3 | 493.34 ug/L | | 3.486 | 493.34 ppb | 3.486 | 0.71% |
| QC value within limits for As 188.979 Recovery = 98.67% | | | | | | | |
| B 249.677† | 17598.2 | 481.46 ug/L | | 7.068 | 481.46 ppb | 7.068 | 1.47% |
| QC value within limits for B 249.677 Recovery = 96.29% | | | | | | | |
| Ba 233.527† | 52806.7 | 496.28 ug/L | | 5.699 | 496.28 ppb | 5.699 | 1.15% |
| QC value within limits for Ba 233.527 Recovery = 99.26% | | | | | | | |
| Be 313.107† | 1215517.1 | 494.63 ug/L | | 0.404 | 494.63 ppb | 0.404 | 0.08% |
| QC value within limits for Be 313.107 Recovery = 98.93% | | | | | | | |
| Ca 317.933Radial† | 2462.4 | 5003.0 ug/L | | 41.11 | 5003.0 ppb | 41.11 | 0.82% |

QC value within limits for Ca 317.933 Radial Recovery = 100.06%

| | | | | | | |
|---|----------|-------------|-------|------------|-------|-------|
| Cd 226.502† | 35458.9 | 500.00 ug/L | 4.801 | 500.00 ppb | 4.801 | 0.96% |
| QC value within limits for Cd 226.502 Recovery = 100.00% | | | | | | |
| Co 228.616† | 19600.2 | 510.21 ug/L | 4.466 | 510.21 ppb | 4.466 | 0.88% |
| QC value within limits for Co 228.616 Recovery = 102.04% | | | | | | |
| Cr 267.716† | 37984.6 | 495.56 ug/L | 4.988 | 495.56 ppb | 4.988 | 1.01% |
| QC value within limits for Cr 267.716 Recovery = 99.11% | | | | | | |
| Cu 324.752† | 152783.0 | 495.38 ug/L | 6.106 | 495.38 ppb | 6.106 | 1.23% |
| QC value within limits for Cu 324.752 Recovery = 99.08% | | | | | | |
| Fe 238.204 Radial† | 402.3 | 5045.7 ug/L | 31.57 | 5045.7 ppb | 31.57 | 0.63% |
| QC value within limits for Fe 238.204 Radial Recovery = 100.91% | | | | | | |
| K 766.490 Radial† | 24425.0 | 4869.7 ug/L | 62.49 | 4869.7 ppb | 62.49 | 1.28% |
| QC value within limits for K 766.490 Radial Recovery = 97.39% | | | | | | |
| Mg 279.077 IEC† | 115.0 | 5024.3 ug/L | 23.52 | 5024.3 ppb | 23.52 | 0.47% |
| QC value within limits for Mg 279.077 IEC Recovery = 100.49% | | | | | | |
| Mn 257.610† | 381231.4 | 500.49 ug/L | 0.783 | 500.49 ppb | 0.783 | 0.16% |
| QC value within limits for Mn 257.610 Recovery = 100.10% | | | | | | |
| Mo 202.031† | 5677.0 | 499.55 ug/L | 4.040 | 499.55 ppb | 4.040 | 0.81% |
| QC value within limits for Mo 202.031 Recovery = 99.91% | | | | | | |
| Na 589.592 Radial† | 25376.4 | 9965.7 ug/L | 86.04 | 9965.7 ppb | 86.04 | 0.86% |
| QC value within limits for Na 589.592 Radial Recovery = 99.66% | | | | | | |
| Ni 231.604† | 16093.2 | 502.20 ug/L | 4.880 | 502.20 ppb | 4.880 | 0.97% |
| QC value within limits for Ni 231.604 Recovery = 100.44% | | | | | | |
| P 214.914† | 3459.7 | 2390.2 ug/L | 14.42 | 2390.2 ppb | 14.42 | 0.60% |
| QC value within limits for P 214.914 Recovery = 95.61% | | | | | | |
| Pb 220.353† | 3289.2 | 497.28 ug/L | 2.847 | 497.28 ppb | 2.847 | 0.57% |
| QC value within limits for Pb 220.353 Recovery = 99.46% | | | | | | |
| S 181.975 Axial† | 571.2 | 1000.3 ug/L | 8.14 | 1000.3 ppb | 8.14 | 0.81% |
| QC value within limits for S 181.975 Axial Recovery = 100.03% | | | | | | |
| Sb 206.836† | 1199.1 | 527.45 ug/L | 6.837 | 527.45 ppb | 6.837 | 1.30% |
| QC value within limits for Sb 206.836 Recovery = 105.49% | | | | | | |
| Se 196.026† | 626.7 | 517.73 ug/L | 7.452 | 517.73 ppb | 7.452 | 1.44% |
| QC value within limits for Se 196.026 Recovery = 103.55% | | | | | | |
| Si 251.611† | 67517.4 | 2507.7 ug/L | 24.02 | 2507.7 ppb | 24.02 | 0.96% |
| QC value within limits for Si 251.611 Recovery = 100.31% | | | | | | |
| Sn 189.927† | 2251.9 | 499.36 ug/L | 5.206 | 499.36 ppb | 5.206 | 1.04% |
| QC value within limits for Sn 189.927 Recovery = 99.87% | | | | | | |
| Sr 421.552† | 56613.5 | 482.06 ug/L | 6.466 | 482.06 ppb | 6.466 | 1.34% |
| QC value within limits for Sr 421.552 Recovery = 96.41% | | | | | | |
| Ti 334.940† | 288683.8 | 496.54 ug/L | 5.321 | 496.54 ppb | 5.321 | 1.07% |
| QC value within limits for Ti 334.940 Recovery = 99.31% | | | | | | |
| Tl 190.801† | 1259.4 | 490.26 ug/L | 3.977 | 490.26 ppb | 3.977 | 0.81% |
| QC value within limits for Tl 190.801 Recovery = 98.05% | | | | | | |
| U 409.014† | 17692.2 | 518.90 ug/L | 9.214 | 518.90 ppb | 9.214 | 1.78% |
| QC value within limits for U 409.014 Recovery = 103.78% | | | | | | |
| V 292.402† | 64354.5 | 502.81 ug/L | 5.034 | 502.81 ppb | 5.034 | 1.00% |
| QC value within limits for V 292.402 Recovery = 100.56% | | | | | | |
| Zn 213.857† | 41875.7 | 492.85 ug/L | 5.510 | 492.85 ppb | 5.510 | 1.12% |
| QC value within limits for Zn 213.857 Recovery = 98.57% | | | | | | |
| SiO2† | 67769.4 | 5400.8 ug/L | 63.79 | 5400.8 ppb | 63.79 | 1.18% |
| QC value within limits for SiO2 Recovery = 101.00% | | | | | | |

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 23:27:10

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 | 4063.6 | 4063.6 | 101 % | | 23:29:02 |
| 1 | Y RADIAL | 4381.4 | 4381.4 | 96.98 % | | 23:29:02 |
| 1 | Al 396.153Radial† | -68.7 | 11.4 | 12.209 ug/L | 12.209 ppb | 23:29:22 |
| 1 | Ca 317.933Radial† | 18.3 | 0.9 | 1.9209 ug/L | 1.9209 ppb | 23:29:22 |
| 1 | Fe 238.204 Radial† | 10.0 | 0.9 | 11.361 ug/L | 11.361 ppb | 23:29:22 |
| 1 | K 766.490 Radial† | 2390.7 | -430.1 | -85.869 ug/L | -85.869 ppb | 23:29:02 |
| 1 | Mg 279.077 IEC† | 2.2 | 1.5 | 64.392 ug/L | 64.392 ppb | 23:29:22 |
| 1 | Na 589.592 Radial† | -372.8 | 90.9 | 35.681 ug/L | 35.681 ppb | 23:29:02 |
| 1 | Sr 421.552† | 26.0 | -44.2 | -0.3767 ug/L | -0.3767 ppb | 23:29:02 |
| 1 | Sc 361.383 | 834128.9 | 834128.9 | 99.318 % | | 23:30:19 |
| 1 | Y 371.029 | 710247.4 | 710247.4 | 99.186 % | | 23:30:19 |
| 1 | Ag 328.068† | 230.0 | -21.8 | -0.1053 ug/L | -0.1053 ppb | 23:30:19 |
| 1 | As 188.979† | -20.0 | 0.7 | 0.3929 ug/L | 0.3929 ppb | 23:30:39 |
| 1 | B 249.677† | -336.4 | -88.6 | -2.4340 ug/L | -2.4340 ppb | 23:30:39 |
| 1 | Ba 233.527† | 19.4 | 1.0 | 0.0112 ug/L | 0.0112 ppb | 23:30:39 |
| 1 | Be 313.107† | -4390.0 | -157.5 | -0.0620 ug/L | -0.0620 ppb | 23:30:19 |
| 1 | Cd 226.502† | -164.6 | 0.7 | 0.0087 ug/L | 0.0087 ppb | 23:30:39 |
| 1 | Co 228.616† | -63.1 | -24.6 | -0.6427 ug/L | -0.6427 ppb | 23:30:39 |
| 1 | Cr 267.716† | 58.4 | -36.2 | -0.4693 ug/L | -0.4693 ppb | 23:30:39 |
| 1 | Cu 324.752† | 6589.2 | 281.7 | 0.9129 ug/L | 0.9129 ppb | 23:30:19 |
| 1 | Mn 257.610† | 792.2 | 345.2 | 0.4515 ug/L | 0.4515 ppb | 23:30:39 |
| 1 | Mo 202.031† | 11.1 | -3.0 | -0.2656 ug/L | -0.2656 ppb | 23:30:39 |
| 1 | Ni 231.604† | 68.2 | -24.9 | -0.7780 ug/L | -0.7780 ppb | 23:30:39 |
| 1 | P 214.914† | 193.8 | 26.9 | 19.180 ug/L | 19.180 ppb | 23:30:39 |
| 1 | Pb 220.353† | -46.7 | 11.8 | 1.7824 ug/L | 1.7824 ppb | 23:30:39 |
| 1 | S 181.975 Axial† | 31.2 | 7.0 | 12.282 ug/L | 12.282 ppb | 23:30:39 |
| 1 | Sb 206.836† | 27.8 | 1.3 | 0.5567 ug/L | 0.5567 ppb | 23:30:39 |
| 1 | Se 196.026† | -19.7 | -2.9 | -2.2472 ug/L | -2.2472 ppb | 23:30:39 |
| 1 | Si 251.611† | 572.2 | 50.6 | 1.8889 ug/L | 1.8889 ppb | 23:30:39 |
| 1 | Sn 189.927† | 3.8 | 0.8 | 0.1740 ug/L | 0.1740 ppb | 23:30:39 |
| 1 | Ti 334.940† | -594.6 | 484.7 | 0.8281 ug/L | 0.8281 ppb | 23:30:19 |
| 1 | Tl 190.801† | -25.7 | -0.8 | -0.3089 ug/L | -0.3089 ppb | 23:30:39 |
| 1 | U 409.014† | -1949.9 | 71.9 | 2.1163 ug/L | 2.1163 ppb | 23:30:19 |
| 1 | V 292.402† | -1323.6 | 94.8 | 0.7302 ug/L | 0.7302 ppb | 23:30:19 |
| 1 | Zn 213.857† | 668.1 | 66.2 | 0.7887 ug/L | 0.7887 ppb | 23:30:39 |
| 1 | SiO2† | 622.1 | 73.0 | 5.8387 ug/L | 5.8387 ppb | 23:31:50 |
| 2 | Sc Radial | 4062.5 | 4062.5 | 101 % | | 23:29:27 |
| 2 | Y RADIAL | 4404.9 | 4404.9 | 97.50 % | | 23:29:27 |
| 2 | Al 396.153Radial† | -31.7 | 48.2 | 51.344 ug/L | 51.344 ppb | 23:29:47 |
| 2 | Ca 317.933Radial† | 25.9 | 8.5 | 17.279 ug/L | 17.279 ppb | 23:29:47 |
| 2 | Fe 238.204 Radial† | 16.0 | 6.9 | 86.584 ug/L | 86.584 ppb | 23:29:47 |
| 2 | K 766.490 Radial† | 2529.7 | -291.4 | -58.183 ug/L | -58.183 ppb | 23:29:27 |
| 2 | Mg 279.077 IEC† | 2.3 | 1.6 | 68.793 ug/L | 68.793 ppb | 23:29:47 |
| 2 | Na 589.592 Radial† | -444.7 | 19.3 | 7.5979 ug/L | 7.5979 ppb | 23:29:27 |
| 2 | Sr 421.552† | 21.9 | -48.3 | -0.4117 ug/L | -0.4117 ppb | 23:29:27 |
| 2 | Sc 361.383 | 821669.6 | 821669.6 | 97.835 % | | 23:30:44 |
| 2 | Y 371.029 | 700250.7 | 700250.7 | 97.790 % | | 23:30:44 |
| 2 | Ag 328.068† | 128.5 | -122.1 | -0.5914 ug/L | -0.5914 ppb | 23:30:44 |
| 2 | As 188.979† | -18.2 | 2.2 | 1.2039 ug/L | 1.2039 ppb | 23:31:04 |
| 2 | B 249.677† | -343.5 | -100.9 | -2.7880 ug/L | -2.7880 ppb | 23:31:04 |
| 2 | Ba 233.527† | -1.0 | -19.5 | -0.1807 ug/L | -0.1807 ppb | 23:31:04 |
| 2 | Be 313.107† | -4488.7 | -325.3 | -0.1317 ug/L | -0.1317 ppb | 23:30:44 |
| 2 | Cd 226.502† | -174.1 | -11.6 | -0.1720 ug/L | -0.1720 ppb | 23:31:04 |
| 2 | Co 228.616† | -43.3 | -5.4 | -0.1412 ug/L | -0.1412 ppb | 23:31:04 |
| 2 | Cr 267.716† | 88.1 | -5.0 | -0.0564 ug/L | -0.0564 ppb | 23:31:04 |
| 2 | Cu 324.752† | 6445.8 | 235.7 | 0.7680 ug/L | 0.7680 ppb | 23:30:44 |
| 2 | Mn 257.610† | 840.3 | 406.5 | 0.5390 ug/L | 0.5390 ppb | 23:31:04 |
| 2 | Mo 202.031† | 17.3 | 3.5 | 0.3129 ug/L | 0.3129 ppb | 23:31:04 |
| 2 | Ni 231.604† | 75.7 | -16.2 | -0.5066 ug/L | -0.5066 ppb | 23:31:04 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 198.9 | 35.1 | 25.002 ug/L | 25.002 ppb | 23:31:04 |
| 2 | Pb 220.353† | -54.9 | 2.7 | 0.4100 ug/L | 0.4100 ppb | 23:31:04 |
| 2 | S 181.975 Axial† | 32.3 | 8.6 | 15.113 ug/L | 15.113 ppb | 23:31:04 |
| 2 | Sb 206.836† | 35.8 | 9.9 | 4.2252 ug/L | 4.2252 ppb | 23:31:04 |
| 2 | Se 196.026† | -25.4 | -9.0 | -6.8957 ug/L | -6.8957 ppb | 23:31:04 |
| 2 | Si 251.611† | 601.8 | 89.7 | 3.3353 ug/L | 3.3353 ppb | 23:31:04 |
| 2 | Sn 189.927† | 5.7 | 2.7 | 0.6040 ug/L | 0.6040 ppb | 23:31:04 |
| 2 | Ti 334.940† | -969.7 | 92.2 | 0.1545 ug/L | 0.1545 ppb | 23:30:44 |
| 2 | Tl 190.801† | -30.8 | -6.4 | -2.4737 ug/L | -2.4737 ppb | 23:31:04 |
| 2 | U 409.014† | -1935.2 | 57.1 | 1.6710 ug/L | 1.6710 ppb | 23:30:44 |
| 2 | V 292.402† | -1428.7 | -32.8 | -0.2564 ug/L | -0.2564 ppb | 23:30:44 |
| 2 | Zn 213.857† | 655.4 | 63.5 | 0.7436 ug/L | 0.7436 ppb | 23:31:04 |
| 2 | SiO2† | 589.8 | 49.5 | 3.9426 ug/L | 3.9426 ppb | 23:32:10 |
| 3 | Sc Radial | 4177.6 | 4177.6 | 104 % | | 23:29:52 |
| 3 | Y RADIAL | 4495.7 | 4495.7 | 99.51 % | | 23:29:52 |
| 3 | Al 396.153Radial† | -63.0 | 18.8 | 20.070 ug/L | 20.070 ppb | 23:30:12 |
| 3 | Ca 317.933Radial† | 20.2 | 2.3 | 4.7125 ug/L | 4.7125 ppb | 23:30:12 |
| 3 | Fe 238.204 Radial† | 13.3 | 3.9 | 48.367 ug/L | 48.367 ppb | 23:30:12 |
| 3 | K 766.490 Radial† | 2443.5 | -443.9 | -88.616 ug/L | -88.616 ppb | 23:29:52 |
| 3 | Mg 279.077 IEC† | 2.1 | 1.3 | 55.893 ug/L | 55.893 ppb | 23:30:12 |
| 3 | Na 589.592 Radial† | -441.8 | 34.2 | 13.450 ug/L | 13.450 ppb | 23:29:52 |
| 3 | Sr 421.552† | 20.1 | -50.6 | -0.4308 ug/L | -0.4308 ppb | 23:29:52 |
| 3 | Sc 361.383 | 828240.5 | 828240.5 | 98.617 % | | 23:31:09 |
| 3 | Y 371.029 | 705568.3 | 705568.3 | 98.533 % | | 23:31:09 |
| 3 | Ag 328.068† | 96.3 | -155.8 | -0.7730 ug/L | -0.7730 ppb | 23:31:09 |
| 3 | As 188.979† | -26.5 | -6.0 | -3.2254 ug/L | -3.2254 ppb | 23:31:29 |
| 3 | B 249.677† | -340.4 | -95.0 | -2.6190 ug/L | -2.6190 ppb | 23:31:29 |
| 3 | Ba 233.527† | 10.6 | -7.8 | -0.0711 ug/L | -0.0711 ppb | 23:31:29 |
| 3 | Be 313.107† | -4430.6 | -230.0 | -0.0934 ug/L | -0.0934 ppb | 23:31:09 |
| 3 | Cd 226.502† | -168.2 | -4.2 | -0.0637 ug/L | -0.0637 ppb | 23:31:29 |
| 3 | Co 228.616† | -49.5 | -11.3 | -0.2939 ug/L | -0.2939 ppb | 23:31:29 |
| 3 | Cr 267.716† | 84.7 | -9.0 | -0.1139 ug/L | -0.1139 ppb | 23:31:29 |
| 3 | Cu 324.752† | 6468.5 | 206.4 | 0.6699 ug/L | 0.6699 ppb | 23:31:09 |
| 3 | Mn 257.610† | 736.4 | 294.3 | 0.3887 ug/L | 0.3887 ppb | 23:31:29 |
| 3 | Mo 202.031† | 16.2 | 2.2 | 0.1985 ug/L | 0.1985 ppb | 23:31:29 |
| 3 | Ni 231.604† | 64.0 | -28.7 | -0.8962 ug/L | -0.8962 ppb | 23:31:29 |
| 3 | P 214.914† | 192.7 | 27.2 | 19.356 ug/L | 19.356 ppb | 23:31:29 |
| 3 | Pb 220.353† | -51.3 | 6.8 | 1.0198 ug/L | 1.0198 ppb | 23:31:29 |
| 3 | S 181.975 Axial† | 30.7 | 6.8 | 11.892 ug/L | 11.892 ppb | 23:31:29 |
| 3 | Sb 206.836† | 28.7 | 2.5 | 1.0771 ug/L | 1.0771 ppb | 23:31:29 |
| 3 | Se 196.026† | -25.6 | -9.0 | -7.0151 ug/L | -7.0151 ppb | 23:31:29 |
| 3 | Si 251.611† | 584.9 | 67.6 | 2.5163 ug/L | 2.5163 ppb | 23:31:29 |
| 3 | Sn 189.927† | 4.3 | 1.3 | 0.2784 ug/L | 0.2784 ppb | 23:31:29 |
| 3 | Ti 334.940† | -1060.0 | 8.4 | 0.0090 ug/L | 0.0090 ppb | 23:31:09 |
| 3 | Tl 190.801† | -26.9 | -2.2 | -0.8409 ug/L | -0.8409 ppb | 23:31:29 |
| 3 | U 409.014† | -1885.2 | 123.5 | 3.6296 ug/L | 3.6296 ppb | 23:31:09 |
| 3 | V 292.402† | -1395.4 | 12.6 | 0.1007 ug/L | 0.1007 ppb | 23:31:09 |
| 3 | Zn 213.857† | 650.2 | 52.9 | 0.6260 ug/L | 0.6260 ppb | 23:31:29 |
| 3 | SiO2† | 617.6 | 72.9 | 5.8193 ug/L | 5.8193 ppb | 23:32:30 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|-------------|----------|---------|
| Sc 361.383 | 828013.0 | 98.590 % | | 0.7421 | | | 0.75% |
| Sc Radial | 4101.2 | 102 % | | 1.6 | | | 1.61% |
| Y 371.029 | 705355.5 | 98.503 % | | 0.6985 | | | 0.71% |
| Y RADIAL | 4427.3 | 97.99 % | | 1.336 | | | 1.36% |
| Ag 328.068† | -99.9 | -0.4899 ug/L | | 0.34527 | -0.4899 ppb | 0.34527 | 70.48% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 26.2 | 27.875 ug/L | | 20.7018 | 27.875 ppb | 20.7018 | 74.27% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -1.0 | -0.5429 ug/L | | 2.35826 | -0.5429 ppb | 2.35826 | 434.40% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | -94.8 | -2.6137 ug/L | | 0.17703 | -2.6137 ppb | 0.17703 | 6.77% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | -8.8 | -0.0802 ug/L | | 0.09628 | -0.0802 ppb | 0.09628 | 120.02% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -237.6 | -0.0957 ug/L | | 0.03491 | -0.0957 ppb | 0.03491 | 36.47% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 3.9 | 7.9708 ug/L | | 8.18112 | 7.9708 ppb | 8.18112 | 102.64% |

| | | | | | | | |
|--|-----------------|--------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | | |
| Cd | 226.502† | -5.0 | -0.0757 ug/L | 0.09093 | -0.0757 ppb | 0.09093 | 120.20% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | | |
| Co | 228.616† | -13.8 | -0.3593 ug/L | 0.25703 | -0.3593 ppb | 0.25703 | 71.54% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr | 267.716† | -16.7 | -0.2132 ug/L | 0.22367 | -0.2132 ppb | 0.22367 | 104.90% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu | 324.752† | 241.3 | 0.7836 ug/L | 0.12223 | 0.7836 ppb | 0.12223 | 15.60% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe | 238.204 Radial† | 3.9 | 48.771 ug/L | 37.6133 | 48.771 ppb | 37.6133 | 77.12% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | | |
| K | 766.490 Radial† | -388.4 | -77.556 ug/L | 16.8337 | -77.556 ppb | 16.8337 | 21.71% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | | |
| Mg | 279.077 IEC† | 1.4 | 63.026 ug/L | 6.5577 | 63.026 ppb | 6.5577 | 10.40% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | | |
| Mn | 257.610† | 348.7 | 0.4597 ug/L | 0.07552 | 0.4597 ppb | 0.07552 | 16.43% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo | 202.031† | 0.9 | 0.0820 ug/L | 0.30637 | 0.0820 ppb | 0.30637 | 373.82% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na | 589.592 Radial† | 48.2 | 18.910 ug/L | 14.8164 | 18.910 ppb | 14.8164 | 78.35% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | | |
| Ni | 231.604† | -23.3 | -0.7269 ug/L | 0.19971 | -0.7269 ppb | 0.19971 | 27.47% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | | |
| P | 214.914† | 29.7 | 21.179 ug/L | 3.3117 | 21.179 ppb | 3.3117 | 15.64% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | | |
| Pb | 220.353† | 7.1 | 1.0707 ug/L | 0.68765 | 1.0707 ppb | 0.68765 | 64.22% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| S | 181.975 Axial† | 7.5 | 13.096 ug/L | 1.7579 | 13.096 ppb | 1.7579 | 13.42% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | | |
| Sb | 206.836† | 4.6 | 1.9530 ug/L | 1.98493 | 1.9530 ppb | 1.98493 | 101.63% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se | 196.026† | -7.0 | -5.3860 ug/L | 2.71896 | -5.3860 ppb | 2.71896 | 50.48% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Si | 251.611† | 69.3 | 2.5802 ug/L | 0.72531 | 2.5802 ppb | 0.72531 | 28.11% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |
| Sn | 189.927† | 1.6 | 0.3521 ug/L | 0.22427 | 0.3521 ppb | 0.22427 | 63.69% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | | |
| Sr | 421.552† | -47.7 | -0.4064 ug/L | 0.02743 | -0.4064 ppb | 0.02743 | 6.75% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | | |
| Ti | 334.940† | 195.1 | 0.3306 ug/L | 0.43699 | 0.3306 ppb | 0.43699 | 132.20% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | | |
| Tl | 190.801† | -3.1 | -1.2078 ug/L | 1.12807 | -1.2078 ppb | 1.12807 | 93.40% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| U | 409.014† | 84.2 | 2.4723 ug/L | 1.02668 | 2.4723 ppb | 1.02668 | 41.53% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | | |
| V | 292.402† | 24.9 | 0.1915 ug/L | 0.49953 | 0.1915 ppb | 0.49953 | 260.83% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn | 213.857† | 60.9 | 0.7195 ug/L | 0.08399 | 0.7195 ppb | 0.08399 | 11.67% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| SiO2† | | 65.1 | 5.2002 ug/L | 1.08914 | 5.2002 ppb | 1.08914 | 20.94% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | | |

All analyte(s) passed QC.

Sequence No.: 61

Sample ID: 247899013|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 84

Date Collected: 3/25/2010 23:34:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899013|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4227.8 | 4227.8 | 105 % | | 23:36:54 |
| 1 | Y RADIAL | 5773.8 | 5773.8 | 127.8 % | | 23:36:34 |
| 1 | Al 396.153Radial† | 68760.2 | 65684.9 | 70004 ug/L | 70004 ppb | 23:36:34 |
| 1 | Ca 317.933Radial† | 13535.7 | 12897.4 | 26204 ug/L | 26204 ppb | 23:36:34 |
| 1 | Fe 238.204 Radial† | 13267.2 | 12649.5 | 158180 ug/L | 158180 ppb | 23:36:34 |
| 1 | K 766.490 Radial† | 58724.7 | 53227.0 | 10614 ug/L | 10614 ppb | 23:36:34 |
| 1 | Mg 279.077 IEC† | 292.0 | 277.9 | 11976 ug/L | 11976 ppb | 23:36:54 |
| 1 | Na 589.592 Radial† | 2221.3 | 2580.3 | 1013.3 ug/L | 1013.3 ppb | 23:36:34 |
| 1 | Sr 421.552† | 22480.2 | 21378.7 | 181.86 ug/L | 181.86 ppb | 23:36:34 |
| 1 | Sc 361.383 | 857789.7 | 857789.7 | 102.14 % | | 23:37:52 |
| 1 | Y 371.029 | 890680.6 | 890680.6 | 124.38 % | | 23:37:52 |
| 1 | Ag 328.068† | -8771.6 | -8841.6 | 3.4434 ug/L | 3.4434 ppb | 23:37:57 |
| 1 | As 188.979† | 6.2 | 26.9 | 81.748 ug/L | 81.748 ppb | 23:38:17 |
| 1 | B 249.677† | 1199.1 | 1424.2 | 13.223 ug/L | 13.223 ppb | 23:37:57 |
| 1 | Ba 233.527† | 96538.4 | 94501.5 | 891.24 ug/L | 891.24 ppb | 23:37:57 |
| 1 | Be 313.107† | 12621.3 | 16620.1 | 14.684 ug/L | 14.684 ppb | 23:37:57 |
| 1 | Cd 226.502† | 1147.9 | 1290.3 | 2.2824 ug/L | 2.2824 ppb | 23:38:17 |
| 1 | Co 228.616† | 3231.0 | 3202.4 | 74.116 ug/L | 74.116 ppb | 23:38:17 |
| 1 | Cr 267.716† | 9670.6 | 9373.5 | 138.40 ug/L | 138.40 ppb | 23:37:57 |
| 1 | Cu 324.752† | 121440.7 | 112548.9 | 372.29 ug/L | 372.29 ppb | 23:37:57 |
| 1 | Mn 257.610† | 4662002.9 | 4564079.3 | 6003.4 ug/L | 6003.4 ppb | 23:37:52 |
| 1 | Mo 202.031† | 30.1 | 15.3 | 13.938 ug/L | 13.938 ppb | 23:38:17 |
| 1 | Ni 231.604† | 3260.5 | 3098.8 | 96.709 ug/L | 96.709 ppb | 23:38:17 |
| 1 | P 214.914† | 2910.9 | 2681.8 | 1745.0 ug/L | 1745.0 ppb | 23:38:17 |
| 1 | Pb 220.353† | 2583.6 | 2588.4 | 383.37 ug/L | 383.37 ppb | 23:38:17 |
| 1 | S 181.975 Axial† | 580.4 | 543.9 | 940.25 ug/L | 940.25 ppb | 23:38:17 |
| 1 | Sb 206.836† | 69.3 | 41.2 | 2.7907 ug/L | 2.7907 ppb | 23:38:17 |
| 1 | Se 196.026† | -612.5 | -582.8 | 30.632 ug/L | 30.632 ppb | 23:38:17 |
| 1 | Si 251.611† | 985124.0 | 964002.0 | 35893 ug/L | 35893 ppb | 23:37:52 |
| 1 | Sn 189.927† | -91.2 | -92.4 | -24.895 ug/L | -24.895 ppb | 23:38:17 |
| 1 | Ti 334.940† | 2074045.6 | 2031765.7 | 3497.3 ug/L | 3497.3 ppb | 23:37:52 |
| 1 | Tl 190.801† | -187.8 | -158.8 | -4.5957 ug/L | -4.5957 ppb | 23:38:17 |
| 1 | U 409.014† | 62346.5 | 63078.2 | 1837.7 ug/L | 1837.7 ppb | 23:37:52 |
| 1 | V 292.402† | 30436.7 | 31227.8 | 217.75 ug/L | 217.75 ppb | 23:37:57 |
| 1 | Zn 213.857† | 59517.8 | 57667.0 | 660.29 ug/L | 660.29 ppb | 23:37:57 |
| 1 | SiO2† | 1003453.2 | 981920.0 | 78451 ug/L | 78451 ppb | 23:39:28 |
| 2 | Sc Radial | 4228.9 | 4228.9 | 105 % | | 23:37:19 |
| 2 | Y RADIAL | 5791.2 | 5791.2 | 128.2 % | | 23:36:59 |
| 2 | Al 396.153Radial† | 68644.0 | 65557.9 | 69869 ug/L | 69869 ppb | 23:36:59 |
| 2 | Ca 317.933Radial† | 13529.0 | 12887.8 | 26185 ug/L | 26185 ppb | 23:36:59 |
| 2 | Fe 238.204 Radial† | 13280.5 | 12659.1 | 158300 ug/L | 158300 ppb | 23:36:59 |
| 2 | K 766.490 Radial† | 58657.1 | 53148.7 | 10599 ug/L | 10599 ppb | 23:36:59 |
| 2 | Mg 279.077 IEC† | 297.3 | 282.9 | 12192 ug/L | 12192 ppb | 23:37:19 |
| 2 | Na 589.592 Radial† | 2257.1 | 2613.9 | 1026.5 ug/L | 1026.5 ppb | 23:36:59 |
| 2 | Sr 421.552† | 22490.1 | 21382.9 | 181.89 ug/L | 181.89 ppb | 23:36:59 |
| 2 | Sc 361.383 | 878682.8 | 878682.8 | 104.62 % | | 23:38:24 |
| 2 | Y 371.029 | 912062.9 | 912062.9 | 127.37 % | | 23:38:24 |
| 2 | Ag 328.068† | -8810.4 | -8674.5 | 4.3211 ug/L | 4.3211 ppb | 23:38:29 |
| 2 | As 188.979† | -18.8 | 2.8 | 68.802 ug/L | 68.802 ppb | 23:38:50 |
| 2 | B 249.677† | 1369.8 | 1559.4 | 16.926 ug/L | 16.926 ppb | 23:38:29 |
| 2 | Ba 233.527† | 97850.6 | 93508.2 | 881.93 ug/L | 881.93 ppb | 23:38:29 |
| 2 | Be 313.107† | 12709.2 | 16410.3 | 14.576 ug/L | 14.576 ppb | 23:38:29 |
| 2 | Cd 226.502† | 1161.6 | 1276.7 | 2.0750 ug/L | 2.0750 ppb | 23:38:50 |
| 2 | Co 228.616† | 3228.0 | 3124.3 | 72.097 ug/L | 72.097 ppb | 23:38:50 |
| 2 | Cr 267.716† | 9863.2 | 9332.4 | 137.88 ug/L | 137.88 ppb | 23:38:29 |
| 2 | Cu 324.752† | 123127.3 | 111333.8 | 368.36 ug/L | 368.36 ppb | 23:38:29 |
| 2 | Mn 257.610† | 4753784.5 | 4543270.8 | 5976.1 ug/L | 5976.1 ppb | 23:38:24 |
| 2 | Mo 202.031† | 19.0 | 4.0 | 12.954 ug/L | 12.954 ppb | 23:38:50 |
| 2 | Ni 231.604† | 3270.4 | 3032.3 | 94.635 ug/L | 94.635 ppb | 23:38:50 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 2916.9 | 2619.8 | 1701.1 ug/L | 1701.1 ppb | 23:38:50 |
| 2 | Pb 220.353† | 2578.7 | 2523.6 | 373.56 ug/L | 373.56 ppb | 23:38:50 |
| 2 | S 181.975 Axial† | 579.7 | 529.7 | 915.45 ug/L | 915.45 ppb | 23:38:50 |
| 2 | Sb 206.836† | 65.0 | 35.5 | 0.3882 ug/L | 0.3882 ppb | 23:38:50 |
| 2 | Se 196.026† | -610.8 | -566.9 | 43.583 ug/L | 43.583 ppb | 23:38:50 |
| 2 | Si 251.611† | 1005062.8 | 960125.4 | 35748 ug/L | 35748 ppb | 23:38:24 |
| 2 | Sn 189.927† | -77.8 | -77.5 | -21.594 ug/L | -21.594 ppb | 23:38:50 |
| 2 | Ti 334.940† | 2118537.5 | 2026006.4 | 3487.4 ug/L | 3487.4 ppb | 23:38:24 |
| 2 | Tl 190.801† | -198.2 | -164.4 | -6.9438 ug/L | -6.9438 ppb | 23:38:50 |
| 2 | U 409.014† | 63468.5 | 62699.1 | 1826.6 ug/L | 1826.6 ppb | 23:38:24 |
| 2 | V 292.402† | 30811.3 | 30877.3 | 215.01 ug/L | 215.01 ppb | 23:38:29 |
| 2 | Zn 213.857† | 60211.4 | 56944.3 | 651.71 ug/L | 651.71 ppb | 23:38:29 |
| 2 | SiO2† | 1008186.5 | 963083.1 | 76946 ug/L | 76946 ppb | 23:39:34 |
| 3 | Sc Radial | 4165.9 | 4165.9 | 103 % | | 23:37:44 |
| 3 | Y RADIAL | 5764.9 | 5764.9 | 127.6 % | | 23:37:24 |
| 3 | Al 396.153Radial† | 68598.4 | 65504.1 | 70877 ug/L | 70877 ppb | 23:37:24 |
| 3 | Ca 317.933Radial† | 13490.0 | 13045.3 | 26505 ug/L | 26505 ppb | 23:37:24 |
| 3 | Fe 238.204 Radial† | 13256.4 | 12827.3 | 160400 ug/L | 160400 ppb | 23:37:24 |
| 3 | K 766.490 Radial† | 58737.3 | 54072.5 | 10783 ug/L | 10783 ppb | 23:37:24 |
| 3 | Mg 279.077 IEC† | 294.8 | 284.7 | 12270 ug/L | 12270 ppb | 23:37:44 |
| 3 | Na 589.592 Radial† | 2273.5 | 2662.3 | 1045.5 ug/L | 1045.5 ppb | 23:37:24 |
| 3 | Sr 421.552† | 22395.6 | 21615.8 | 183.87 ug/L | 183.87 ppb | 23:37:24 |
| 3 | Sc 361.383 | 872076.5 | 872076.5 | 103.84 % | | 23:38:56 |
| 3 | Y 371.029 | 904868.8 | 904868.8 | 126.37 % | | 23:38:56 |
| 3 | Ag 328.068† | -8852.6 | -8778.9 | 4.4386 ug/L | 4.4386 ppb | 23:39:02 |
| 3 | As 188.979† | -14.8 | 6.6 | 71.341 ug/L | 71.341 ppb | 23:39:22 |
| 3 | B 249.677† | 1294.2 | 1496.6 | 14.853 ug/L | 14.853 ppb | 23:39:02 |
| 3 | Ba 233.527† | 97819.8 | 94187.1 | 888.36 ug/L | 888.36 ppb | 23:39:02 |
| 3 | Be 313.107† | 12758.4 | 16549.7 | 14.641 ug/L | 14.641 ppb | 23:39:02 |
| 3 | Cd 226.502† | 1176.6 | 1299.5 | 2.1818 ug/L | 2.1818 ppb | 23:39:22 |
| 3 | Co 228.616† | 3250.4 | 3169.2 | 73.233 ug/L | 73.233 ppb | 23:39:22 |
| 3 | Cr 267.716† | 9792.8 | 9336.0 | 138.14 ug/L | 138.14 ppb | 23:39:02 |
| 3 | Cu 324.752† | 122546.4 | 111665.9 | 369.54 ug/L | 369.54 ppb | 23:39:02 |
| 3 | Mn 257.610† | 4727194.4 | 4552083.9 | 5987.9 ug/L | 5987.9 ppb | 23:38:56 |
| 3 | Mo 202.031† | 26.9 | 11.8 | 13.801 ug/L | 13.801 ppb | 23:39:22 |
| 3 | Ni 231.604† | 3271.7 | 3057.2 | 95.411 ug/L | 95.411 ppb | 23:39:22 |
| 3 | P 214.914† | 2925.5 | 2649.2 | 1720.5 ug/L | 1720.5 ppb | 23:39:22 |
| 3 | Pb 220.353† | 2607.4 | 2569.9 | 380.47 ug/L | 380.47 ppb | 23:39:22 |
| 3 | S 181.975 Axial† | 579.0 | 533.2 | 921.37 ug/L | 921.37 ppb | 23:39:22 |
| 3 | Sb 206.836† | 63.8 | 34.8 | 0.0170 ug/L | 0.0170 ppb | 23:39:22 |
| 3 | Se 196.026† | -620.5 | -580.6 | 39.247 ug/L | 39.247 ppb | 23:39:22 |
| 3 | Si 251.611† | 1000489.5 | 962998.4 | 35855 ug/L | 35855 ppb | 23:38:56 |
| 3 | Sn 189.927† | -90.3 | -90.0 | -24.439 ug/L | -24.439 ppb | 23:39:22 |
| 3 | Ti 334.940† | 2104712.6 | 2028032.0 | 3490.9 ug/L | 3490.9 ppb | 23:38:56 |
| 3 | Tl 190.801† | -206.2 | -173.5 | -10.416 ug/L | -10.416 ppb | 23:39:22 |
| 3 | U 409.014† | 63363.0 | 63057.1 | 1836.9 ug/L | 1836.9 ppb | 23:38:56 |
| 3 | V 292.402† | 30785.3 | 31075.4 | 216.26 ug/L | 216.26 ppb | 23:39:02 |
| 3 | Zn 213.857† | 60340.8 | 57504.9 | 658.05 ug/L | 658.05 ppb | 23:39:02 |
| 3 | SiO2† | 982371.4 | 945521.9 | 75542 ug/L | 75542 ppb | 23:39:40 |

Mean Data: 247899013|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|-------------|----------|--------|
| | Intensity | Units | Units | | Conc. Units | | |
| Sc 361.383 | 869516.3 | 103.53 | % | 1.272 | | | 1.23% |
| Sc Radial | 4207.5 | 104 | % | 0.9 | | | 0.86% |
| Y 371.029 | 902537.4 | 126.04 | % | 1.519 | | | 1.21% |
| Y RADIAL | 5776.7 | 127.9 | % | 0.30 | | | 0.23% |
| Ag 328.068† | -8765.0 | 4.0677 | ug/L | 0.54382 | 4.0677 ppb | 0.54382 | 13.37% |
| Al 396.153Radial† | 65915.6 | 70250 | ug/L | 547.3 | 70250 ppb | 547.3 | 0.78% |
| As 188.979† | 12.1 | 73.963 | ug/L | 6.8598 | 73.963 ppb | 6.8598 | 9.27% |
| B 249.677† | 1493.4 | 15.001 | ug/L | 1.8556 | 15.001 ppb | 1.8556 | 12.37% |
| Ba 233.527† | 94065.6 | 887.18 | ug/L | 4.768 | 887.18 ppb | 4.768 | 0.54% |
| Be 313.107† | 16526.7 | 14.634 | ug/L | 0.0542 | 14.634 ppb | 0.0542 | 0.37% |
| Ca 317.933Radial† | 12943.5 | 26298 | ug/L | 179.4 | 26298 ppb | 179.4 | 0.68% |
| Cd 226.502† | 1288.8 | 2.1797 | ug/L | 0.10369 | 2.1797 ppb | 0.10369 | 4.76% |
| Co 228.616† | 3165.3 | 73.149 | ug/L | 1.0123 | 73.149 ppb | 1.0123 | 1.38% |
| Cr 267.716† | 9347.3 | 138.14 | ug/L | 0.261 | 138.14 ppb | 0.261 | 0.19% |
| Cu 324.752† | 111849.5 | 370.07 | ug/L | 2.015 | 370.07 ppb | 2.015 | 0.54% |
| Fe 238.204 Radial† | 12711.9 | 158960 | ug/L | 1250.6 | 158960 ppb | 1250.6 | 0.79% |
| K 766.490 Radial† | 53482.7 | 10665 | ug/L | 102.2 | 10665 ppb | 102.2 | 0.96% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 281.8 | 12146 ug/L | 152.2 | 12146 ppb | 152.2 | 1.25% |
| Mn 257.610† | 4553144.6 | 5989.2 ug/L | 13.69 | 5989.2 ppb | 13.69 | 0.23% |
| Mo 202.031† | 10.4 | 13.564 ug/L | 0.5333 | 13.564 ppb | 0.5333 | 3.93% |
| Na 589.592 Radial† | 2618.8 | 1028.5 ug/L | 16.20 | 1028.5 ppb | 16.20 | 1.58% |
| Ni 231.604† | 3062.8 | 95.585 ug/L | 1.0477 | 95.585 ppb | 1.0477 | 1.10% |
| P 214.914† | 2650.3 | 1722.2 ug/L | 22.01 | 1722.2 ppb | 22.01 | 1.28% |
| Pb 220.353† | 2560.6 | 379.14 ug/L | 5.039 | 379.14 ppb | 5.039 | 1.33% |
| S 181.975 Axial† | 535.6 | 925.69 ug/L | 12.954 | 925.69 ppb | 12.954 | 1.40% |
| Sb 206.836† | 37.2 | 1.0653 ug/L | 1.50575 | 1.0653 ppb | 1.50575 | 141.35% |
| Se 196.026† | -576.8 | 37.821 ug/L | 6.5923 | 37.821 ppb | 6.5923 | 17.43% |
| Si 251.611† | 962375.3 | 35832 ug/L | 74.9 | 35832 ppb | 74.9 | 0.21% |
| Sn 189.927† | -86.6 | -23.643 ug/L | 1.7888 | -23.643 ppb | 1.7888 | 7.57% |
| Sr 421.552† | 21459.1 | 182.54 ug/L | 1.154 | 182.54 ppb | 1.154 | 0.63% |
| Ti 334.940† | 2028601.4 | 3491.9 ug/L | 5.03 | 3491.9 ppb | 5.03 | 0.14% |
| Tl 190.801† | -165.6 | -7.3184 ug/L | 2.92800 | -7.3184 ppb | 2.92800 | 40.01% |
| U 409.014† | 62944.8 | 1833.7 ug/L | 6.21 | 1833.7 ppb | 6.21 | 0.34% |
| V 292.402† | 31060.2 | 216.34 ug/L | 1.372 | 216.34 ppb | 1.372 | 0.63% |
| Zn 213.857† | 57372.1 | 656.68 ug/L | 4.452 | 656.68 ppb | 4.452 | 0.68% |
| SiO2† | 963508.3 | 76980 ug/L | 1454.3 | 76980 ppb | 1454.3 | 1.89% |

Sequence No.: 62

Sample ID: 247899014|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 85

Date Collected: 3/25/2010 23:41:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899014|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4137.6 | 4137.6 | 103 % | | 23:44:04 |
| 1 | Y RADIAL | 6240.4 | 6240.4 | 138.1 % | | 23:43:44 |
| 1 | Al 396.153Radial† | 32381.9 | 31649.6 | 33731 ug/L | 33731 ppb | 23:43:44 |
| 1 | Ca 317.933Radial† | 5945.1 | 5778.8 | 11741 ug/L | 11741 ppb | 23:43:44 |
| 1 | Fe 238.204 Radial† | 8864.1 | 8632.9 | 107950 ug/L | 107950 ppb | 23:43:44 |
| 1 | K 766.490 Radial† | 28899.5 | 25371.6 | 5059.3 ug/L | 5059.3 ppb | 23:43:44 |
| 1 | Mg 279.077 IEC† | 135.7 | 131.6 | 5633.9 ug/L | 5633.9 ppb | 23:44:04 |
| 1 | Na 589.592 Radial† | 4384.3 | 4735.2 | 1859.6 ug/L | 1859.6 ppb | 23:43:44 |
| 1 | Sr 421.552† | 11455.8 | 11098.5 | 94.423 ug/L | 94.423 ppb | 23:43:44 |
| 1 | Sc 361.383 | 856153.8 | 856153.8 | 101.94 % | | 23:45:02 |
| 1 | Y 371.029 | 963065.3 | 963065.3 | 134.49 % | | 23:45:02 |
| 1 | Ag 328.068† | -6101.9 | -6239.1 | 2.4835 ug/L | 2.4835 ppb | 23:45:07 |
| 1 | As 188.979† | -46.5 | -24.8 | 45.279 ug/L | 45.279 ppb | 23:45:27 |
| 1 | B 249.677† | 558.7 | 798.2 | 4.3466 ug/L | 4.3466 ppb | 23:45:07 |
| 1 | Ba 233.527† | 31557.9 | 30938.7 | 293.54 ug/L | 293.54 ppb | 23:45:07 |
| 1 | Be 313.107† | -14503.1 | -9964.3 | 4.6767 ug/L | 4.6767 ppb | 23:45:07 |
| 1 | Cd 226.502† | 645.1 | 799.2 | 0.0899 ug/L | 0.0899 ppb | 23:45:27 |
| 1 | Co 228.616† | 844.0 | 866.8 | 13.052 ug/L | 13.052 ppb | 23:45:27 |
| 1 | Cr 267.716† | 8187.9 | 7937.1 | 115.06 ug/L | 115.06 ppb | 23:45:07 |
| 1 | Cu 324.752† | 20876.6 | 14126.5 | 51.722 ug/L | 51.722 ppb | 23:45:07 |
| 1 | Mn 257.610† | 2007945.1 | 1969267.9 | 2594.2 ug/L | 2594.2 ppb | 23:45:02 |
| 1 | Mo 202.031† | 42.5 | 27.5 | 10.941 ug/L | 10.941 ppb | 23:45:27 |
| 1 | Ni 231.604† | 2153.5 | 2018.9 | 63.027 ug/L | 63.027 ppb | 23:45:27 |
| 1 | P 214.914† | 987.7 | 800.7 | 487.75 ug/L | 487.75 ppb | 23:45:27 |
| 1 | Pb 220.353† | 626.0 | 672.9 | 93.690 ug/L | 93.690 ppb | 23:45:27 |
| 1 | S 181.975 Axial† | 241.3 | 212.3 | 365.78 ug/L | 365.78 ppb | 23:45:27 |
| 1 | Sb 206.836† | 50.8 | 23.2 | -4.7297 ug/L | -4.7297 ppb | 23:45:27 |
| 1 | Se 196.026† | -413.1 | -388.3 | 23.054 ug/L | 23.054 ppb | 23:45:27 |
| 1 | Si 251.611† | 906922.9 | 889132.6 | 33105 ug/L | 33105 ppb | 23:45:02 |
| 1 | Sn 189.927† | -51.6 | -53.7 | -15.997 ug/L | -15.997 ppb | 23:45:27 |
| 1 | Ti 334.940† | 2275249.2 | 2233019.2 | 3843.2 ug/L | 3843.2 ppb | 23:45:02 |
| 1 | Tl 190.801† | -150.4 | -122.4 | -3.3998 ug/L | -3.3998 ppb | 23:45:27 |
| 1 | U 409.014† | -14734.5 | -12418.8 | -377.96 ug/L | -377.96 ppb | 23:45:02 |
| 1 | V 292.402† | 12143.9 | 13340.2 | 82.454 ug/L | 82.454 ppb | 23:45:07 |
| 1 | Zn 213.857† | 44228.4 | 42780.0 | 491.60 ug/L | 491.60 ppb | 23:45:07 |
| 1 | SiO2† | 907031.1 | 889210.7 | 71043 ug/L | 71043 ppb | 23:46:35 |
| 2 | Sc Radial | 4176.1 | 4176.1 | 104 % | | 23:44:29 |
| 2 | Y RADIAL | 6064.5 | 6064.5 | 134.2 % | | 23:44:09 |
| 2 | Al 396.153Radial† | 31690.0 | 30690.4 | 32708 ug/L | 32708 ppb | 23:44:09 |
| 2 | Ca 317.933Radial† | 5845.6 | 5629.4 | 11437 ug/L | 11437 ppb | 23:44:09 |
| 2 | Fe 238.204 Radial† | 8657.1 | 8353.3 | 104460 ug/L | 104460 ppb | 23:44:09 |
| 2 | K 766.490 Radial† | 28477.0 | 24703.9 | 4926.1 ug/L | 4926.1 ppb | 23:44:09 |
| 2 | Mg 279.077 IEC† | 141.7 | 136.1 | 5837.6 ug/L | 5837.6 ppb | 23:44:29 |
| 2 | Na 589.592 Radial† | 4306.1 | 4620.4 | 1814.5 ug/L | 1814.5 ppb | 23:44:09 |
| 2 | Sr 421.552† | 11173.6 | 10723.0 | 91.227 ug/L | 91.227 ppb | 23:44:09 |
| 2 | Sc 361.383 | 859767.4 | 859767.4 | 102.37 % | | 23:45:33 |
| 2 | Y 371.029 | 966827.5 | 966827.5 | 135.02 % | | 23:45:33 |
| 2 | Ag 328.068† | -6000.1 | -6114.6 | 2.0292 ug/L | 2.0292 ppb | 23:45:38 |
| 2 | As 188.979† | -54.2 | -32.1 | 40.547 ug/L | 40.547 ppb | 23:45:58 |
| 2 | B 249.677† | 563.7 | 800.8 | 4.9831 ug/L | 4.9831 ppb | 23:45:38 |
| 2 | Ba 233.527† | 31618.6 | 30867.9 | 292.77 ug/L | 292.77 ppb | 23:45:38 |
| 2 | Be 313.107† | -14496.2 | -9897.8 | 4.7118 ug/L | 4.7118 ppb | 23:45:38 |
| 2 | Cd 226.502† | 653.7 | 805.0 | 0.5341 ug/L | 0.5341 ppb | 23:45:58 |
| 2 | Co 228.616† | 866.6 | 885.4 | 13.578 ug/L | 13.578 ppb | 23:45:58 |
| 2 | Cr 267.716† | 8211.0 | 7925.8 | 114.54 ug/L | 114.54 ppb | 23:45:38 |
| 2 | Cu 324.752† | 20844.4 | 14008.9 | 51.153 ug/L | 51.153 ppb | 23:45:38 |
| 2 | Mn 257.610† | 2019353.1 | 1972133.0 | 2597.6 ug/L | 2597.6 ppb | 23:45:33 |
| 2 | Mo 202.031† | 37.3 | 22.2 | 10.200 ug/L | 10.200 ppb | 23:45:58 |
| 2 | Ni 231.604† | 2170.4 | 2026.6 | 63.265 ug/L | 63.265 ppb | 23:45:58 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 997.7 | 806.4 | 494.51 ug/L | 494.51 ppb | 23:45:58 |
| 2 | Pb 220.353† | 625.0 | 669.4 | 93.433 ug/L | 93.433 ppb | 23:45:58 |
| 2 | S 181.975 Axial† | 239.0 | 209.1 | 360.30 ug/L | 360.30 ppb | 23:45:58 |
| 2 | Sb 206.836† | 62.1 | 34.0 | -0.0902 ug/L | -0.0902 ppb | 23:45:58 |
| 2 | Se 196.026† | -409.1 | -382.7 | 16.773 ug/L | 16.773 ppb | 23:45:58 |
| 2 | Si 251.611† | 911198.3 | 889569.8 | 33121 ug/L | 33121 ppb | 23:45:33 |
| 2 | Sn 189.927† | -50.7 | -52.6 | -15.616 ug/L | -15.616 ppb | 23:45:58 |
| 2 | Ti 334.940† | 2286972.5 | 2235090.1 | 3846.7 ug/L | 3846.7 ppb | 23:45:33 |
| 2 | Tl 190.801† | -158.0 | -129.3 | -6.0110 ug/L | -6.0110 ppb | 23:45:58 |
| 2 | U 409.014† | -14636.0 | -12261.9 | -372.94 ug/L | -372.94 ppb | 23:45:33 |
| 2 | V 292.402† | 12140.2 | 13286.6 | 82.552 ug/L | 82.552 ppb | 23:45:38 |
| 2 | Zn 213.857† | 44019.9 | 42393.9 | 487.54 ug/L | 487.54 ppb | 23:45:38 |
| 2 | SiO2† | 905697.7 | 884168.6 | 70641 ug/L | 70641 ppb | 23:46:41 |
| 3 | Sc Radial | 4155.8 | 4155.8 | 103 % | | 23:44:54 |
| 3 | Y RADIAL | 6096.2 | 6096.2 | 134.9 % | | 23:44:34 |
| 3 | Al 396.153Radial† | 31723.8 | 30872.7 | 32903 ug/L | 32903 ppb | 23:44:34 |
| 3 | Ca 317.933Radial† | 5858.8 | 5669.7 | 11519 ug/L | 11519 ppb | 23:44:34 |
| 3 | Fe 238.204 Radial† | 8662.3 | 8399.2 | 105030 ug/L | 105030 ppb | 23:44:34 |
| 3 | K 766.490 Radial† | 28502.2 | 24862.7 | 4957.8 ug/L | 4957.8 ppb | 23:44:34 |
| 3 | Mg 279.077 IEC† | 140.0 | 135.2 | 5797.0 ug/L | 5797.0 ppb | 23:44:54 |
| 3 | Na 589.592 Radial† | 4270.0 | 4605.6 | 1808.7 ug/L | 1808.7 ppb | 23:44:34 |
| 3 | Sr 421.552† | 11147.8 | 10750.7 | 91.462 ug/L | 91.462 ppb | 23:44:34 |
| 3 | Sc 361.383 | 849723.0 | 849723.0 | 101.17 % | | 23:46:04 |
| 3 | Y 371.029 | 955576.7 | 955576.7 | 133.45 % | | 23:46:04 |
| 3 | Ag 328.068† | -5942.4 | -6126.8 | 2.1545 ug/L | 2.1545 ppb | 23:46:09 |
| 3 | As 188.979† | -46.7 | -25.3 | 44.339 ug/L | 44.339 ppb | 23:46:29 |
| 3 | B 249.677† | 546.1 | 789.9 | 4.5896 ug/L | 4.5896 ppb | 23:46:09 |
| 3 | Ba 233.527† | 31482.8 | 31098.7 | 294.96 ug/L | 294.96 ppb | 23:46:09 |
| 3 | Be 313.107† | -14279.3 | -9850.7 | 4.7355 ug/L | 4.7355 ppb | 23:46:09 |
| 3 | Cd 226.502† | 660.9 | 819.6 | 0.6793 ug/L | 0.6793 ppb | 23:46:29 |
| 3 | Co 228.616† | 882.4 | 911.1 | 14.237 ug/L | 14.237 ppb | 23:46:29 |
| 3 | Cr 267.716† | 8158.4 | 7968.7 | 115.17 ug/L | 115.17 ppb | 23:46:09 |
| 3 | Cu 324.752† | 20726.2 | 14132.8 | 51.590 ug/L | 51.590 ppb | 23:46:09 |
| 3 | Mn 257.610† | 1999401.4 | 1975730.5 | 2602.4 ug/L | 2602.4 ppb | 23:46:04 |
| 3 | Mo 202.031† | 45.6 | 30.8 | 11.001 ug/L | 11.001 ppb | 23:46:29 |
| 3 | Ni 231.604† | 2171.2 | 2052.4 | 64.071 ug/L | 64.071 ppb | 23:46:29 |
| 3 | P 214.914† | 996.3 | 816.5 | 501.27 ug/L | 501.27 ppb | 23:46:29 |
| 3 | Pb 220.353† | 605.6 | 657.4 | 91.585 ug/L | 91.585 ppb | 23:46:29 |
| 3 | S 181.975 Axial† | 240.7 | 213.6 | 368.17 ug/L | 368.17 ppb | 23:46:29 |
| 3 | Sb 206.836† | 53.0 | 25.8 | -3.5991 ug/L | -3.5991 ppb | 23:46:29 |
| 3 | Se 196.026† | -397.1 | -375.5 | 24.258 ug/L | 24.258 ppb | 23:46:29 |
| 3 | Si 251.611† | 903064.3 | 892051.8 | 33214 ug/L | 33214 ppb | 23:46:04 |
| 3 | Sn 189.927† | -48.1 | -50.7 | -15.204 ug/L | -15.204 ppb | 23:46:29 |
| 3 | Ti 334.940† | 2261444.9 | 2236266.7 | 3848.7 ug/L | 3848.7 ppb | 23:46:04 |
| 3 | Tl 190.801† | -144.4 | -117.6 | -1.4572 ug/L | -1.4572 ppb | 23:46:29 |
| 3 | U 409.014† | -14762.0 | -12555.4 | -381.64 ug/L | -381.64 ppb | 23:46:04 |
| 3 | V 292.402† | 12122.8 | 13409.6 | 83.407 ug/L | 83.407 ppb | 23:46:09 |
| 3 | Zn 213.857† | 44090.9 | 42972.5 | 494.32 ug/L | 494.32 ppb | 23:46:09 |
| 3 | SiO2† | 914785.2 | 903608.7 | 72194 ug/L | 72194 ppb | 23:46:47 |

Mean Data: 247899014|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------------|----------|--------------------|----------|--------|
| Sc 361.383 | 855214.7 | 101.83 % | % | 0.606 | | | 0.59% |
| Sc Radial | 4156.5 | 103 % | % | 0.5 | | | 0.46% |
| Y 371.029 | 961823.2 | 134.32 % | % | 0.800 | | | 0.60% |
| Y RADIAL | 6133.7 | 135.8 % | % | 2.08 | | | 1.53% |
| Ag 328.068† | -6160.2 | 2.2224 ug/L | ug/L | 0.23465 | 2.2224 ppb | 0.23465 | 10.56% |
| Al 396.153Radial† | 31070.9 | 33114 ug/L | ug/L | 542.9 | 33114 ppb | 542.9 | 1.64% |
| As 188.979† | -27.4 | 43.388 ug/L | ug/L | 2.5050 | 43.388 ppb | 2.5050 | 5.77% |
| B 249.677† | 796.3 | 4.6398 ug/L | ug/L | 0.32117 | 4.6398 ppb | 0.32117 | 6.92% |
| Ba 233.527† | 30968.4 | 293.76 ug/L | ug/L | 1.107 | 293.76 ppb | 1.107 | 0.38% |
| Be 313.107† | -9904.2 | 4.7080 ug/L | ug/L | 0.02958 | 4.7080 ppb | 0.02958 | 0.63% |
| Ca 317.933Radial† | 5692.6 | 11566 ug/L | ug/L | 157.1 | 11566 ppb | 157.1 | 1.36% |
| Cd 226.502† | 807.9 | 0.4344 ug/L | ug/L | 0.30707 | 0.4344 ppb | 0.30707 | 70.68% |
| Co 228.616† | 887.8 | 13.622 ug/L | ug/L | 0.5935 | 13.622 ppb | 0.5935 | 4.36% |
| Cr 267.716† | 7943.8 | 114.92 ug/L | ug/L | 0.334 | 114.92 ppb | 0.334 | 0.29% |
| Cu 324.752† | 14089.4 | 51.488 ug/L | ug/L | 0.2977 | 51.488 ppb | 0.2977 | 0.58% |
| Fe 238.204 Radial† | 8461.8 | 105810 ug/L | ug/L | 1874.6 | 105810 ppb | 1874.6 | 1.77% |
| K 766.490 Radial† | 24979.4 | 4981.1 ug/L | ug/L | 69.58 | 4981.1 ppb | 69.58 | 1.40% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 134.3 | 5756.2 ug/L | 107.81 | 5756.2 ppb | 107.81 | 1.87% |
| Mn 257.610† | 1972377.1 | 2598.1 ug/L | 4.11 | 2598.1 ppb | 4.11 | 0.16% |
| Mo 202.031† | 26.9 | 10.714 ug/L | 0.4463 | 10.714 ppb | 0.4463 | 4.17% |
| Na 589.592 Radial† | 4653.7 | 1827.6 ug/L | 27.88 | 1827.6 ppb | 27.88 | 1.53% |
| Ni 231.604† | 2032.6 | 63.454 ug/L | 0.5471 | 63.454 ppb | 0.5471 | 0.86% |
| P 214.914† | 807.8 | 494.51 ug/L | 6.760 | 494.51 ppb | 6.760 | 1.37% |
| Pb 220.353† | 666.5 | 92.903 ug/L | 1.1483 | 92.903 ppb | 1.1483 | 1.24% |
| S 181.975 Axial† | 211.6 | 364.75 ug/L | 4.035 | 364.75 ppb | 4.035 | 1.11% |
| Sb 206.836† | 27.7 | -2.8063 ug/L | 2.41920 | -2.8063 ppb | 2.41920 | 86.21% |
| Se 196.026† | -382.2 | 21.362 ug/L | 4.0191 | 21.362 ppb | 4.0191 | 18.81% |
| Si 251.611† | 890251.4 | 33147 ug/L | 58.6 | 33147 ppb | 58.6 | 0.18% |
| Sn 189.927† | -52.3 | -15.606 ug/L | 0.3965 | -15.606 ppb | 0.3965 | 2.54% |
| Sr 421.552† | 10857.4 | 92.371 ug/L | 1.7808 | 92.371 ppb | 1.7808 | 1.93% |
| Ti 334.940† | 2234792.0 | 3846.2 ug/L | 2.80 | 3846.2 ppb | 2.80 | 0.07% |
| Tl 190.801† | -123.1 | -3.6227 ug/L | 2.28506 | -3.6227 ppb | 2.28506 | 63.08% |
| U 409.014† | -12412.0 | -377.51 ug/L | 4.369 | -377.51 ppb | 4.369 | 1.16% |
| V 292.402† | 13345.5 | 82.804 ug/L | 0.5246 | 82.804 ppb | 0.5246 | 0.63% |
| Zn 213.857† | 42715.5 | 491.15 ug/L | 3.413 | 491.15 ppb | 3.413 | 0.69% |
| SiO2† | 892329.4 | 71293 ug/L | 806.0 | 71293 ppb | 806.0 | 1.13% |

Sequence No.: 63

Sample ID: 247899015|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 86

Date Collected: 3/25/2010 23:48:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899015|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Conc. Units | Calib. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------|--------------|--------------------|---------------|
| 1 | Sc Radial | 4195.9 | 4195.9 | 104 % | | | 23:51:12 |
| 1 | Y RADIAL | 5572.9 | 5572.9 | 123.3 % | | | 23:50:52 |
| 1 | Al 396.153Radial† | 50343.0 | 48478.5 | 51666 ug/L | | 51666 ppb | 23:50:52 |
| 1 | Ca 317.933Radial† | 7934.4 | 7610.8 | 15463 ug/L | | 15463 ppb | 23:50:52 |
| 1 | Fe 238.204 Radial† | 8072.1 | 7751.4 | 96929 ug/L | | 96929 ppb | 23:50:52 |
| 1 | K 766.490 Radial† | 42779.0 | 38323.7 | 7644.2 ug/L | | 7644.2 ppb | 23:50:52 |
| 1 | Mg 279.077 IEC† | 260.6 | 249.8 | 10813 ug/L | | 10813 ppb | 23:51:12 |
| 1 | Na 589.592 Radial† | 3389.8 | 3719.7 | 1460.8 ug/L | | 1460.8 ppb | 23:50:52 |
| 1 | Sr 421.552† | 17136.0 | 16404.2 | 139.58 ug/L | | 139.58 ppb | 23:50:52 |
| 1 | Sc 361.383 | 861093.9 | 861093.9 | 102.53 % | | | 23:52:10 |
| 1 | Y 371.029 | 871284.4 | 871284.4 | 121.68 % | | | 23:52:10 |
| 1 | Ag 328.068† | -5530.5 | -5647.5 | 1.8865 ug/L | | 1.8865 ppb | 23:52:15 |
| 1 | As 188.979† | -26.1 | -4.7 | 41.423 ug/L | | 41.423 ppb | 23:52:35 |
| 1 | B 249.677† | 936.2 | 1163.3 | 16.157 ug/L | | 16.157 ppb | 23:52:15 |
| 1 | Ba 233.527† | 89352.7 | 87130.3 | 820.04 ug/L | | 820.04 ppb | 23:52:15 |
| 1 | Be 313.107† | 3072.1 | 7259.0 | 8.5070 ug/L | | 8.5070 ppb | 23:52:15 |
| 1 | Cd 226.502† | 594.9 | 746.6 | 0.5322 ug/L | | 0.5322 ppb | 23:52:35 |
| 1 | Co 228.616† | 1036.8 | 1050.2 | 21.162 ug/L | | 21.162 ppb | 23:52:35 |
| 1 | Cr 267.716† | 5118.7 | 4897.5 | 74.247 ug/L | | 74.247 ppb | 23:52:35 |
| 1 | Cu 324.752† | 59405.7 | 51587.7 | 172.45 ug/L | | 172.45 ppb | 23:52:15 |
| 1 | Mn 257.610† | 1388385.2 | 1353688.8 | 1785.2 ug/L | | 1785.2 ppb | 23:52:10 |
| 1 | Mo 202.031† | -10.7 | -24.6 | 5.5424 ug/L | | 5.5424 ppb | 23:52:35 |
| 1 | Ni 231.604† | 1700.0 | 1564.4 | 48.833 ug/L | | 48.833 ppb | 23:52:35 |
| 1 | P 214.914† | 916.0 | 725.2 | 422.74 ug/L | | 422.74 ppb | 23:52:35 |
| 1 | Pb 220.353† | 793.2 | 832.5 | 123.26 ug/L | | 123.26 ppb | 23:52:35 |
| 1 | S 181.975 Axial† | 273.0 | 241.9 | 414.28 ug/L | | 414.28 ppb | 23:52:35 |
| 1 | Sb 206.836† | 53.6 | 25.7 | 0.5199 ug/L | | 0.5199 ppb | 23:52:35 |
| 1 | Se 196.026† | -375.1 | -348.9 | 28.658 ug/L | | 28.658 ppb | 23:52:35 |
| 1 | Si 251.611† | 1156919.6 | 1127859.3 | 41994 ug/L | | 41994 ppb | 23:52:10 |
| 1 | Sn 189.927† | -52.9 | -54.6 | -14.919 ug/L | | -14.919 ppb | 23:52:35 |
| 1 | Ti 334.940† | 1458296.2 | 1423411.3 | 2450.2 ug/L | | 2450.2 ppb | 23:52:10 |
| 1 | Tl 190.801† | -127.6 | -99.4 | -9.9914 ug/L | | -9.9914 ppb | 23:52:35 |
| 1 | U 409.014† | -5041.1 | -2881.6 | -95.983 ug/L | | -95.983 ppb | 23:52:10 |
| 1 | V 292.402† | 15777.0 | 16815.4 | 112.91 ug/L | | 112.91 ppb | 23:52:15 |
| 1 | Zn 213.857† | 29616.8 | 28279.9 | 320.92 ug/L | | 320.92 ppb | 23:52:15 |
| 1 | SiO2† | 1172646.0 | 1143169.8 | 91334 ug/L | | 91334 ppb | 23:53:44 |
| 2 | Sc Radial | 4190.7 | 4190.7 | 104 % | | | 23:51:38 |
| 2 | Y RADIAL | 5488.7 | 5488.7 | 121.5 % | | | 23:51:18 |
| 2 | Al 396.153Radial† | 49821.2 | 48035.4 | 51194 ug/L | | 51194 ppb | 23:51:18 |
| 2 | Ca 317.933Radial† | 7850.2 | 7539.1 | 15318 ug/L | | 15318 ppb | 23:51:18 |
| 2 | Fe 238.204 Radial† | 8017.4 | 7708.2 | 96389 ug/L | | 96389 ppb | 23:51:18 |
| 2 | K 766.490 Radial† | 42440.1 | 38047.8 | 7589.2 ug/L | | 7589.2 ppb | 23:51:18 |
| 2 | Mg 279.077 IEC† | 263.8 | 253.2 | 10961 ug/L | | 10961 ppb | 23:51:38 |
| 2 | Na 589.592 Radial† | 3351.9 | 3687.3 | 1448.1 ug/L | | 1448.1 ppb | 23:51:18 |
| 2 | Sr 421.552† | 16907.8 | 16204.7 | 137.88 ug/L | | 137.88 ppb | 23:51:18 |
| 2 | Sc 361.383 | 874380.6 | 874380.6 | 104.11 % | | | 23:52:41 |
| 2 | Y 371.029 | 884735.4 | 884735.4 | 123.55 % | | | 23:52:41 |
| 2 | Ag 328.068† | -5541.0 | -5575.6 | 2.0776 ug/L | | 2.0776 ppb | 23:52:46 |
| 2 | As 188.979† | -21.8 | -0.1 | 43.788 ug/L | | 43.788 ppb | 23:53:06 |
| 2 | B 249.677† | 932.3 | 1145.7 | 15.762 ug/L | | 15.762 ppb | 23:52:46 |
| 2 | Ba 233.527† | 89979.5 | 86408.1 | 813.25 ug/L | | 813.25 ppb | 23:52:46 |
| 2 | Be 313.107† | 3160.3 | 7298.3 | 8.5294 ug/L | | 8.5294 ppb | 23:52:46 |
| 2 | Cd 226.502† | 602.3 | 745.0 | 0.5658 ug/L | | 0.5658 ppb | 23:53:06 |
| 2 | Co 228.616† | 1019.1 | 1017.8 | 20.319 ug/L | | 20.319 ppb | 23:53:06 |
| 2 | Cr 267.716† | 5121.3 | 4824.1 | 73.233 ug/L | | 73.233 ppb | 23:53:06 |
| 2 | Cu 324.752† | 59608.1 | 50901.7 | 170.20 ug/L | | 170.20 ppb | 23:52:46 |
| 2 | Mn 257.610† | 1412135.4 | 1355924.3 | 1788.1 ug/L | | 1788.1 ppb | 23:52:41 |
| 2 | Mo 202.031† | -8.2 | -22.1 | 5.7234 ug/L | | 5.7234 ppb | 23:53:06 |
| 2 | Ni 231.604† | 1723.9 | 1562.2 | 48.763 ug/L | | 48.763 ppb | 23:53:06 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 931.7 | 726.7 | 424.57 ug/L | 424.57 ppb | 23:53:06 |
| 2 | Pb 220.353† | 809.4 | 836.2 | 123.80 ug/L | 123.80 ppb | 23:53:06 |
| 2 | S 181.975 Axial† | 290.3 | 254.5 | 436.44 ug/L | 436.44 ppb | 23:53:06 |
| 2 | Sb 206.836† | 39.7 | 11.5 | -5.5210 ug/L | -5.5210 ppb | 23:53:06 |
| 2 | Se 196.026† | -374.7 | -343.0 | 31.620 ug/L | 31.620 ppb | 23:53:06 |
| 2 | Si 251.611† | 1175682.0 | 1128734.3 | 42026 ug/L | 42026 ppb | 23:52:41 |
| 2 | Sn 189.927† | -62.3 | -62.9 | -16.739 ug/L | -16.739 ppb | 23:53:06 |
| 2 | Ti 334.940† | 1482502.4 | 1425048.6 | 2453.0 ug/L | 2453.0 ppb | 23:52:41 |
| 2 | Tl 190.801† | -122.1 | -92.2 | -7.1560 ug/L | -7.1560 ppb | 23:53:06 |
| 2 | U 409.014† | -4956.0 | -2725.1 | -91.315 ug/L | -91.315 ppb | 23:52:41 |
| 2 | V 292.402† | 15933.4 | 16731.8 | 112.36 ug/L | 112.36 ppb | 23:52:46 |
| 2 | Zn 213.857† | 29816.2 | 28032.4 | 318.06 ug/L | 318.06 ppb | 23:52:46 |
| 2 | SiO2† | 1155415.4 | 1109240.0 | 88623 ug/L | 88623 ppb | 23:53:50 |
| 3 | Sc Radial | 4182.4 | 4182.4 | 104 % | | 23:52:03 |
| 3 | Y RADIAL | 5560.4 | 5560.4 | 123.1 % | | 23:51:43 |
| 3 | Al 396.153Radial† | 50275.1 | 48569.1 | 51763 ug/L | 51763 ppb | 23:51:43 |
| 3 | Ca 317.933Radial† | 7979.6 | 7679.0 | 15602 ug/L | 15602 ppb | 23:51:43 |
| 3 | Fe 238.204 Radial† | 8104.1 | 7807.3 | 97628 ug/L | 97628 ppb | 23:51:43 |
| 3 | K 766.490 Radial† | 42787.9 | 38464.9 | 7672.3 ug/L | 7672.3 ppb | 23:51:43 |
| 3 | Mg 279.077 IEC† | 259.8 | 249.8 | 10812 ug/L | 10812 ppb | 23:52:03 |
| 3 | Na 589.592 Radial† | 3435.3 | 3774.2 | 1482.2 ug/L | 1482.2 ppb | 23:51:43 |
| 3 | Sr 421.552† | 17110.1 | 16432.4 | 139.81 ug/L | 139.81 ppb | 23:51:43 |
| 3 | Sc 361.383 | 870229.3 | 870229.3 | 103.62 % | | 23:53:12 |
| 3 | Y 371.029 | 879371.3 | 879371.3 | 122.80 % | | 23:53:12 |
| 3 | Ag 328.068† | -5591.5 | -5649.7 | 2.0917 ug/L | 2.0917 ppb | 23:53:17 |
| 3 | As 188.979† | -37.4 | -15.3 | 35.935 ug/L | 35.935 ppb | 23:53:37 |
| 3 | B 249.677† | 977.8 | 1193.8 | 16.883 ug/L | 16.883 ppb | 23:53:17 |
| 3 | Ba 233.527† | 89850.7 | 86696.1 | 815.99 ug/L | 815.99 ppb | 23:53:17 |
| 3 | Be 313.107† | 3168.3 | 7320.4 | 8.5426 ug/L | 8.5426 ppb | 23:53:17 |
| 3 | Cd 226.502† | 590.4 | 736.2 | 0.3122 ug/L | 0.3122 ppb | 23:53:37 |
| 3 | Co 228.616† | 1039.3 | 1042.0 | 20.931 ug/L | 20.931 ppb | 23:53:37 |
| 3 | Cr 267.716† | 5119.6 | 4845.9 | 73.651 ug/L | 73.651 ppb | 23:53:37 |
| 3 | Cu 324.752† | 59456.5 | 51028.5 | 170.68 ug/L | 170.68 ppb | 23:53:17 |
| 3 | Mn 257.610† | 1407770.3 | 1358182.0 | 1791.2 ug/L | 1791.2 ppb | 23:53:12 |
| 3 | Mo 202.031† | 10.4 | -4.1 | 7.4011 ug/L | 7.4011 ppb | 23:53:37 |
| 3 | Ni 231.604† | 1688.6 | 1536.1 | 47.948 ug/L | 47.948 ppb | 23:53:37 |
| 3 | P 214.914† | 926.3 | 725.7 | 422.91 ug/L | 422.91 ppb | 23:53:37 |
| 3 | Pb 220.353† | 804.0 | 834.7 | 123.53 ug/L | 123.53 ppb | 23:53:37 |
| 3 | S 181.975 Axial† | 271.2 | 237.4 | 406.39 ug/L | 406.39 ppb | 23:53:37 |
| 3 | Sb 206.836† | 39.4 | 11.4 | -5.5719 ug/L | -5.5719 ppb | 23:53:37 |
| 3 | Se 196.026† | -382.2 | -351.9 | 28.386 ug/L | 28.386 ppb | 23:53:37 |
| 3 | Si 251.611† | 1171584.8 | 1130167.1 | 42080 ug/L | 42080 ppb | 23:53:12 |
| 3 | Sn 189.927† | -62.4 | -63.3 | -16.863 ug/L | -16.863 ppb | 23:53:37 |
| 3 | Ti 334.940† | 1476601.2 | 1426146.3 | 2454.9 ug/L | 2454.9 ppb | 23:53:12 |
| 3 | Tl 190.801† | -116.9 | -87.7 | -5.4033 ug/L | -5.4033 ppb | 23:53:37 |
| 3 | U 409.014† | -5195.4 | -2978.9 | -98.923 ug/L | -98.923 ppb | 23:53:12 |
| 3 | V 292.402† | 15948.7 | 16819.6 | 112.86 ug/L | 112.86 ppb | 23:53:17 |
| 3 | Zn 213.857† | 29788.6 | 28142.4 | 319.19 ug/L | 319.19 ppb | 23:53:17 |
| 3 | SiO2† | 1155035.5 | 1114167.5 | 89016 ug/L | 89016 ppb | 23:53:56 |

Mean Data: 247899015|958053|1

| Analyte | Mean Corrected | Conc. | Calib. | Std.Dev. | Sample | Std.Dev. | RSD |
|--------------------|----------------|--------|--------|----------|------------|----------|--------|
| Sc 361.383 | 868567.9 | 103.42 | % | 0.809 | | | 0.78% |
| Sc Radial | 4189.7 | 104 | % | 0.2 | | | 0.16% |
| Y 371.029 | 878463.7 | 122.68 | % | 0.946 | | | 0.77% |
| Y RADIAL | 5540.7 | 122.6 | % | 1.01 | | | 0.82% |
| Ag 328.068† | -5624.3 | 2.0186 | ug/L | 0.11460 | 2.0186 ppb | 0.11460 | 5.68% |
| Al 396.153Radial† | 48361.0 | 51541 | ug/L | 304.4 | 51541 ppb | 304.4 | 0.59% |
| As 188.979† | -6.7 | 40.382 | ug/L | 4.0285 | 40.382 ppb | 4.0285 | 9.98% |
| B 249.677† | 1167.6 | 16.267 | ug/L | 0.5684 | 16.267 ppb | 0.5684 | 3.49% |
| Ba 233.527† | 86744.8 | 816.42 | ug/L | 3.415 | 816.42 ppb | 3.415 | 0.42% |
| Be 313.107† | 7292.6 | 8.5263 | ug/L | 0.01799 | 8.5263 ppb | 0.01799 | 0.21% |
| Ca 317.933Radial† | 7609.6 | 15461 | ug/L | 142.1 | 15461 ppb | 142.1 | 0.92% |
| Cd 226.502† | 742.6 | 0.4701 | ug/L | 0.13776 | 0.4701 ppb | 0.13776 | 29.31% |
| Co 228.616† | 1036.6 | 20.804 | ug/L | 0.4357 | 20.804 ppb | 0.4357 | 2.09% |
| Cr 267.716† | 4855.8 | 73.710 | ug/L | 0.5098 | 73.710 ppb | 0.5098 | 0.69% |
| Cu 324.752† | 51172.6 | 171.11 | ug/L | 1.188 | 171.11 ppb | 1.188 | 0.69% |
| Fe 238.204 Radial† | 7755.6 | 96982 | ug/L | 621.0 | 96982 ppb | 621.0 | 0.64% |
| K 766.490 Radial† | 38278.8 | 7635.2 | ug/L | 42.30 | 7635.2 ppb | 42.30 | 0.55% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 251.0 | 10862 ug/L | 85.7 | 10862 ppb | 85.7 | 0.79% |
| Mn 257.610† | 1355931.7 | 1788.2 ug/L | 2.98 | 1788.2 ppb | 2.98 | 0.17% |
| Mo 202.031† | -17.0 | 6.2223 ug/L | 1.02484 | 6.2223 ppb | 1.02484 | 16.47% |
| Na 589.592 Radial† | 3727.1 | 1463.7 ug/L | 17.24 | 1463.7 ppb | 17.24 | 1.18% |
| Ni 231.604† | 1554.2 | 48.515 ug/L | 0.4919 | 48.515 ppb | 0.4919 | 1.01% |
| P 214.914† | 725.9 | 423.40 ug/L | 1.013 | 423.40 ppb | 1.013 | 0.24% |
| Pb 220.353† | 834.5 | 123.53 ug/L | 0.270 | 123.53 ppb | 0.270 | 0.22% |
| S 181.975 Axial† | 244.6 | 419.04 ug/L | 15.575 | 419.04 ppb | 15.575 | 3.72% |
| Sb 206.836† | 16.2 | -3.5243 ug/L | 3.50251 | -3.5243 ppb | 3.50251 | 99.38% |
| Se 196.026† | -347.9 | 29.555 ug/L | 1.7938 | 29.555 ppb | 1.7938 | 6.07% |
| Si 251.611† | 1128920.2 | 42033 ug/L | 43.4 | 42033 ppb | 43.4 | 0.10% |
| Sn 189.927† | -60.3 | -16.174 ug/L | 1.0880 | -16.174 ppb | 1.0880 | 6.73% |
| Sr 421.552† | 16347.1 | 139.09 ug/L | 1.056 | 139.09 ppb | 1.056 | 0.76% |
| Ti 334.940† | 1424868.7 | 2452.7 ug/L | 2.38 | 2452.7 ppb | 2.38 | 0.10% |
| Tl 190.801† | -93.1 | -7.5169 ug/L | 2.31528 | -7.5169 ppb | 2.31528 | 30.80% |
| U 409.014† | -2861.9 | -95.407 ug/L | 3.8365 | -95.407 ppb | 3.8365 | 4.02% |
| V 292.402† | 16788.9 | 112.71 ug/L | 0.305 | 112.71 ppb | 0.305 | 0.27% |
| Zn 213.857† | 28151.6 | 319.39 ug/L | 1.438 | 319.39 ppb | 1.438 | 0.45% |
| SiO2† | 1122192.5 | 89658 ug/L | 1464.7 | 89658 ppb | 1464.7 | 1.63% |

Sequence No.: 64

Sample ID: 247899016|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 87

Date Collected: 3/25/2010 23:56:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899016|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4446.7 | 4446.7 | 110 % | | 23:58:00 |
| 1 | Y RADIAL | 6832.9 | 6832.9 | 151.2 % | | 23:58:00 |
| 1 | Al 396.153Radial† | 71936.1 | 65336.3 | 69633 ug/L | 69633 ppb | 23:58:00 |
| 1 | Ca 317.933Radial† | 8298.6 | 7510.8 | 15260 ug/L | 15260 ppb | 23:58:00 |
| 1 | Fe 238.204 Radial† | 9710.2 | 8799.5 | 110040 ug/L | 110040 ppb | 23:58:00 |
| 1 | K 766.490 Radial† | 41645.0 | 34974.9 | 6976.0 ug/L | 6976.0 ppb | 23:58:00 |
| 1 | Mg 279.077 IEC† | 309.3 | 279.9 | 12111 ug/L | 12111 ppb | 23:58:20 |
| 1 | Na 589.592 Radial† | 2721.4 | 2929.6 | 1150.5 ug/L | 1150.5 ppb | 23:58:00 |
| 1 | Sr 421.552† | 13963.9 | 12597.3 | 107.16 ug/L | 107.16 ppb | 23:58:00 |
| 1 | Sc 361.383 | 884497.5 | 884497.5 | 105.32 % | | 23:59:17 |
| 1 | Y 371.029 | 1067142.2 | 1067142.2 | 149.03 % | | 23:59:17 |
| 1 | Ag 328.068† | -6842.6 | -6750.6 | 0.5886 ug/L | 0.5886 ppb | 23:59:22 |
| 1 | As 188.979† | -15.0 | 6.6 | 49.899 ug/L | 49.899 ppb | 23:59:42 |
| 1 | B 249.677† | 704.3 | 918.9 | 7.3425 ug/L | 7.3425 ppb | 23:59:22 |
| 1 | Ba 233.527† | 32645.4 | 30979.2 | 294.03 ug/L | 294.03 ppb | 23:59:22 |
| 1 | Be 313.107† | 20570.6 | 23795.1 | 15.053 ug/L | 15.053 ppb | 23:59:22 |
| 1 | Cd 226.502† | 739.3 | 868.4 | 0.8609 ug/L | 0.8609 ppb | 23:59:42 |
| 1 | Co 228.616† | 616.0 | 623.8 | 9.7539 ug/L | 9.7539 ppb | 23:59:42 |
| 1 | Cr 267.716† | 9370.9 | 8803.0 | 126.59 ug/L | 126.59 ppb | 23:59:22 |
| 1 | Cu 324.752† | 30039.1 | 22170.2 | 77.926 ug/L | 77.926 ppb | 23:59:22 |
| 1 | Mn 257.610† | 1191596.6 | 1131002.2 | 1494.3 ug/L | 1494.3 ppb | 23:59:17 |
| 1 | Mo 202.031† | -15.2 | -28.6 | 6.2085 ug/L | 6.2085 ppb | 23:59:42 |
| 1 | Ni 231.604† | 2982.0 | 2737.9 | 85.480 ug/L | 85.480 ppb | 23:59:42 |
| 1 | P 214.914† | 1003.8 | 785.0 | 478.56 ug/L | 478.56 ppb | 23:59:42 |
| 1 | Pb 220.353† | 470.2 | 505.3 | 76.102 ug/L | 76.102 ppb | 23:59:42 |
| 1 | S 181.975 Axial† | 145.2 | 113.5 | 185.85 ug/L | 185.85 ppb | 23:59:42 |
| 1 | Sb 206.836† | 44.3 | 15.5 | -4.2061 ug/L | -4.2061 ppb | 23:59:42 |
| 1 | Se 196.026† | -461.8 | -421.6 | 16.429 ug/L | 16.429 ppb | 23:59:42 |
| 1 | Si 251.611† | 1265462.1 | 1201066.5 | 44719 ug/L | 44719 ppb | 23:59:17 |
| 1 | Sn 189.927† | -52.3 | -52.7 | -15.287 ug/L | -15.287 ppb | 23:59:42 |
| 1 | Ti 334.940† | 1452794.1 | 1380552.4 | 2376.4 ug/L | 2376.4 ppb | 23:59:17 |
| 1 | Tl 190.801† | -110.3 | -79.7 | -4.2926 ug/L | -4.2926 ppb | 23:59:42 |
| 1 | U 409.014† | -15957.7 | -13117.1 | -398.76 ug/L | -398.76 ppb | 23:59:17 |
| 1 | V 292.402† | 14923.5 | 15597.9 | 101.12 ug/L | 101.12 ppb | 23:59:22 |
| 1 | Zn 213.857† | 42065.3 | 39335.8 | 450.19 ug/L | 450.19 ppb | 23:59:22 |
| 1 | SiO2† | 1252145.6 | 1188394.2 | 94947 ug/L | 94947 ppb | 00:00:51 |
| 2 | Sc Radial | 4367.0 | 4367.0 | 108 % | | 23:58:25 |
| 2 | Y RADIAL | 6766.3 | 6766.3 | 149.8 % | | 23:58:25 |
| 2 | Al 396.153Radial† | 70972.8 | 65638.3 | 69955 ug/L | 69955 ppb | 23:58:25 |
| 2 | Ca 317.933Radial† | 8206.7 | 7563.5 | 15367 ug/L | 15367 ppb | 23:58:25 |
| 2 | Fe 238.204 Radial† | 9590.9 | 8850.2 | 110670 ug/L | 110670 ppb | 23:58:25 |
| 2 | K 766.490 Radial† | 41256.8 | 35306.3 | 7042.1 ug/L | 7042.1 ppb | 23:58:25 |
| 2 | Mg 279.077 IEC† | 303.7 | 279.8 | 12107 ug/L | 12107 ppb | 23:58:45 |
| 2 | Na 589.592 Radial† | 2681.3 | 2937.6 | 1153.6 ug/L | 1153.6 ppb | 23:58:25 |
| 2 | Sr 421.552† | 13775.7 | 12654.8 | 107.65 ug/L | 107.65 ppb | 23:58:25 |
| 2 | Sc 361.383 | 885005.6 | 885005.6 | 105.38 % | | 23:59:48 |
| 2 | Y 371.029 | 1068331.1 | 1068331.1 | 149.19 % | | 23:59:48 |
| 2 | Ag 328.068† | -6738.1 | -6647.7 | 1.2988 ug/L | 1.2988 ppb | 23:59:54 |
| 2 | As 188.979† | -3.9 | 17.2 | 55.713 ug/L | 55.713 ppb | 00:00:14 |
| 2 | B 249.677† | 718.5 | 932.1 | 7.6015 ug/L | 7.6015 ppb | 23:59:54 |
| 2 | Ba 233.527† | 32398.7 | 30727.4 | 291.68 ug/L | 291.68 ppb | 23:59:54 |
| 2 | Be 313.107† | 20294.3 | 23521.6 | 14.947 ug/L | 14.947 ppb | 23:59:54 |
| 2 | Cd 226.502† | 729.1 | 858.3 | 0.6527 ug/L | 0.6527 ppb | 00:00:14 |
| 2 | Co 228.616† | 613.3 | 620.9 | 9.6702 ug/L | 9.6702 ppb | 00:00:14 |
| 2 | Cr 267.716† | 9279.7 | 8711.3 | 125.46 ug/L | 125.46 ppb | 23:59:54 |
| 2 | Cu 324.752† | 29997.5 | 22114.4 | 77.779 ug/L | 77.779 ppb | 23:59:54 |
| 2 | Mn 257.610† | 1193133.1 | 1131810.8 | 1495.4 ug/L | 1495.4 ppb | 23:59:48 |
| 2 | Mo 202.031† | 10.0 | -4.7 | 8.3580 ug/L | 8.3580 ppb | 00:00:14 |
| 2 | Ni 231.604† | 2986.6 | 2740.7 | 85.568 ug/L | 85.568 ppb | 00:00:14 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1006.6 | 787.0 | 479.63 ug/L | 479.63 ppb | 00:00:14 |
| 2 | Pb 220.353† | 463.0 | 498.2 | 75.019 ug/L | 75.019 ppb | 00:00:14 |
| 2 | S 181.975 Axial† | 151.0 | 118.9 | 195.35 ug/L | 195.35 ppb | 00:00:14 |
| 2 | Sb 206.836† | 46.6 | 17.6 | -3.2604 ug/L | -3.2604 ppb | 00:00:14 |
| 2 | Se 196.026† | -449.1 | -409.3 | 28.261 ug/L | 28.261 ppb | 00:00:14 |
| 2 | Si 251.611† | 1268301.0 | 1203070.8 | 44794 ug/L | 44794 ppb | 23:59:48 |
| 2 | Sn 189.927† | -51.1 | -51.6 | -15.046 ug/L | -15.046 ppb | 00:00:14 |
| 2 | Ti 334.940† | 1454819.8 | 1381682.8 | 2378.4 ug/L | 2378.4 ppb | 23:59:48 |
| 2 | Tl 190.801† | -115.1 | -84.2 | -6.0189 ug/L | -6.0189 ppb | 00:00:14 |
| 2 | U 409.014† | -15982.3 | -13131.8 | -399.27 ug/L | -399.27 ppb | 23:59:48 |
| 2 | V 292.402† | 14804.9 | 15477.2 | 100.12 ug/L | 100.12 ppb | 23:59:54 |
| 2 | Zn 213.857† | 41796.7 | 39057.9 | 446.80 ug/L | 446.80 ppb | 23:59:54 |
| 2 | SiO2† | 1253706.6 | 1189193.0 | 95011 ug/L | 95011 ppb | 00:00:57 |
| 3 | Sc Radial | 4362.5 | 4362.5 | 108 % | | 23:58:50 |
| 3 | Y RADIAL | 6715.1 | 6715.1 | 148.6 % | | 23:58:50 |
| 3 | Al 396.153Radial† | 70629.6 | 65388.2 | 69688 ug/L | 69688 ppb | 23:58:50 |
| 3 | Ca 317.933Radial† | 8147.6 | 7516.6 | 15272 ug/L | 15272 ppb | 23:58:50 |
| 3 | Fe 238.204 Radial† | 9569.9 | 8839.9 | 110540 ug/L | 110540 ppb | 23:58:50 |
| 3 | K 766.490 Radial† | 41086.2 | 35187.6 | 7018.4 ug/L | 7018.4 ppb | 23:58:50 |
| 3 | Mg 279.077 IEC† | 307.6 | 283.7 | 12277 ug/L | 12277 ppb | 23:59:10 |
| 3 | Na 589.592 Radial† | 2645.3 | 2906.8 | 1141.6 ug/L | 1141.6 ppb | 23:58:50 |
| 3 | Sr 421.552† | 13715.3 | 12612.0 | 107.28 ug/L | 107.28 ppb | 23:58:50 |
| 3 | Sc 361.383 | 878226.4 | 878226.4 | 104.57 % | | 00:00:20 |
| 3 | Y 371.029 | 1058859.9 | 1058859.9 | 147.87 % | | 00:00:20 |
| 3 | Ag 328.068† | -6741.9 | -6700.7 | 0.9996 ug/L | 0.9996 ppb | 00:00:25 |
| 3 | As 188.979† | -5.3 | 15.8 | 54.962 ug/L | 54.962 ppb | 00:00:45 |
| 3 | B 249.677† | 731.8 | 950.0 | 8.1159 ug/L | 8.1159 ppb | 00:00:25 |
| 3 | Ba 233.527† | 32207.1 | 30781.5 | 292.19 ug/L | 292.19 ppb | 00:00:25 |
| 3 | Be 313.107† | 20240.6 | 23619.0 | 14.988 ug/L | 14.988 ppb | 00:00:25 |
| 3 | Cd 226.502† | 709.5 | 844.9 | 0.4755 ug/L | 0.4755 ppb | 00:00:45 |
| 3 | Co 228.616† | 618.9 | 630.8 | 9.9243 ug/L | 9.9243 ppb | 00:00:45 |
| 3 | Cr 267.716† | 9226.3 | 8728.2 | 125.67 ug/L | 125.67 ppb | 00:00:25 |
| 3 | Cu 324.752† | 29926.5 | 22266.2 | 78.268 ug/L | 78.268 ppb | 00:00:25 |
| 3 | Mn 257.610† | 1185562.1 | 1133310.7 | 1497.4 ug/L | 1497.4 ppb | 00:00:20 |
| 3 | Mo 202.031† | -5.7 | -19.6 | 7.0366 ug/L | 7.0366 ppb | 00:00:45 |
| 3 | Ni 231.604† | 2968.5 | 2745.2 | 85.710 ug/L | 85.710 ppb | 00:00:45 |
| 3 | P 214.914† | 999.2 | 787.3 | 479.81 ug/L | 479.81 ppb | 00:00:45 |
| 3 | Pb 220.353† | 483.5 | 521.2 | 78.438 ug/L | 78.438 ppb | 00:00:45 |
| 3 | S 181.975 Axial† | 150.6 | 119.6 | 196.65 ug/L | 196.65 ppb | 00:00:45 |
| 3 | Sb 206.836† | 48.6 | 19.8 | -2.3720 ug/L | -2.3720 ppb | 00:00:45 |
| 3 | Se 196.026† | -458.1 | -421.2 | 18.284 ug/L | 18.284 ppb | 00:00:45 |
| 3 | Si 251.611† | 1258370.2 | 1202864.7 | 44786 ug/L | 44786 ppb | 00:00:20 |
| 3 | Sn 189.927† | -56.0 | -56.7 | -16.184 ug/L | -16.184 ppb | 00:00:45 |
| 3 | Ti 334.940† | 1444119.5 | 1382107.1 | 2379.1 ug/L | 2379.1 ppb | 00:00:20 |
| 3 | Tl 190.801† | -116.2 | -86.1 | -6.7293 ug/L | -6.7293 ppb | 00:00:45 |
| 3 | U 409.014† | -16128.7 | -13388.9 | -406.82 ug/L | -406.82 ppb | 00:00:20 |
| 3 | V 292.402† | 14704.0 | 15489.1 | 100.20 ug/L | 100.20 ppb | 00:00:25 |
| 3 | Zn 213.857† | 41746.7 | 39316.3 | 449.89 ug/L | 449.89 ppb | 00:00:25 |
| 3 | SiO2† | 1256756.2 | 1201293.3 | 95977 ug/L | 95977 ppb | 00:01:03 |

Mean Data: 247899016|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Sample | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|-------------|--------|----------|--------|
| Sc 361.383 | 882576.5 | 105.09 % | | 0.450 | | | | 0.43% |
| Sc Radial | 4392.1 | 109 % | | 1.2 | | | | 1.08% |
| Y 371.029 | 1064777.7 | 148.70 % | | 0.721 | | | | 0.48% |
| Y RADIAL | 6771.5 | 149.9 % | | 1.31 | | | | 0.87% |
| Ag 328.068† | -6699.7 | 0.9623 ug/L | | 0.35652 | 0.9623 ppb | | 0.35652 | 37.05% |
| Al 396.153Radial† | 65454.3 | 69758 ug/L | | 172.1 | 69758 ppb | | 172.1 | 0.25% |
| As 188.979† | 13.2 | 53.525 ug/L | | 3.1623 | 53.525 ppb | | 3.1623 | 5.91% |
| B 249.677† | 933.7 | 7.6867 ug/L | | 0.39370 | 7.6867 ppb | | 0.39370 | 5.12% |
| Ba 233.527† | 30829.3 | 292.63 ug/L | | 1.234 | 292.63 ppb | | 1.234 | 0.42% |
| Be 313.107† | 23645.2 | 14.996 ug/L | | 0.0538 | 14.996 ppb | | 0.0538 | 0.36% |
| Ca 317.933Radial† | 7530.3 | 15300 ug/L | | 58.7 | 15300 ppb | | 58.7 | 0.38% |
| Cd 226.502† | 857.2 | 0.6630 ug/L | | 0.19287 | 0.6630 ppb | | 0.19287 | 29.09% |
| Co 228.616† | 625.2 | 9.7828 ug/L | | 0.12945 | 9.7828 ppb | | 0.12945 | 1.32% |
| Cr 267.716† | 8747.5 | 125.91 ug/L | | 0.600 | 125.91 ppb | | 0.600 | 0.48% |
| Cu 324.752† | 22183.6 | 77.991 ug/L | | 0.2512 | 77.991 ppb | | 0.2512 | 0.32% |
| Fe 238.204 Radial† | 8829.9 | 110420 ug/L | | 335.0 | 110420 ppb | | 335.0 | 0.30% |
| K 766.490 Radial† | 35156.3 | 7012.2 ug/L | | 33.50 | 7012.2 ppb | | 33.50 | 0.48% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 281.1 | 12165 ug/L | 97.2 | 12165 ppb | 97.2 | 0.80% |
| Mn 257.610† | 1132041.2 | 1495.7 ug/L | 1.55 | 1495.7 ppb | 1.55 | 0.10% |
| Mo 202.031† | -17.7 | 7.2010 ug/L | 1.08413 | 7.2010 ppb | 1.08413 | 15.06% |
| Na 589.592 Radial† | 2924.7 | 1148.6 ug/L | 6.27 | 1148.6 ppb | 6.27 | 0.55% |
| Ni 231.604† | 2741.3 | 85.586 ug/L | 0.1159 | 85.586 ppb | 0.1159 | 0.14% |
| P 214.914† | 786.4 | 479.33 ug/L | 0.671 | 479.33 ppb | 0.671 | 0.14% |
| Pb 220.353† | 508.2 | 76.520 ug/L | 1.7476 | 76.520 ppb | 1.7476 | 2.28% |
| S 181.975 Axial† | 117.3 | 192.62 ug/L | 5.897 | 192.62 ppb | 5.897 | 3.06% |
| Sb 206.836† | 17.6 | -3.2795 ug/L | 0.91722 | -3.2795 ppb | 0.91722 | 27.97% |
| Se 196.026† | -417.3 | 20.992 ug/L | 6.3639 | 20.992 ppb | 6.3639 | 30.32% |
| Si 251.611† | 1202334.0 | 44767 ug/L | 41.0 | 44767 ppb | 41.0 | 0.09% |
| Sn 189.927† | -53.7 | -15.506 ug/L | 0.5998 | -15.506 ppb | 0.5998 | 3.87% |
| Sr 421.552† | 12621.4 | 107.36 ug/L | 0.254 | 107.36 ppb | 0.254 | 0.24% |
| Ti 334.940† | 1381447.4 | 2378.0 ug/L | 1.38 | 2378.0 ppb | 1.38 | 0.06% |
| Tl 190.801† | -83.3 | -5.6803 ug/L | 1.25315 | -5.6803 ppb | 1.25315 | 22.06% |
| U 409.014† | -13212.6 | -401.62 ug/L | 4.511 | -401.62 ppb | 4.511 | 1.12% |
| V 292.402† | 15521.4 | 100.48 ug/L | 0.553 | 100.48 ppb | 0.553 | 0.55% |
| Zn 213.857† | 39236.7 | 448.96 ug/L | 1.878 | 448.96 ppb | 1.878 | 0.42% |
| SiO2† | 1192960.2 | 95312 ug/L | 577.5 | 95312 ppb | 577.5 | 0.61% |

Sequence No.: 65

Sample ID: 247899017|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 88

Date Collected: 3/26/2010 00:03:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899017|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4156.2 | 4156.2 | 103 % | | 00:05:28 |
| 1 | Y RADIAL | 5133.3 | 5133.3 | 113.6 % | | 00:05:08 |
| 1 | Al 396.153Radial† | 37848.3 | 36813.4 | 39234 ug/L | 39234 ppb | 00:05:08 |
| 1 | Ca 317.933Radial† | 7733.9 | 7488.9 | 15216 ug/L | 15216 ppb | 00:05:08 |
| 1 | Fe 238.204 Radial† | 5710.3 | 5533.1 | 69191 ug/L | 69191 ppb | 00:05:08 |
| 1 | K 766.490 Radial† | 35815.5 | 31957.6 | 6373.6 ug/L | 6373.6 ppb | 00:05:08 |
| 1 | Mg 279.077 IEC† | 179.5 | 173.5 | 7507.1 ug/L | 7507.1 ppb | 00:05:28 |
| 1 | Na 589.592 Radial† | 1500.7 | 1917.4 | 752.97 ug/L | 752.97 ppb | 00:05:08 |
| 1 | Sr 421.552† | 15035.8 | 14523.0 | 123.56 ug/L | 123.56 ppb | 00:05:08 |
| 1 | Sc 361.383 | 850557.6 | 850557.6 | 101.27 % | | 00:06:26 |
| 1 | Y 371.029 | 813365.1 | 813365.1 | 113.59 % | | 00:06:26 |
| 1 | Ag 328.068† | -3758.1 | -3964.2 | 1.5271 ug/L | 1.5271 ppb | 00:06:31 |
| 1 | As 188.979† | -24.0 | -2.8 | 32.234 ug/L | 32.234 ppb | 00:06:51 |
| 1 | B 249.677† | 360.7 | 606.3 | 5.3666 ug/L | 5.3666 ppb | 00:06:31 |
| 1 | Ba 233.527† | 63147.7 | 62334.6 | 586.68 ug/L | 586.68 ppb | 00:06:31 |
| 1 | Be 313.107† | 27049.0 | 30971.4 | 17.173 ug/L | 17.173 ppb | 00:06:31 |
| 1 | Cd 226.502† | 537.7 | 697.3 | 2.7823 ug/L | 2.7823 ppb | 00:06:51 |
| 1 | Co 228.616† | 832.2 | 860.6 | 17.337 ug/L | 17.337 ppb | 00:06:51 |
| 1 | Cr 267.716† | 17636.6 | 17319.7 | 232.92 ug/L | 232.92 ppb | 00:06:31 |
| 1 | Cu 324.752† | 106184.0 | 98495.2 | 322.99 ug/L | 322.99 ppb | 00:06:31 |
| 1 | Mn 257.610† | 1491701.9 | 1472480.0 | 1938.5 ug/L | 1938.5 ppb | 00:06:26 |
| 1 | Mo 202.031† | 12.8 | -1.6 | 5.4145 ug/L | 5.4145 ppb | 00:06:51 |
| 1 | Ni 231.604† | 3986.7 | 3842.9 | 119.98 ug/L | 119.98 ppb | 00:06:51 |
| 1 | P 214.914† | 1011.8 | 830.9 | 487.68 ug/L | 487.68 ppb | 00:06:51 |
| 1 | Pb 220.353† | 1306.9 | 1349.2 | 202.28 ug/L | 202.28 ppb | 00:06:51 |
| 1 | S 181.975 Axial† | 246.2 | 218.7 | 376.02 ug/L | 376.02 ppb | 00:06:51 |
| 1 | Sb 206.836† | 62.1 | 34.7 | 6.3191 ug/L | 6.3191 ppb | 00:06:51 |
| 1 | Se 196.026† | -282.8 | -262.3 | 10.846 ug/L | 10.846 ppb | 00:06:51 |
| 1 | Si 251.611† | 1015746.9 | 1002440.8 | 37324 ug/L | 37324 ppb | 00:06:26 |
| 1 | Sn 189.927† | -76.7 | -78.8 | -18.726 ug/L | -18.726 ppb | 00:06:51 |
| 1 | Ti 334.940† | 1191239.5 | 1177334.0 | 2026.9 ug/L | 2026.9 ppb | 00:06:26 |
| 1 | Tl 190.801† | -109.9 | -83.5 | -6.5203 ug/L | -6.5203 ppb | 00:06:51 |
| 1 | U 409.014† | 1088.5 | 3110.0 | 83.118 ug/L | 83.118 ppb | 00:06:26 |
| 1 | V 292.402† | 11468.8 | 12752.0 | 86.317 ug/L | 86.317 ppb | 00:06:31 |
| 1 | Zn 213.857† | 28339.0 | 27376.0 | 313.67 ug/L | 313.67 ppb | 00:06:31 |
| 1 | SiO2† | 1027721.5 | 1014236.8 | 81033 ug/L | 81033 ppb | 00:07:59 |
| 2 | Sc Radial | 4145.3 | 4145.3 | 103 % | | 00:05:53 |
| 2 | Y RADIAL | 5152.3 | 5152.3 | 114.0 % | | 00:05:33 |
| 2 | Al 396.153Radial† | 37986.9 | 37045.4 | 39481 ug/L | 39481 ppb | 00:05:33 |
| 2 | Ca 317.933Radial† | 7759.7 | 7533.9 | 15307 ug/L | 15307 ppb | 00:05:33 |
| 2 | Fe 238.204 Radial† | 5744.7 | 5581.2 | 69792 ug/L | 69792 ppb | 00:05:33 |
| 2 | K 766.490 Radial† | 35848.6 | 32081.6 | 6398.4 ug/L | 6398.4 ppb | 00:05:33 |
| 2 | Mg 279.077 IEC† | 180.7 | 175.1 | 7576.2 ug/L | 7576.2 ppb | 00:05:53 |
| 2 | Na 589.592 Radial† | 1478.7 | 1899.9 | 746.11 ug/L | 746.11 ppb | 00:05:33 |
| 2 | Sr 421.552† | 15091.1 | 14615.4 | 124.34 ug/L | 124.34 ppb | 00:05:33 |
| 2 | Sc 361.383 | 861126.3 | 861126.3 | 102.53 % | | 00:06:57 |
| 2 | Y 371.029 | 822380.9 | 822380.9 | 114.85 % | | 00:06:57 |
| 2 | Ag 328.068† | -3780.8 | -3940.8 | 1.8327 ug/L | 1.8327 ppb | 00:07:02 |
| 2 | As 188.979† | -20.2 | 1.1 | 34.492 ug/L | 34.492 ppb | 00:07:22 |
| 2 | B 249.677† | 336.5 | 578.3 | 4.4995 ug/L | 4.4995 ppb | 00:07:02 |
| 2 | Ba 233.527† | 63277.4 | 61695.9 | 580.71 ug/L | 580.71 ppb | 00:07:02 |
| 2 | Be 313.107† | 27165.8 | 30757.4 | 17.088 ug/L | 17.088 ppb | 00:07:02 |
| 2 | Cd 226.502† | 536.0 | 689.1 | 2.6024 ug/L | 2.6024 ppb | 00:07:22 |
| 2 | Co 228.616† | 844.8 | 862.9 | 17.385 ug/L | 17.385 ppb | 00:07:22 |
| 2 | Cr 267.716† | 17650.0 | 17119.1 | 230.38 ug/L | 230.38 ppb | 00:07:02 |
| 2 | Cu 324.752† | 106193.6 | 97217.7 | 318.88 ug/L | 318.88 ppb | 00:07:02 |
| 2 | Mn 257.610† | 1510491.5 | 1472727.9 | 1938.9 ug/L | 1938.9 ppb | 00:06:57 |
| 2 | Mo 202.031† | 17.4 | 2.8 | 5.8482 ug/L | 5.8482 ppb | 00:07:22 |
| 2 | Ni 231.604† | 3986.7 | 3794.6 | 118.47 ug/L | 118.47 ppb | 00:07:22 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1009.7 | 816.5 | 477.74 ug/L | 477.74 ppb | 00:07:22 |
| 2 | Pb 220.353† | 1292.6 | 1319.5 | 197.77 ug/L | 197.77 ppb | 00:07:22 |
| 2 | S 181.975 Axial† | 245.1 | 214.6 | 368.80 ug/L | 368.80 ppb | 00:07:22 |
| 2 | Sb 206.836† | 66.8 | 38.5 | 7.9235 ug/L | 7.9235 ppb | 00:07:22 |
| 2 | Se 196.026† | -269.9 | -246.3 | 25.459 ug/L | 25.459 ppb | 00:07:22 |
| 2 | Si 251.611† | 1028936.3 | 1002994.8 | 37345 ug/L | 37345 ppb | 00:06:57 |
| 2 | Sn 189.927† | -79.6 | -80.7 | -19.158 ug/L | -19.158 ppb | 00:07:22 |
| 2 | Ti 334.940† | 1206369.4 | 1177653.8 | 2027.5 ug/L | 2027.5 ppb | 00:06:57 |
| 2 | Tl 190.801† | -102.4 | -74.8 | -3.1472 ug/L | -3.1472 ppb | 00:07:22 |
| 2 | U 409.014† | 938.2 | 2950.2 | 78.352 ug/L | 78.352 ppb | 00:06:57 |
| 2 | V 292.402† | 11578.0 | 12719.5 | 85.978 ug/L | 85.978 ppb | 00:07:02 |
| 2 | Zn 213.857† | 28371.9 | 27064.6 | 309.90 ug/L | 309.90 ppb | 00:07:02 |
| 2 | SiO2† | 1036179.4 | 1010031.1 | 80696 ug/L | 80696 ppb | 00:08:05 |
| 3 | Sc Radial | 4105.1 | 4105.1 | 102 % | | 00:06:18 |
| 3 | Y RADIAL | 5221.8 | 5221.8 | 115.6 % | | 00:05:58 |
| 3 | Al 396.153Radial† | 38472.7 | 37884.8 | 40376 ug/L | 40376 ppb | 00:05:58 |
| 3 | Ca 317.933Radial† | 7844.8 | 7691.5 | 15627 ug/L | 15627 ppb | 00:05:58 |
| 3 | Fe 238.204 Radial† | 5737.7 | 5629.1 | 70391 ug/L | 70391 ppb | 00:05:58 |
| 3 | K 766.490 Radial† | 36206.1 | 32774.6 | 6536.6 ug/L | 6536.6 ppb | 00:05:58 |
| 3 | Mg 279.077 IEC† | 177.5 | 173.8 | 7517.0 ug/L | 7517.0 ppb | 00:06:18 |
| 3 | Na 589.592 Radial† | 1573.2 | 2006.8 | 788.10 ug/L | 788.10 ppb | 00:05:58 |
| 3 | Sr 421.552† | 15245.3 | 14910.8 | 126.86 ug/L | 126.86 ppb | 00:05:58 |
| 3 | Sc 361.383 | 866359.5 | 866359.5 | 103.16 % | | 00:07:28 |
| 3 | Y 371.029 | 826832.9 | 826832.9 | 115.47 % | | 00:07:28 |
| 3 | Ag 328.068† | -3753.9 | -3892.4 | 2.2472 ug/L | 2.2472 ppb | 00:07:33 |
| 3 | As 188.979† | -21.7 | -0.2 | 33.946 ug/L | 33.946 ppb | 00:07:53 |
| 3 | B 249.677† | 426.1 | 663.3 | 6.7366 ug/L | 6.7366 ppb | 00:07:33 |
| 3 | Ba 233.527† | 62783.9 | 60844.7 | 572.74 ug/L | 572.74 ppb | 00:07:33 |
| 3 | Be 313.107† | 26929.5 | 30368.4 | 16.927 ug/L | 16.927 ppb | 00:07:33 |
| 3 | Cd 226.502† | 534.0 | 684.1 | 2.4694 ug/L | 2.4694 ppb | 00:07:53 |
| 3 | Co 228.616† | 846.9 | 859.9 | 17.297 ug/L | 17.297 ppb | 00:07:53 |
| 3 | Cr 267.716† | 17506.0 | 16875.5 | 227.26 ug/L | 227.26 ppb | 00:07:33 |
| 3 | Cu 324.752† | 105435.7 | 95857.4 | 314.50 ug/L | 314.50 ppb | 00:07:33 |
| 3 | Mn 257.610† | 1517378.3 | 1470505.4 | 1936.0 ug/L | 1936.0 ppb | 00:07:28 |
| 3 | Mo 202.031† | 0.1 | -14.1 | 4.4097 ug/L | 4.4097 ppb | 00:07:53 |
| 3 | Ni 231.604† | 3962.6 | 3747.8 | 117.01 ug/L | 117.01 ppb | 00:07:53 |
| 3 | P 214.914† | 1003.5 | 804.6 | 469.80 ug/L | 469.80 ppb | 00:07:53 |
| 3 | Pb 220.353† | 1254.7 | 1275.1 | 191.20 ug/L | 191.20 ppb | 00:07:53 |
| 3 | S 181.975 Axial† | 240.8 | 209.0 | 358.85 ug/L | 358.85 ppb | 00:07:53 |
| 3 | Sb 206.836† | 55.4 | 27.1 | 3.0064 ug/L | 3.0064 ppb | 00:07:53 |
| 3 | Se 196.026† | -266.8 | -241.7 | 31.241 ug/L | 31.241 ppb | 00:07:53 |
| 3 | Si 251.611† | 1034481.9 | 1002309.1 | 37319 ug/L | 37319 ppb | 00:07:28 |
| 3 | Sn 189.927† | -82.7 | -83.3 | -19.707 ug/L | -19.707 ppb | 00:07:53 |
| 3 | Ti 334.940† | 1212970.1 | 1176945.6 | 2026.3 ug/L | 2026.3 ppb | 00:07:28 |
| 3 | Tl 190.801† | -111.9 | -83.4 | -6.4963 ug/L | -6.4963 ppb | 00:07:53 |
| 3 | U 409.014† | 1054.0 | 3057.0 | 81.433 ug/L | 81.433 ppb | 00:07:28 |
| 3 | V 292.402† | 11393.1 | 12472.1 | 83.969 ug/L | 83.969 ppb | 00:07:33 |
| 3 | Zn 213.857† | 28196.9 | 26727.8 | 305.82 ug/L | 305.82 ppb | 00:07:33 |
| 3 | SiO2† | 1031488.9 | 999379.6 | 79846 ug/L | 79846 ppb | 00:08:11 |

Mean Data: 247899017|958053|1

| Analyte | Mean Corrected Intensity | Conc. | Calib. Units | Std.Dev. | Conc. | Sample Units | Std.Dev. | RSD |
|--------------------|--------------------------|--------|--------------|----------|--------|--------------|----------|--------|
| Sc 361.383 | 859347.8 | 102.32 | % | 0.958 | | | | 0.94% |
| Sc Radial | 4135.5 | 103 | % | 0.7 | | | | 0.65% |
| Y 371.029 | 820859.6 | 114.63 | % | 0.958 | | | | 0.84% |
| Y RADIAL | 5169.1 | 114.4 | % | 1.03 | | | | 0.90% |
| Ag 328.068† | -3932.5 | 1.8690 | ug/L | 0.36143 | 1.8690 | ppb | 0.36143 | 19.34% |
| Al 396.153Radial† | 37247.8 | 39697 | ug/L | 600.8 | 39697 | ppb | 600.8 | 1.51% |
| As 188.979† | -0.6 | 33.557 | ug/L | 1.1782 | 33.557 | ppb | 1.1782 | 3.51% |
| B 249.677† | 616.0 | 5.5342 | ug/L | 1.12794 | 5.5342 | ppb | 1.12794 | 20.38% |
| Ba 233.527† | 61625.1 | 580.04 | ug/L | 6.992 | 580.04 | ppb | 6.992 | 1.21% |
| Be 313.107† | 30699.1 | 17.062 | ug/L | 0.1251 | 17.062 | ppb | 0.1251 | 0.73% |
| Ca 317.933Radial† | 7571.4 | 15383 | ug/L | 216.2 | 15383 | ppb | 216.2 | 1.41% |
| Cd 226.502† | 690.2 | 2.6180 | ug/L | 0.15705 | 2.6180 | ppb | 0.15705 | 6.00% |
| Co 228.616† | 861.1 | 17.340 | ug/L | 0.0441 | 17.340 | ppb | 0.0441 | 0.25% |
| Cr 267.716† | 17104.8 | 230.19 | ug/L | 2.834 | 230.19 | ppb | 2.834 | 1.23% |
| Cu 324.752† | 97190.1 | 318.79 | ug/L | 4.245 | 318.79 | ppb | 4.245 | 1.33% |
| Fe 238.204 Radial† | 5581.2 | 69791 | ug/L | 600.1 | 69791 | ppb | 600.1 | 0.86% |
| K 766.490 Radial† | 32271.3 | 6436.2 | ug/L | 87.82 | 6436.2 | ppb | 87.82 | 1.36% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 174.1 | 7533.4 ug/L | 37.35 | 7533.4 ppb | 37.35 | 0.50% |
| Mn 257.610† | 1471904.5 | 1937.8 ug/L | 1.55 | 1937.8 ppb | 1.55 | 0.08% |
| Mo 202.031† | -4.3 | 5.2241 ug/L | 0.73788 | 5.2241 ppb | 0.73788 | 14.12% |
| Na 589.592 Radial† | 1941.3 | 762.39 ug/L | 22.524 | 762.39 ppb | 22.524 | 2.95% |
| Ni 231.604† | 3795.1 | 118.49 ug/L | 1.485 | 118.49 ppb | 1.485 | 1.25% |
| P 214.914† | 817.3 | 478.41 ug/L | 8.955 | 478.41 ppb | 8.955 | 1.87% |
| Pb 220.353† | 1314.6 | 197.08 ug/L | 5.574 | 197.08 ppb | 5.574 | 2.83% |
| S 181.975 Axial† | 214.1 | 367.89 ug/L | 8.619 | 367.89 ppb | 8.619 | 2.34% |
| Sb 206.836† | 33.4 | 5.7497 ug/L | 2.50748 | 5.7497 ppb | 2.50748 | 43.61% |
| Se 196.026† | -250.1 | 22.515 ug/L | 10.5118 | 22.515 ppb | 10.5118 | 46.69% |
| Si 251.611† | 1002581.6 | 37329 ug/L | 13.5 | 37329 ppb | 13.5 | 0.04% |
| Sn 189.927† | -80.9 | -19.197 ug/L | 0.4919 | -19.197 ppb | 0.4919 | 2.56% |
| Sr 421.552† | 14683.0 | 124.92 ug/L | 1.723 | 124.92 ppb | 1.723 | 1.38% |
| Ti 334.940† | 1177311.1 | 2026.9 ug/L | 0.59 | 2026.9 ppb | 0.59 | 0.03% |
| Tl 190.801† | -80.5 | -5.3879 ug/L | 1.94057 | -5.3879 ppb | 1.94057 | 36.02% |
| U 409.014† | 3039.0 | 80.968 ug/L | 2.4170 | 80.968 ppb | 2.4170 | 2.99% |
| V 292.402† | 12647.9 | 85.421 ug/L | 1.2692 | 85.421 ppb | 1.2692 | 1.49% |
| Zn 213.857† | 27056.1 | 309.80 ug/L | 3.925 | 309.80 ppb | 3.925 | 1.27% |
| SiO2† | 1007882.5 | 80525 ug/L | 611.8 | 80525 ppb | 611.8 | 0.76% |

Sequence No.: 66

Sample ID: 247899018|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 89

Date Collected: 3/26/2010 00:10:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899018|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4270.7 | 4270.7 | 106 % | | 00:12:16 |
| 1 | Y RADIAL | 5391.2 | 5391.2 | 119.3 % | | 00:12:16 |
| 1 | Al 396.153Radial† | 33007.8 | 31256.4 | 33312 ug/L | 33312 ppb | 00:12:16 |
| 1 | Ca 317.933Radial† | 4843.9 | 4558.0 | 9260.6 ug/L | 9260.6 ppb | 00:12:16 |
| 1 | Fe 238.204 Radial† | 8033.6 | 7579.0 | 94773 ug/L | 94773 ppb | 00:12:16 |
| 1 | K 766.490 Radial† | 38124.1 | 33206.0 | 6624.3 ug/L | 6624.3 ppb | 00:12:16 |
| 1 | Mg 279.077 IEC† | 171.1 | 160.9 | 6928.3 ug/L | 6928.3 ppb | 00:12:36 |
| 1 | Na 589.592 Radial† | 2384.8 | 2713.4 | 1065.6 ug/L | 1065.6 ppb | 00:12:16 |
| 1 | Sr 421.552† | 9372.9 | 8783.0 | 74.723 ug/L | 74.723 ppb | 00:12:16 |
| 1 | Sc 361.383 | 848728.0 | 848728.0 | 101.06 % | | 00:13:34 |
| 1 | Y 371.029 | 837696.1 | 837696.1 | 116.98 % | | 00:13:34 |
| 1 | Ag 328.068† | -5467.0 | -5663.2 | 1.3130 ug/L | 1.3130 ppb | 00:13:39 |
| 1 | As 188.979† | -51.1 | -29.7 | 34.399 ug/L | 34.399 ppb | 00:13:59 |
| 1 | B 249.677† | 505.1 | 749.9 | 5.1386 ug/L | 5.1386 ppb | 00:13:39 |
| 1 | Ba 233.527† | 43762.0 | 43286.0 | 408.92 ug/L | 408.92 ppb | 00:13:39 |
| 1 | Be 313.107† | -12361.8 | -7969.9 | 4.1406 ug/L | 4.1406 ppb | 00:13:39 |
| 1 | Cd 226.502† | 587.8 | 748.1 | 0.7387 ug/L | 0.7387 ppb | 00:13:59 |
| 1 | Co 228.616† | 1114.3 | 1141.6 | 21.714 ug/L | 21.714 ppb | 00:13:59 |
| 1 | Cr 267.716† | 3555.3 | 3423.2 | 54.875 ug/L | 54.875 ppb | 00:13:59 |
| 1 | Cu 324.752† | 16346.8 | 9823.1 | 37.011 ug/L | 37.011 ppb | 00:13:39 |
| 1 | Mn 257.610† | 2335778.2 | 2310907.5 | 3041.1 ug/L | 3041.1 ppb | 00:13:34 |
| 1 | Mo 202.031† | 22.3 | 7.8 | 8.1570 ug/L | 8.1570 ppb | 00:13:59 |
| 1 | Ni 231.604† | 1503.7 | 1394.4 | 43.521 ug/L | 43.521 ppb | 00:13:59 |
| 1 | P 214.914† | 850.5 | 673.4 | 409.59 ug/L | 409.59 ppb | 00:13:59 |
| 1 | Pb 220.353† | 448.4 | 502.5 | 69.764 ug/L | 69.764 ppb | 00:13:59 |
| 1 | S 181.975 Axial† | 163.4 | 137.3 | 234.47 ug/L | 234.47 ppb | 00:13:59 |
| 1 | Sb 206.836† | 53.7 | 26.5 | -1.2032 ug/L | -1.2032 ppb | 00:13:59 |
| 1 | Se 196.026† | -368.0 | -347.2 | 16.603 ug/L | 16.603 ppb | 00:13:59 |
| 1 | Si 251.611† | 907392.5 | 897381.2 | 33412 ug/L | 33412 ppb | 00:13:34 |
| 1 | Sn 189.927† | -46.0 | -48.6 | -14.562 ug/L | -14.562 ppb | 00:13:59 |
| 1 | Ti 334.940† | 1907319.6 | 1888463.8 | 3249.9 ug/L | 3249.9 ppb | 00:13:34 |
| 1 | Tl 190.801† | -145.2 | -118.7 | -4.7742 ug/L | -4.7742 ppb | 00:13:59 |
| 1 | U 409.014† | -10884.3 | -8735.4 | -267.94 ug/L | -267.94 ppb | 00:13:34 |
| 1 | V 292.402† | 13858.2 | 15140.8 | 99.111 ug/L | 99.111 ppb | 00:13:39 |
| 1 | Zn 213.857† | 35711.1 | 34731.4 | 398.10 ug/L | 398.10 ppb | 00:13:39 |
| 1 | SiO2† | 925908.2 | 915675.4 | 73158 ug/L | 73158 ppb | 00:15:07 |
| 2 | Sc Radial | 4184.4 | 4184.4 | 104 % | | 00:12:41 |
| 2 | Y RADIAL | 5244.6 | 5244.6 | 116.1 % | | 00:12:41 |
| 2 | Al 396.153Radial† | 32259.3 | 31178.3 | 33228 ug/L | 33228 ppb | 00:12:41 |
| 2 | Ca 317.933Radial† | 4714.9 | 4528.0 | 9199.9 ug/L | 9199.9 ppb | 00:12:41 |
| 2 | Fe 238.204 Radial† | 7855.8 | 7564.2 | 94588 ug/L | 94588 ppb | 00:12:41 |
| 2 | K 766.490 Radial† | 37242.8 | 33099.5 | 6603.1 ug/L | 6603.1 ppb | 00:12:41 |
| 2 | Mg 279.077 IEC† | 170.1 | 163.3 | 7033.4 ug/L | 7033.4 ppb | 00:13:01 |
| 2 | Na 589.592 Radial† | 2309.2 | 2687.0 | 1055.2 ug/L | 1055.2 ppb | 00:12:41 |
| 2 | Sr 421.552† | 9149.9 | 8750.7 | 74.448 ug/L | 74.448 ppb | 00:12:41 |
| 2 | Sc 361.383 | 857289.9 | 857289.9 | 102.08 % | | 00:14:05 |
| 2 | Y 371.029 | 846893.1 | 846893.1 | 118.27 % | | 00:14:05 |
| 2 | Ag 328.068† | -5420.9 | -5564.1 | 1.7454 ug/L | 1.7454 ppb | 00:14:10 |
| 2 | As 188.979† | -53.6 | -31.7 | 33.346 ug/L | 33.346 ppb | 00:14:30 |
| 2 | B 249.677† | 541.2 | 780.3 | 6.0049 ug/L | 6.0049 ppb | 00:14:10 |
| 2 | Ba 233.527† | 44050.4 | 43136.1 | 407.51 ug/L | 407.51 ppb | 00:14:10 |
| 2 | Be 313.107† | -12411.8 | -7896.7 | 4.1739 ug/L | 4.1739 ppb | 00:14:10 |
| 2 | Cd 226.502† | 577.2 | 731.9 | 0.5320 ug/L | 0.5320 ppb | 00:14:30 |
| 2 | Co 228.616† | 1119.2 | 1135.4 | 21.549 ug/L | 21.549 ppb | 00:14:30 |
| 2 | Cr 267.716† | 3558.8 | 3391.5 | 54.438 ug/L | 54.438 ppb | 00:14:30 |
| 2 | Cu 324.752† | 16362.1 | 9676.6 | 36.519 ug/L | 36.519 ppb | 00:14:10 |
| 2 | Mn 257.610† | 2355880.4 | 2307516.9 | 3036.6 ug/L | 3036.6 ppb | 00:14:05 |
| 2 | Mo 202.031† | 13.8 | -0.7 | 7.3946 ug/L | 7.3946 ppb | 00:14:30 |
| 2 | Ni 231.604† | 1502.4 | 1378.2 | 43.018 ug/L | 43.018 ppb | 00:14:30 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 817.0 | 632.2 | 380.21 ug/L | 380.21 ppb | 00:14:30 |
| 2 | Pb 220.353† | 436.1 | 486.1 | 67.289 ug/L | 67.289 ppb | 00:14:30 |
| 2 | S 181.975 Axial† | 166.1 | 138.4 | 236.33 ug/L | 236.33 ppb | 00:14:30 |
| 2 | Sb 206.836† | 38.1 | 10.7 | -7.9029 ug/L | -7.9029 ppb | 00:14:30 |
| 2 | Se 196.026† | -362.2 | -337.9 | 23.479 ug/L | 23.479 ppb | 00:14:30 |
| 2 | Si 251.611† | 917135.1 | 897958.0 | 33434 ug/L | 33434 ppb | 00:14:05 |
| 2 | Sn 189.927† | -27.9 | -30.4 | -10.536 ug/L | -10.536 ppb | 00:14:30 |
| 2 | Ti 334.940† | 1927514.5 | 1889398.3 | 3251.5 ug/L | 3251.5 ppb | 00:14:05 |
| 2 | Tl 190.801† | -140.4 | -112.5 | -2.3942 ug/L | -2.3942 ppb | 00:14:30 |
| 2 | U 409.014† | -10599.9 | -8349.2 | -256.55 ug/L | -256.55 ppb | 00:14:05 |
| 2 | V 292.402† | 13941.6 | 15085.6 | 98.724 ug/L | 98.724 ppb | 00:14:10 |
| 2 | Zn 213.857† | 36022.1 | 34683.1 | 397.56 ug/L | 397.56 ppb | 00:14:10 |
| 2 | SiO2† | 911574.5 | 892482.7 | 71305 ug/L | 71305 ppb | 00:15:13 |
| 3 | Sc Radial | 4276.0 | 4276.0 | 106 % | | 00:13:06 |
| 3 | Y RADIAL | 5383.1 | 5383.1 | 119.1 % | | 00:13:06 |
| 3 | Al 396.153Radial† | 32775.3 | 30999.1 | 33037 ug/L | 33037 ppb | 00:13:06 |
| 3 | Ca 317.933Radial† | 4823.4 | 4533.1 | 9210.1 ug/L | 9210.1 ppb | 00:13:06 |
| 3 | Fe 238.204 Radial† | 7936.1 | 7477.7 | 93507 ug/L | 93507 ppb | 00:13:06 |
| 3 | K 766.490 Radial† | 37742.0 | 32801.6 | 6543.6 ug/L | 6543.6 ppb | 00:13:06 |
| 3 | Mg 279.077 IEC† | 171.3 | 160.9 | 6932.3 ug/L | 6932.3 ppb | 00:13:26 |
| 3 | Na 589.592 Radial† | 2337.6 | 2666.2 | 1047.0 ug/L | 1047.0 ppb | 00:13:06 |
| 3 | Sr 421.552† | 9356.6 | 8756.7 | 74.500 ug/L | 74.500 ppb | 00:13:06 |
| 3 | Sc 361.383 | 859372.8 | 859372.8 | 102.32 % | | 00:14:36 |
| 3 | Y 371.029 | 848797.4 | 848797.4 | 118.53 % | | 00:14:36 |
| 3 | Ag 328.068† | -5454.8 | -5584.3 | 1.3115 ug/L | 1.3115 ppb | 00:14:41 |
| 3 | As 188.979† | -57.5 | -35.3 | 31.132 ug/L | 31.132 ppb | 00:15:01 |
| 3 | B 249.677† | 409.7 | 650.6 | 2.6150 ug/L | 2.6150 ppb | 00:14:41 |
| 3 | Ba 233.527† | 43766.1 | 42753.6 | 403.89 ug/L | 403.89 ppb | 00:14:41 |
| 3 | Be 313.107† | -12365.3 | -7821.8 | 4.2055 ug/L | 4.2055 ppb | 00:14:41 |
| 3 | Cd 226.502† | 575.0 | 728.4 | 0.5919 ug/L | 0.5919 ppb | 00:15:01 |
| 3 | Co 228.616† | 1091.0 | 1105.1 | 20.775 ug/L | 20.775 ppb | 00:15:01 |
| 3 | Cr 267.716† | 3544.0 | 3368.6 | 54.026 ug/L | 54.026 ppb | 00:15:01 |
| 3 | Cu 324.752† | 16209.9 | 9489.0 | 35.858 ug/L | 35.858 ppb | 00:14:41 |
| 3 | Mn 257.610† | 2358305.8 | 2304293.3 | 3032.3 ug/L | 3032.3 ppb | 00:14:36 |
| 3 | Mo 202.031† | 13.8 | -0.7 | 7.3051 ug/L | 7.3051 ppb | 00:15:01 |
| 3 | Ni 231.604† | 1494.5 | 1366.9 | 42.666 ug/L | 42.666 ppb | 00:15:01 |
| 3 | P 214.914† | 837.0 | 649.7 | 393.75 ug/L | 393.75 ppb | 00:15:01 |
| 3 | Pb 220.353† | 416.9 | 466.3 | 64.413 ug/L | 64.413 ppb | 00:15:01 |
| 3 | S 181.975 Axial† | 163.0 | 134.9 | 230.22 ug/L | 230.22 ppb | 00:15:01 |
| 3 | Sb 206.836† | 47.5 | 19.7 | -4.0755 ug/L | -4.0755 ppb | 00:15:01 |
| 3 | Se 196.026† | -364.7 | -339.5 | 18.910 ug/L | 18.910 ppb | 00:15:01 |
| 3 | Si 251.611† | 918784.0 | 897391.9 | 33413 ug/L | 33413 ppb | 00:14:36 |
| 3 | Sn 189.927† | -41.1 | -43.3 | -13.316 ug/L | -13.316 ppb | 00:15:01 |
| 3 | Ti 334.940† | 1932501.9 | 1889695.7 | 3252.0 ug/L | 3252.0 ppb | 00:14:36 |
| 3 | Tl 190.801† | -145.2 | -116.9 | -4.1005 ug/L | -4.1005 ppb | 00:15:01 |
| 3 | U 409.014† | -10908.4 | -8625.5 | -264.56 ug/L | -264.56 ppb | 00:14:36 |
| 3 | V 292.402† | 13839.2 | 14952.4 | 97.837 ug/L | 97.837 ppb | 00:14:41 |
| 3 | Zn 213.857† | 35718.6 | 34301.0 | 393.18 ug/L | 393.18 ppb | 00:14:41 |
| 3 | SiO2† | 913558.2 | 892256.8 | 71287 ug/L | 71287 ppb | 00:15:19 |

Mean Data: 247899018|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 855130.3 | 101.82 % | | 0.672 | | | 0.66% |
| Sc Radial | 4243.7 | 105 % | | 1.3 | | | 1.21% |
| Y 371.029 | 844462.2 | 117.93 % | | 0.829 | | | 0.70% |
| Y RADIAL | 5339.6 | 118.2 % | | 1.82 | | | 1.54% |
| Ag 328.068† | -5603.9 | 1.4566 ug/L | | 0.25007 | 1.4566 ppb | 0.25007 | 17.17% |
| Al 396.153Radial† | 31144.6 | 33193 ug/L | | 140.6 | 33193 ppb | 140.6 | 0.42% |
| As 188.979† | -32.2 | 32.959 ug/L | | 1.6674 | 32.959 ppb | 1.6674 | 5.06% |
| B 249.677† | 726.9 | 4.5862 ug/L | | 1.76115 | 4.5862 ppb | 1.76115 | 38.40% |
| Ba 233.527† | 43058.5 | 406.78 ug/L | | 2.596 | 406.78 ppb | 2.596 | 0.64% |
| Be 313.107† | -7896.1 | 4.1733 ug/L | | 0.03248 | 4.1733 ppb | 0.03248 | 0.78% |
| Ca 317.933Radial† | 4539.7 | 9223.5 ug/L | | 32.54 | 9223.5 ppb | 32.54 | 0.35% |
| Cd 226.502† | 736.1 | 0.6209 ug/L | | 0.10637 | 0.6209 ppb | 0.10637 | 17.13% |
| Co 228.616† | 1127.4 | 21.346 ug/L | | 0.5009 | 21.346 ppb | 0.5009 | 2.35% |
| Cr 267.716† | 3394.4 | 54.446 ug/L | | 0.4243 | 54.446 ppb | 0.4243 | 0.78% |
| Cu 324.752† | 9662.9 | 36.463 ug/L | | 0.5783 | 36.463 ppb | 0.5783 | 1.59% |
| Fe 238.204 Radial† | 7540.3 | 94289 ug/L | | 684.1 | 94289 ppb | 684.1 | 0.73% |
| K 766.490 Radial† | 33035.7 | 6590.3 ug/L | | 41.83 | 6590.3 ppb | 41.83 | 0.63% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 161.7 | 6964.7 ug/L | 59.53 | 6964.7 ppb | 59.53 | 0.85% |
| Mn 257.610† | 2307572.6 | 3036.7 ug/L | 4.40 | 3036.7 ppb | 4.40 | 0.14% |
| Mo 202.031† | 2.2 | 7.6189 ug/L | 0.46817 | 7.6189 ppb | 0.46817 | 6.14% |
| Na 589.592 Radial† | 2688.8 | 1055.9 ug/L | 9.29 | 1055.9 ppb | 9.29 | 0.88% |
| Ni 231.604† | 1379.8 | 43.068 ug/L | 0.4299 | 43.068 ppb | 0.4299 | 1.00% |
| P 214.914† | 651.8 | 394.52 ug/L | 14.707 | 394.52 ppb | 14.707 | 3.73% |
| Pb 220.353† | 485.0 | 67.155 ug/L | 2.6785 | 67.155 ppb | 2.6785 | 3.99% |
| S 181.975 Axial† | 136.9 | 233.67 ug/L | 3.133 | 233.67 ppb | 3.133 | 1.34% |
| Sb 206.836† | 19.0 | -4.3939 ug/L | 3.36120 | -4.3939 ppb | 3.36120 | 76.50% |
| Se 196.026† | -341.5 | 19.664 ug/L | 3.4995 | 19.664 ppb | 3.4995 | 17.80% |
| Si 251.611† | 897577.0 | 33420 ug/L | 12.3 | 33420 ppb | 12.3 | 0.04% |
| Sn 189.927† | -40.8 | -12.804 ug/L | 2.0612 | -12.804 ppb | 2.0612 | 16.10% |
| Sr 421.552† | 8763.5 | 74.557 ug/L | 0.1458 | 74.557 ppb | 0.1458 | 0.20% |
| Ti 334.940† | 1889185.9 | 3251.1 ug/L | 1.10 | 3251.1 ppb | 1.10 | 0.03% |
| Tl 190.801† | -116.0 | -3.7563 ug/L | 1.22678 | -3.7563 ppb | 1.22678 | 32.66% |
| U 409.014† | -8570.0 | -263.02 ug/L | 5.847 | -263.02 ppb | 5.847 | 2.22% |
| V 292.402† | 15059.6 | 98.557 ug/L | 0.6533 | 98.557 ppb | 0.6533 | 0.66% |
| Zn 213.857† | 34571.8 | 396.28 ug/L | 2.696 | 396.28 ppb | 2.696 | 0.68% |
| SiO2† | 900138.3 | 71917 ug/L | 1075.1 | 71917 ppb | 1075.1 | 1.49% |

Sequence No.: 67

Sample ID: 247899019|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 90

Date Collected: 3/26/2010 00:17:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899019|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|------------------|------------------------|-----------------------|-----------------------|------------------|
| 1 | Sc Radial | 4163.9 | 4163.9 | 103 % | | 00:19:24 |
| 1 | Y RADIAL | 5170.2 | 5170.2 | 114.4 % | | 00:19:24 |
| 1 | Al 396.153Radial† | 29200.7 | 28368.5 | 30234 ug/L | 30234 ppb | 00:19:24 |
| 1 | Ca 317.933Radial† | 4675.7 | 4512.5 | 9168.2 ug/L | 9168.2 ppb | 00:19:24 |
| 1 | Fe 238.204 Radial† | 6294.8 | 6089.2 | 76145 ug/L | 76145 ppb | 00:19:24 |
| 1 | K 766.490 Radial† | 33443.3 | 29595.7 | 5903.9 ug/L | 5903.9 ppb | 00:19:24 |
| 1 | Mg 279.077 IEC† | 134.4 | 129.5 | 5575.5 ug/L | 5575.5 ppb | 00:19:44 |
| 1 | Na 589.592 Radial† | 2198.1 | 2590.4 | 1017.3 ug/L | 1017.3 ppb | 00:19:24 |
| 1 | Sr 421.552† | 8395.9 | 8063.7 | 68.599 ug/L | 68.599 ppb | 00:19:24 |
| 1 | Sc 361.383 | 855532.5 | 855532.5 | 101.87 % | | 00:20:41 |
| 1 | Y 371.029 | 829749.2 | 829749.2 | 115.87 % | | 00:20:41 |
| 1 | Ag 328.068† | -4469.3 | -4640.8 | 0.5781 ug/L | 0.5781 ppb | 00:20:47 |
| 1 | As 188.979† | -56.9 | -35.0 | 22.015 ug/L | 22.015 ppb | 00:21:07 |
| 1 | B 249.677† | 446.4 | 688.4 | 6.4857 ug/L | 6.4857 ppb | 00:20:47 |
| 1 | Ba 233.527† | 38123.7 | 37406.6 | 353.19 ug/L | 353.19 ppb | 00:20:47 |
| 1 | Be 313.107† | -11534.6 | -7060.5 | 3.1435 ug/L | 3.1435 ppb | 00:20:47 |
| 1 | Cd 226.502† | 461.2 | 619.2 | 0.8526 ug/L | 0.8526 ppb | 00:21:07 |
| 1 | Co 228.616† | 943.5 | 965.1 | 18.620 ug/L | 18.620 ppb | 00:21:07 |
| 1 | Cr 267.716† | 3566.5 | 3406.1 | 52.628 ug/L | 52.628 ppb | 00:21:07 |
| 1 | Cu 324.752† | 17606.4 | 10931.1 | 39.587 ug/L | 39.587 ppb | 00:20:47 |
| 1 | Mn 257.610† | 1784504.7 | 1751352.4 | 2305.2 ug/L | 2305.2 ppb | 00:20:41 |
| 1 | Mo 202.031† | 3.9 | -10.4 | 5.1094 ug/L | 5.1094 ppb | 00:21:07 |
| 1 | Ni 231.604† | 1352.1 | 1233.8 | 38.509 ug/L | 38.509 ppb | 00:21:07 |
| 1 | P 214.914† | 769.1 | 586.8 | 360.86 ug/L | 360.86 ppb | 00:21:07 |
| 1 | Pb 220.353† | 346.2 | 398.7 | 56.072 ug/L | 56.072 ppb | 00:21:07 |
| 1 | S 181.975 Axial† | 187.3 | 159.5 | 273.94 ug/L | 273.94 ppb | 00:21:07 |
| 1 | Sb 206.836† | 52.7 | 25.1 | 0.3747 ug/L | 0.3747 ppb | 00:21:07 |
| 1 | Se 196.026† | -306.7 | -284.2 | 10.513 ug/L | 10.513 ppb | 00:21:07 |
| 1 | Si 251.611† | 914702.5 | 897415.8 | 33414 ug/L | 33414 ppb | 00:20:41 |
| 1 | Sn 189.927† | -39.1 | -41.4 | -11.919 ug/L | -11.919 ppb | 00:21:07 |
| 1 | Ti 334.940† | 1566285.1 | 1538667.3 | 2648.1 ug/L | 2648.1 ppb | 00:20:41 |
| 1 | Tl 190.801† | -128.3 | -100.9 | -6.3586 ug/L | -6.3586 ppb | 00:21:07 |
| 1 | U 409.014† | -9105.7 | -6903.7 | -211.92 ug/L | -211.92 ppb | 00:20:41 |
| 1 | V 292.402† | 11162.3 | 12385.3 | 81.274 ug/L | 81.274 ppb | 00:20:47 |
| 1 | Zn 213.857† | 30155.0 | 28996.0 | 332.78 ug/L | 332.78 ppb | 00:20:47 |
| 1 | SiO2† | 915920.3 | 898583.3 | 71792 ug/L | 71792 ppb | 00:22:15 |
| 2 | Sc Radial | 4149.2 | 4149.2 | 103 % | | 00:19:49 |
| 2 | Y RADIAL | 5117.7 | 5117.7 | 113.3 % | | 00:19:49 |
| 2 | Al 396.153Radial† | 28903.1 | 28179.2 | 30032 ug/L | 30032 ppb | 00:19:49 |
| 2 | Ca 317.933Radial† | 4635.3 | 4489.3 | 9121.1 ug/L | 9121.1 ppb | 00:19:49 |
| 2 | Fe 238.204 Radial† | 6226.0 | 6043.9 | 75578 ug/L | 75578 ppb | 00:19:49 |
| 2 | K 766.490 Radial† | 33033.0 | 29311.4 | 5847.1 ug/L | 5847.1 ppb | 00:19:49 |
| 2 | Mg 279.077 IEC† | 139.3 | 134.7 | 5806.6 ug/L | 5806.6 ppb | 00:20:09 |
| 2 | Na 589.592 Radial† | 2188.0 | 2588.0 | 1016.4 ug/L | 1016.4 ppb | 00:19:49 |
| 2 | Sr 421.552† | 8317.1 | 8015.9 | 68.191 ug/L | 68.191 ppb | 00:19:49 |
| 2 | Sc 361.383 | 861023.3 | 861023.3 | 102.52 % | | 00:21:12 |
| 2 | Y 371.029 | 835157.5 | 835157.5 | 116.63 % | | 00:21:12 |
| 2 | Ag 328.068† | -4487.4 | -4630.5 | 0.4472 ug/L | 0.4472 ppb | 00:21:18 |
| 2 | As 188.979† | -44.7 | -22.8 | 28.429 ug/L | 28.429 ppb | 00:21:38 |
| 2 | B 249.677† | 418.8 | 658.7 | 5.7614 ug/L | 5.7614 ppb | 00:21:18 |
| 2 | Ba 233.527† | 37874.1 | 36924.5 | 348.65 ug/L | 348.65 ppb | 00:21:18 |
| 2 | Be 313.107† | -11421.6 | -6878.1 | 3.2161 ug/L | 3.2161 ppb | 00:21:18 |
| 2 | Cd 226.502† | 456.3 | 611.5 | 0.8038 ug/L | 0.8038 ppb | 00:21:38 |
| 2 | Co 228.616† | 943.1 | 958.9 | 18.467 ug/L | 18.467 ppb | 00:21:38 |
| 2 | Cr 267.716† | 3547.6 | 3365.4 | 52.034 ug/L | 52.034 ppb | 00:21:38 |
| 2 | Cu 324.752† | 17222.9 | 10446.7 | 37.984 ug/L | 37.984 ppb | 00:21:18 |
| 2 | Mn 257.610† | 1790452.9 | 1745983.0 | 2298.0 ug/L | 2298.0 ppb | 00:21:12 |
| 2 | Mo 202.031† | 11.5 | -3.0 | 5.7137 ug/L | 5.7137 ppb | 00:21:38 |
| 2 | Ni 231.604† | 1369.5 | 1242.3 | 38.775 ug/L | 38.775 ppb | 00:21:38 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 766.8 | 579.8 | 356.51 ug/L | 356.51 ppb | 00:21:38 |
| 2 | Pb 220.353† | 351.2 | 401.3 | 56.508 ug/L | 56.508 ppb | 00:21:38 |
| 2 | S 181.975 Axial† | 181.6 | 152.8 | 262.18 ug/L | 262.18 ppb | 00:21:38 |
| 2 | Sb 206.836† | 44.0 | 16.3 | -3.3669 ug/L | -3.3669 ppb | 00:21:38 |
| 2 | Se 196.026† | -312.2 | -287.6 | 6.0667 ug/L | 6.0667 ppb | 00:21:38 |
| 2 | Si 251.611† | 919641.3 | 896506.8 | 33380 ug/L | 33380 ppb | 00:21:12 |
| 2 | Sn 189.927† | -47.6 | -49.5 | -13.685 ug/L | -13.685 ppb | 00:21:38 |
| 2 | Ti 334.940† | 1575963.0 | 1538301.9 | 2647.5 ug/L | 2647.5 ppb | 00:21:12 |
| 2 | Tl 190.801† | -118.9 | -90.9 | -2.5085 ug/L | -2.5085 ppb | 00:21:38 |
| 2 | U 409.014† | -9017.6 | -6760.8 | -207.65 ug/L | -207.65 ppb | 00:21:12 |
| 2 | V 292.402† | 11077.6 | 12232.8 | 80.203 ug/L | 80.203 ppb | 00:21:18 |
| 2 | Zn 213.857† | 29862.6 | 28522.0 | 327.23 ug/L | 327.23 ppb | 00:21:18 |
| 2 | SiO2† | 914166.5 | 891138.8 | 71198 ug/L | 71198 ppb | 00:22:21 |
| 3 | Sc Radial | 4178.3 | 4178.3 | 104 % | | 00:20:14 |
| 3 | Y RADIAL | 5178.8 | 5178.8 | 114.6 % | | 00:20:14 |
| 3 | Al 396.153Radial† | 29186.9 | 28257.6 | 30116 ug/L | 30116 ppb | 00:20:14 |
| 3 | Ca 317.933Radial† | 4699.0 | 4519.4 | 9182.3 ug/L | 9182.3 ppb | 00:20:14 |
| 3 | Fe 238.204 Radial† | 6271.0 | 6045.2 | 75594 ug/L | 75594 ppb | 00:20:14 |
| 3 | K 766.490 Radial† | 33381.7 | 29424.5 | 5869.7 ug/L | 5869.7 ppb | 00:20:14 |
| 3 | Mg 279.077 IEC† | 138.1 | 132.6 | 5713.2 ug/L | 5713.2 ppb | 00:20:34 |
| 3 | Na 589.592 Radial† | 2156.6 | 2542.9 | 998.63 ug/L | 998.63 ppb | 00:20:14 |
| 3 | Sr 421.552† | 8350.8 | 7992.1 | 67.989 ug/L | 67.989 ppb | 00:20:14 |
| 3 | Sc 361.383 | 852769.3 | 852769.3 | 101.54 % | | 00:21:44 |
| 3 | Y 371.029 | 828180.9 | 828180.9 | 115.66 % | | 00:21:44 |
| 3 | Ag 328.068† | -4685.5 | -4867.9 | -0.7326 ug/L | -0.7326 ppb | 00:21:49 |
| 3 | As 188.979† | -46.6 | -25.1 | 27.190 ug/L | 27.190 ppb | 00:22:09 |
| 3 | B 249.677† | 438.1 | 681.6 | 6.3889 ug/L | 6.3889 ppb | 00:21:49 |
| 3 | Ba 233.527† | 38232.5 | 37635.0 | 355.32 ug/L | 355.32 ppb | 00:21:49 |
| 3 | Be 313.107† | -11673.6 | -7234.1 | 3.0679 ug/L | 3.0679 ppb | 00:21:49 |
| 3 | Cd 226.502† | 439.0 | 598.7 | 0.6208 ug/L | 0.6208 ppb | 00:22:09 |
| 3 | Co 228.616† | 931.6 | 956.4 | 18.408 ug/L | 18.408 ppb | 00:22:09 |
| 3 | Cr 267.716† | 3527.4 | 3379.0 | 52.218 ug/L | 52.218 ppb | 00:22:09 |
| 3 | Cu 324.752† | 17504.8 | 10887.0 | 39.416 ug/L | 39.416 ppb | 00:21:49 |
| 3 | Mn 257.610† | 1776016.2 | 1748668.7 | 2301.6 ug/L | 2301.6 ppb | 00:21:44 |
| 3 | Mo 202.031† | 6.8 | -7.5 | 5.3217 ug/L | 5.3217 ppb | 00:22:09 |
| 3 | Ni 231.604† | 1372.9 | 1258.5 | 39.282 ug/L | 39.282 ppb | 00:22:09 |
| 3 | P 214.914† | 762.2 | 582.5 | 358.18 ug/L | 358.18 ppb | 00:22:09 |
| 3 | Pb 220.353† | 344.9 | 398.5 | 56.099 ug/L | 56.099 ppb | 00:22:09 |
| 3 | S 181.975 Axial† | 189.6 | 162.4 | 278.95 ug/L | 278.95 ppb | 00:22:09 |
| 3 | Sb 206.836† | 47.8 | 20.4 | -1.6070 ug/L | -1.6070 ppb | 00:22:09 |
| 3 | Se 196.026† | -303.5 | -282.0 | 10.592 ug/L | 10.592 ppb | 00:22:09 |
| 3 | Si 251.611† | 910745.6 | 896428.3 | 33377 ug/L | 33377 ppb | 00:21:44 |
| 3 | Sn 189.927† | -53.2 | -55.5 | -15.002 ug/L | -15.002 ppb | 00:22:09 |
| 3 | Ti 334.940† | 1559904.1 | 1537365.1 | 2645.9 ug/L | 2645.9 ppb | 00:21:44 |
| 3 | Tl 190.801† | -126.1 | -99.1 | -5.6859 ug/L | -5.6859 ppb | 00:22:09 |
| 3 | U 409.014† | -9158.8 | -6985.0 | -214.24 ug/L | -214.24 ppb | 00:21:44 |
| 3 | V 292.402† | 11225.5 | 12483.0 | 82.112 ug/L | 82.112 ppb | 00:21:49 |
| 3 | Zn 213.857† | 30144.6 | 29081.7 | 333.87 ug/L | 333.87 ppb | 00:21:49 |
| 3 | SiO2† | 912697.0 | 898322.2 | 71772 ug/L | 71772 ppb | 00:22:27 |

Mean Data: 247899019|958053|1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Sc 361.383 | 856441.7 | 101.97 % | 0.500 | | | 0.49% |
| Sc Radial | 4163.8 | 103 % | 0.4 | | | 0.35% |
| Y 371.029 | 831029.2 | 116.05 % | 0.511 | | | 0.44% |
| Y RADIAL | 5155.6 | 114.1 % | 0.73 | | | 0.64% |
| Ag 328.068† | -4713.1 | 0.0976 ug/L | 0.72192 | 0.0976 ppb | 0.72192 | 739.86% |
| Al 396.153Radial† | 28268.4 | 30127 ug/L | 101.4 | 30127 ppb | 101.4 | 0.34% |
| As 188.979† | -27.6 | 25.878 ug/L | 3.4022 | 25.878 ppb | 3.4022 | 13.15% |
| B 249.677† | 676.2 | 6.2120 ug/L | 0.39320 | 6.2120 ppb | 0.39320 | 6.33% |
| Ba 233.527† | 37322.0 | 352.39 ug/L | 3.405 | 352.39 ppb | 3.405 | 0.97% |
| Be 313.107† | -7057.6 | 3.1425 ug/L | 0.07409 | 3.1425 ppb | 0.07409 | 2.36% |
| Ca 317.933Radial† | 4507.0 | 9157.2 ug/L | 32.05 | 9157.2 ppb | 32.05 | 0.35% |
| Cd 226.502† | 609.8 | 0.7591 ug/L | 0.12223 | 0.7591 ppb | 0.12223 | 16.10% |
| Co 228.616† | 960.1 | 18.498 ug/L | 0.1094 | 18.498 ppb | 0.1094 | 0.59% |
| Cr 267.716† | 3383.5 | 52.293 ug/L | 0.3042 | 52.293 ppb | 0.3042 | 0.58% |
| Cu 324.752† | 10754.9 | 38.996 ug/L | 0.8802 | 38.996 ppb | 0.8802 | 2.26% |
| Fe 238.204 Radial† | 6059.5 | 75772 ug/L | 322.8 | 75772 ppb | 322.8 | 0.43% |
| K 766.490 Radial† | 29443.9 | 5873.6 ug/L | 28.57 | 5873.6 ppb | 28.57 | 0.49% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|---------|
| Mg 279.077 IEC† | 132.3 | 5698.4 ug/L | 116.29 | 5698.4 ppb | 116.29 | 2.04% |
| Mn 257.610† | 1748668.0 | 2301.6 ug/L | 3.56 | 2301.6 ppb | 3.56 | 0.15% |
| Mo 202.031† | -6.9 | 5.3816 ug/L | 0.30661 | 5.3816 ppb | 0.30661 | 5.70% |
| Na 589.592 Radial† | 2573.8 | 1010.8 ug/L | 10.51 | 1010.8 ppb | 10.51 | 1.04% |
| Ni 231.604† | 1244.8 | 38.855 ug/L | 0.3927 | 38.855 ppb | 0.3927 | 1.01% |
| P 214.914† | 583.0 | 358.51 ug/L | 2.191 | 358.51 ppb | 2.191 | 0.61% |
| Pb 220.353† | 399.5 | 56.226 ug/L | 0.2441 | 56.226 ppb | 0.2441 | 0.43% |
| S 181.975 Axial† | 158.2 | 271.69 ug/L | 8.612 | 271.69 ppb | 8.612 | 3.17% |
| Sb 206.836† | 20.6 | -1.5331 ug/L | 1.87190 | -1.5331 ppb | 1.87190 | 122.10% |
| Se 196.026† | -284.6 | 9.0573 ug/L | 2.59022 | 9.0573 ppb | 2.59022 | 28.60% |
| Si 251.611† | 896783.6 | 33390 ug/L | 20.4 | 33390 ppb | 20.4 | 0.06% |
| Sn 189.927† | -48.8 | -13.535 ug/L | 1.5471 | -13.535 ppb | 1.5471 | 11.43% |
| Sr 421.552† | 8023.9 | 68.260 ug/L | 0.3107 | 68.260 ppb | 0.3107 | 0.46% |
| Ti 334.940† | 1538111.4 | 2647.2 ug/L | 1.16 | 2647.2 ppb | 1.16 | 0.04% |
| Tl 190.801† | -97.0 | -4.8510 ug/L | 2.05633 | -4.8510 ppb | 2.05633 | 42.39% |
| U 409.014† | -6883.1 | -211.27 ug/L | 3.347 | -211.27 ppb | 3.347 | 1.58% |
| V 292.402† | 12367.0 | 81.196 ug/L | 0.9567 | 81.196 ppb | 0.9567 | 1.18% |
| Zn 213.857† | 28866.6 | 331.30 ug/L | 3.561 | 331.30 ppb | 3.561 | 1.07% |
| SiO2† | 896014.8 | 71587 ug/L | 337.5 | 71587 ppb | 337.5 | 0.47% |

Sequence No.: 68

Sample ID: 247899020|958053|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 91

Date Collected: 3/26/2010 00:24:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247899020|958053|1

| Repl# | Analyte | Net Intensity | Corrected Intensity | Calib. Conc. Units | Sample Conc. Units | Analysis Time |
|-------|--------------------|---------------|---------------------|--------------------|--------------------|---------------|
| 1 | Sc Radial | 4329.0 | 4329.0 | 107 % | | 00:26:32 |
| 1 | Y RADIAL | 5272.4 | 5272.4 | 116.7 % | | 00:26:32 |
| 1 | Al 396.153Radial† | 53537.9 | 49967.7 | 53254 ug/L | 53254 ppb | 00:26:32 |
| 1 | Ca 317.933Radial† | 11115.9 | 10340.9 | 21010 ug/L | 21010 ppb | 00:26:32 |
| 1 | Fe 238.204 Radial† | 7296.4 | 6790.0 | 84907 ug/L | 84907 ppb | 00:26:32 |
| 1 | K 766.490 Radial† | 49018.8 | 42873.8 | 8550.7 ug/L | 8550.7 ppb | 00:26:32 |
| 1 | Mg 279.077 IEC† | 231.4 | 214.9 | 9299.8 ug/L | 9299.8 ppb | 00:26:52 |
| 1 | Na 589.592 Radial† | 1659.2 | 2007.0 | 788.18 ug/L | 788.18 ppb | 00:26:32 |
| 1 | Sr 421.552† | 18687.0 | 17343.0 | 147.53 ug/L | 147.53 ppb | 00:26:32 |
| 1 | Sc 361.383 | 851211.6 | 851211.6 | 101.35 % | | 00:27:50 |
| 1 | Y 371.029 | 815428.7 | 815428.7 | 113.87 % | | 00:27:50 |
| 1 | Ag 328.068† | -4731.6 | -4921.8 | 1.3745 ug/L | 1.3745 ppb | 00:27:55 |
| 1 | As 188.979† | -20.8 | 0.3 | 42.594 ug/L | 42.594 ppb | 00:28:15 |
| 1 | B 249.677† | 852.9 | 1091.7 | 16.146 ug/L | 16.146 ppb | 00:27:55 |
| 1 | Ba 233.527† | 73423.7 | 72425.6 | 681.78 ug/L | 681.78 ppb | 00:27:55 |
| 1 | Be 313.107† | 49969.5 | 53565.6 | 27.657 ug/L | 27.657 ppb | 00:27:55 |
| 1 | Cd 226.502† | 995.6 | 1148.7 | 7.5335 ug/L | 7.5335 ppb | 00:28:15 |
| 1 | Co 228.616† | 958.1 | 984.2 | 19.218 ug/L | 19.218 ppb | 00:28:15 |
| 1 | Cr 267.716† | 7926.0 | 7725.3 | 109.62 ug/L | 109.62 ppb | 00:27:55 |
| 1 | Cu 324.752† | 258857.8 | 249051.5 | 811.89 ug/L | 811.89 ppb | 00:27:55 |
| 1 | Mn 257.610† | 1870837.9 | 1845426.2 | 2429.3 ug/L | 2429.3 ppb | 00:27:50 |
| 1 | Mo 202.031† | 5.1 | -9.1 | 6.0401 ug/L | 6.0401 ppb | 00:28:15 |
| 1 | Ni 231.604† | 2371.8 | 2246.6 | 70.133 ug/L | 70.133 ppb | 00:28:15 |
| 1 | P 214.914† | 1545.8 | 1357.0 | 759.76 ug/L | 759.76 ppb | 00:28:15 |
| 1 | Pb 220.353† | 3471.1 | 3483.6 | 524.73 ug/L | 524.73 ppb | 00:28:15 |
| 1 | S 181.975 Axial† | 420.6 | 390.6 | 674.63 ug/L | 674.63 ppb | 00:28:15 |
| 1 | Sb 206.836† | 81.3 | 53.5 | 11.951 ug/L | 11.951 ppb | 00:28:15 |
| 1 | Se 196.026† | -320.5 | -299.2 | 33.268 ug/L | 33.268 ppb | 00:28:15 |
| 1 | Si 251.611† | 902849.2 | 890278.6 | 33148 ug/L | 33148 ppb | 00:27:50 |
| 1 | Sn 189.927† | -48.9 | -51.3 | -12.511 ug/L | -12.511 ppb | 00:28:15 |
| 1 | Ti 334.940† | 1532325.1 | 1512965.3 | 2605.0 ug/L | 2605.0 ppb | 00:27:50 |
| 1 | Tl 190.801† | -122.2 | -95.5 | -4.0898 ug/L | -4.0898 ppb | 00:28:15 |
| 1 | U 409.014† | 8115.4 | 10042.3 | 285.59 ug/L | 285.59 ppb | 00:27:50 |
| 1 | V 292.402† | 13426.7 | 14675.1 | 98.704 ug/L | 98.704 ppb | 00:27:55 |
| 1 | Zn 213.857† | 44688.1 | 43485.5 | 502.35 ug/L | 502.35 ppb | 00:27:55 |
| 1 | SiO2† | 906937.7 | 894284.7 | 71449 ug/L | 71449 ppb | 00:29:23 |
| 2 | Sc Radial | 4213.8 | 4213.8 | 104 % | | 00:26:57 |
| 2 | Y RADIAL | 5177.4 | 5177.4 | 114.6 % | | 00:26:57 |
| 2 | Al 396.153Radial† | 52336.2 | 50180.1 | 53480 ug/L | 53480 ppb | 00:26:57 |
| 2 | Ca 317.933Radial† | 10867.8 | 10386.4 | 21102 ug/L | 21102 ppb | 00:26:57 |
| 2 | Fe 238.204 Radial† | 7099.1 | 6786.9 | 84868 ug/L | 84868 ppb | 00:26:57 |
| 2 | K 766.490 Radial† | 47996.1 | 43142.5 | 8604.3 ug/L | 8604.3 ppb | 00:26:57 |
| 2 | Mg 279.077 IEC† | 233.1 | 222.4 | 9626.1 ug/L | 9626.1 ppb | 00:27:17 |
| 2 | Na 589.592 Radial† | 1616.7 | 2008.5 | 788.78 ug/L | 788.78 ppb | 00:26:57 |
| 2 | Sr 421.552† | 18168.2 | 17322.0 | 147.35 ug/L | 147.35 ppb | 00:26:57 |
| 2 | Sc 361.383 | 848768.1 | 848768.1 | 101.06 % | | 00:28:21 |
| 2 | Y 371.029 | 811734.1 | 811734.1 | 113.36 % | | 00:28:21 |
| 2 | Ag 328.068† | -4750.9 | -4954.4 | 1.1938 ug/L | 1.1938 ppb | 00:28:26 |
| 2 | As 188.979† | -24.3 | -3.2 | 40.729 ug/L | 40.729 ppb | 00:28:46 |
| 2 | B 249.677† | 790.4 | 1032.2 | 14.518 ug/L | 14.518 ppb | 00:28:26 |
| 2 | Ba 233.527† | 72818.9 | 72035.8 | 678.13 ug/L | 678.13 ppb | 00:28:26 |
| 2 | Be 313.107† | 49548.9 | 53291.3 | 27.554 ug/L | 27.554 ppb | 00:28:26 |
| 2 | Cd 226.502† | 997.0 | 1152.9 | 7.5964 ug/L | 7.5964 ppb | 00:28:46 |
| 2 | Co 228.616† | 953.8 | 982.7 | 19.169 ug/L | 19.169 ppb | 00:28:46 |
| 2 | Cr 267.716† | 7953.4 | 7774.9 | 110.26 ug/L | 110.26 ppb | 00:28:26 |
| 2 | Cu 324.752† | 258814.3 | 249743.8 | 814.13 ug/L | 814.13 ppb | 00:28:26 |
| 2 | Mn 257.610† | 1868446.6 | 1848374.1 | 2433.1 ug/L | 2433.1 ppb | 00:28:21 |
| 2 | Mo 202.031† | 6.9 | -7.3 | 6.1934 ug/L | 6.1934 ppb | 00:28:46 |
| 2 | Ni 231.604† | 2341.3 | 2223.1 | 69.401 ug/L | 69.401 ppb | 00:28:46 |

| | | | | | | |
|---|--------------------|-----------|-----------|--------------|-------------|----------|
| 2 | P 214.914† | 1552.0 | 1367.5 | 766.97 ug/L | 766.97 ppb | 00:28:46 |
| 2 | Pb 220.353† | 3467.3 | 3489.7 | 525.71 ug/L | 525.71 ppb | 00:28:46 |
| 2 | S 181.975 Axial† | 411.6 | 382.9 | 661.13 ug/L | 661.13 ppb | 00:28:46 |
| 2 | Sb 206.836† | 65.1 | 37.8 | 5.2986 ug/L | 5.2986 ppb | 00:28:46 |
| 2 | Se 196.026† | -334.2 | -313.7 | 21.693 ug/L | 21.693 ppb | 00:28:46 |
| 2 | Si 251.611† | 901571.5 | 891578.8 | 33196 ug/L | 33196 ppb | 00:28:21 |
| 2 | Sn 189.927† | -33.1 | -35.8 | -9.0602 ug/L | -9.0602 ppb | 00:28:46 |
| 2 | Ti 334.940† | 1529893.7 | 1514912.0 | 2608.3 ug/L | 2608.3 ppb | 00:28:21 |
| 2 | Tl 190.801† | -130.7 | -104.3 | -7.4272 ug/L | -7.4272 ppb | 00:28:46 |
| 2 | U 409.014† | 8211.8 | 10160.7 | 289.07 ug/L | 289.07 ppb | 00:28:21 |
| 2 | V 292.402† | 13382.1 | 14669.1 | 98.674 ug/L | 98.674 ppb | 00:28:26 |
| 2 | Zn 213.857† | 44432.8 | 43359.7 | 500.87 ug/L | 500.87 ppb | 00:28:26 |
| 2 | SiO2† | 898904.4 | 888911.9 | 71020 ug/L | 71020 ppb | 00:29:29 |
| 3 | Sc Radial | 4243.5 | 4243.5 | 105 % | | 00:27:22 |
| 3 | Y RADIAL | 5189.4 | 5189.4 | 114.9 % | | 00:27:22 |
| 3 | Al 396.153Radial† | 52685.1 | 50162.2 | 53461 ug/L | 53461 ppb | 00:27:22 |
| 3 | Ca 317.933Radial† | 10917.1 | 10360.6 | 21050 ug/L | 21050 ppb | 00:27:22 |
| 3 | Fe 238.204 Radial† | 7135.7 | 6774.2 | 84710 ug/L | 84710 ppb | 00:27:22 |
| 3 | K 766.490 Radial† | 48152.0 | 42970.1 | 8569.9 ug/L | 8569.9 ppb | 00:27:22 |
| 3 | Mg 279.077 IEC† | 230.0 | 217.9 | 9432.1 ug/L | 9432.1 ppb | 00:27:42 |
| 3 | Na 589.592 Radial† | 1572.4 | 1955.6 | 768.01 ug/L | 768.01 ppb | 00:27:22 |
| 3 | Sr 421.552† | 18311.5 | 17336.9 | 147.48 ug/L | 147.48 ppb | 00:27:22 |
| 3 | Sc 361.383 | 862134.7 | 862134.7 | 102.65 % | | 00:28:52 |
| 3 | Y 371.029 | 825982.8 | 825982.8 | 115.35 % | | 00:28:52 |
| 3 | Ag 328.068† | -4642.7 | -4776.1 | 2.0402 ug/L | 2.0402 ppb | 00:28:57 |
| 3 | As 188.979† | -29.4 | -7.8 | 38.193 ug/L | 38.193 ppb | 00:29:17 |
| 3 | B 249.677† | 791.0 | 1020.7 | 14.227 ug/L | 14.227 ppb | 00:28:57 |
| 3 | Ba 233.527† | 73989.1 | 72058.5 | 678.34 ug/L | 678.34 ppb | 00:28:57 |
| 3 | Be 313.107† | 50496.7 | 53454.5 | 27.612 ug/L | 27.612 ppb | 00:28:57 |
| 3 | Cd 226.502† | 1003.4 | 1143.9 | 7.4860 ug/L | 7.4860 ppb | 00:29:17 |
| 3 | Co 228.616† | 967.6 | 981.6 | 19.148 ug/L | 19.148 ppb | 00:29:17 |
| 3 | Cr 267.716† | 8056.6 | 7753.4 | 109.96 ug/L | 109.96 ppb | 00:28:57 |
| 3 | Cu 324.752† | 262398.0 | 249264.4 | 812.57 ug/L | 812.57 ppb | 00:28:57 |
| 3 | Mn 257.610† | 1890280.5 | 1840979.3 | 2423.4 ug/L | 2423.4 ppb | 00:28:52 |
| 3 | Mo 202.031† | -0.5 | -14.7 | 5.5379 ug/L | 5.5379 ppb | 00:29:17 |
| 3 | Ni 231.604† | 2349.3 | 2195.0 | 68.523 ug/L | 68.523 ppb | 00:29:17 |
| 3 | P 214.914† | 1548.9 | 1340.6 | 748.09 ug/L | 748.09 ppb | 00:29:17 |
| 3 | Pb 220.353† | 3501.7 | 3470.0 | 522.75 ug/L | 522.75 ppb | 00:29:17 |
| 3 | S 181.975 Axial† | 415.5 | 380.4 | 656.74 ug/L | 656.74 ppb | 00:29:17 |
| 3 | Sb 206.836† | 79.1 | 50.4 | 10.622 ug/L | 10.622 ppb | 00:29:17 |
| 3 | Se 196.026† | -333.0 | -307.5 | 26.192 ug/L | 26.192 ppb | 00:29:17 |
| 3 | Si 251.611† | 913024.5 | 888904.6 | 33097 ug/L | 33097 ppb | 00:28:52 |
| 3 | Sn 189.927† | -40.3 | -42.4 | -10.503 ug/L | -10.503 ppb | 00:29:17 |
| 3 | Ti 334.940† | 1551808.9 | 1512790.3 | 2604.6 ug/L | 2604.6 ppb | 00:28:52 |
| 3 | Tl 190.801† | -119.8 | -91.6 | -2.6016 ug/L | -2.6016 ppb | 00:29:17 |
| 3 | U 409.014† | 8530.1 | 10344.9 | 294.51 ug/L | 294.51 ppb | 00:28:52 |
| 3 | V 292.402† | 13599.2 | 14675.3 | 98.747 ug/L | 98.747 ppb | 00:28:57 |
| 3 | Zn 213.857† | 45122.0 | 43349.5 | 500.78 ug/L | 500.78 ppb | 00:28:57 |
| 3 | SiO2† | 902736.0 | 878854.1 | 70216 ug/L | 70216 ppb | 00:29:35 |

Mean Data: 247899020|958053|1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--------------------|--------------------------|-------------|--------|----------|--------------------|----------|--------|
| Sc 361.383 | 854038.1 | 101.69 % | | 0.847 | | | 0.83% |
| Sc Radial | 4262.1 | 106 % | | 1.5 | | | 1.40% |
| Y 371.029 | 817715.2 | 114.19 % | | 1.033 | | | 0.90% |
| Y RADIAL | 5213.0 | 115.4 % | | 1.15 | | | 0.99% |
| Ag 328.068† | -4884.1 | 1.5361 ug/L | | 0.44576 | 1.5361 ppb | 0.44576 | 29.02% |
| Al 396.153Radial† | 50103.3 | 53398 ug/L | | 125.5 | 53398 ppb | 125.5 | 0.24% |
| As 188.979† | -3.6 | 40.506 ug/L | | 2.2089 | 40.506 ppb | 2.2089 | 5.45% |
| B 249.677† | 1048.2 | 14.964 ug/L | | 1.0341 | 14.964 ppb | 1.0341 | 6.91% |
| Ba 233.527† | 72173.3 | 679.42 ug/L | | 2.053 | 679.42 ppb | 2.053 | 0.30% |
| Be 313.107† | 53437.1 | 27.608 ug/L | | 0.0520 | 27.608 ppb | 0.0520 | 0.19% |
| Ca 317.933Radial† | 10362.6 | 21054 ug/L | | 46.3 | 21054 ppb | 46.3 | 0.22% |
| Cd 226.502† | 1148.5 | 7.5386 ug/L | | 0.05535 | 7.5386 ppb | 0.05535 | 0.73% |
| Co 228.616† | 982.8 | 19.178 ug/L | | 0.0357 | 19.178 ppb | 0.0357 | 0.19% |
| Cr 267.716† | 7751.2 | 109.94 ug/L | | 0.321 | 109.94 ppb | 0.321 | 0.29% |
| Cu 324.752† | 249353.2 | 812.86 ug/L | | 1.150 | 812.86 ppb | 1.150 | 0.14% |
| Fe 238.204 Radial† | 6783.7 | 84828 ug/L | | 104.3 | 84828 ppb | 104.3 | 0.12% |
| K 766.490 Radial† | 42995.5 | 8575.0 ug/L | | 27.15 | 8575.0 ppb | 27.15 | 0.32% |

| | | | | | | |
|--------------------|-----------|--------------|---------|-------------|---------|--------|
| Mg 279.077 IEC† | 218.4 | 9452.7 ug/L | 164.10 | 9452.7 ppb | 164.10 | 1.74% |
| Mn 257.610† | 1844926.5 | 2428.6 ug/L | 4.89 | 2428.6 ppb | 4.89 | 0.20% |
| Mo 202.031† | -10.4 | 5.9238 ug/L | 0.34288 | 5.9238 ppb | 0.34288 | 5.79% |
| Na 589.592 Radial† | 1990.4 | 781.65 ug/L | 11.823 | 781.65 ppb | 11.823 | 1.51% |
| Ni 231.604† | 2221.6 | 69.353 ug/L | 0.8061 | 69.353 ppb | 0.8061 | 1.16% |
| P 214.914† | 1355.0 | 758.27 ug/L | 9.525 | 758.27 ppb | 9.525 | 1.26% |
| Pb 220.353† | 3481.1 | 524.40 ug/L | 1.506 | 524.40 ppb | 1.506 | 0.29% |
| S 181.975 Axial† | 384.6 | 664.17 ug/L | 9.322 | 664.17 ppb | 9.322 | 1.40% |
| Sb 206.836† | 47.2 | 9.2908 ug/L | 3.52060 | 9.2908 ppb | 3.52060 | 37.89% |
| Se 196.026† | -306.8 | 27.051 ug/L | 5.8352 | 27.051 ppb | 5.8352 | 21.57% |
| Si 251.611† | 890254.0 | 33147 ug/L | 49.8 | 33147 ppb | 49.8 | 0.15% |
| Sn 189.927† | -43.2 | -10.692 ug/L | 1.7331 | -10.692 ppb | 1.7331 | 16.21% |
| Sr 421.552† | 17334.0 | 147.45 ug/L | 0.092 | 147.45 ppb | 0.092 | 0.06% |
| Ti 334.940† | 1513555.9 | 2606.0 ug/L | 2.02 | 2606.0 ppb | 2.02 | 0.08% |
| Tl 190.801† | -97.1 | -4.7062 ug/L | 2.47115 | -4.7062 ppb | 2.47115 | 52.51% |
| U 409.014† | 10182.6 | 289.72 ug/L | 4.497 | 289.72 ppb | 4.497 | 1.55% |
| V 292.402† | 14673.2 | 98.708 ug/L | 0.0365 | 98.708 ppb | 0.0365 | 0.04% |
| Zn 213.857† | 43398.2 | 501.33 ug/L | 0.885 | 501.33 ppb | 0.885 | 0.18% |
| SiO2† | 887350.2 | 70895 ug/L | 625.8 | 70895 ppb | 625.8 | 0.88% |

Sequence No.: 69

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/26/2010 00:31:46

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 | 4031.0 | 4031.0 | 99.9 % | | 00:33:58 |
| 1 | Y RADIAL | 4461.7 | 4461.7 | 98.75 % | | 00:33:38 |
| 1 | Al 396.153Radial† | 4275.1 | 4357.7 | 4620.2 ug/L | 4620.2 ppb | 00:33:38 |
| 1 | Ca 317.933Radial† | 2439.0 | 2423.5 | 4923.9 ug/L | 4923.9 ppb | 00:33:58 |
| 1 | Fe 238.204 Radial† | 410.2 | 401.5 | 5035.9 ug/L | 5035.9 ppb | 00:33:58 |
| 1 | K 766.490 Radial† | 26383.1 | 23598.1 | 4704.6 ug/L | 4704.6 ppb | 00:33:38 |
| 1 | Mg 279.077 IEC† | 114.3 | 113.7 | 4965.9 ug/L | 4965.9 ppb | 00:33:58 |
| 1 | Na 589.592 Radial† | 25290.7 | 25769.1 | 10120 ug/L | 10120 ppb | 00:33:38 |
| 1 | Sr 421.552† | 55619.4 | 55587.9 | 473.33 ug/L | 473.33 ppb | 00:33:38 |
| 1 | Sc 361.383 | 843174.0 | 843174.0 | 100.40 % | | 00:34:56 |
| 1 | Y 371.029 | 708828.2 | 708828.2 | 98.988 % | | 00:34:56 |
| 1 | Ag 328.068† | 100476.0 | 99827.1 | 506.34 ug/L | 506.34 ppb | 00:35:01 |
| 1 | As 188.979† | 885.5 | 902.9 | 488.31 ug/L | 488.31 ppb | 00:35:21 |
| 1 | B 249.677† | 17331.6 | 17513.6 | 479.14 ug/L | 479.14 ppb | 00:35:01 |
| 1 | Ba 233.527† | 52801.8 | 52575.5 | 494.11 ug/L | 494.11 ppb | 00:35:01 |
| 1 | Be 313.107† | 1205411.1 | 1204929.5 | 490.33 ug/L | 490.33 ppb | 00:34:56 |
| 1 | Cd 226.502† | 35362.9 | 35390.1 | 499.04 ug/L | 499.04 ppb | 00:35:01 |
| 1 | Co 228.616† | 19585.2 | 19547.1 | 508.82 ug/L | 508.82 ppb | 00:35:01 |
| 1 | Cr 267.716† | 38040.4 | 37795.7 | 493.10 ug/L | 493.10 ppb | 00:35:01 |
| 1 | Cu 324.752† | 159076.9 | 152098.0 | 493.16 ug/L | 493.16 ppb | 00:35:01 |
| 1 | Mn 257.610† | 380414.6 | 378464.9 | 496.86 ug/L | 496.86 ppb | 00:34:56 |
| 1 | Mo 202.031† | 5661.4 | 5624.9 | 494.97 ug/L | 494.97 ppb | 00:35:21 |
| 1 | Ni 231.604† | 16221.2 | 16063.7 | 501.28 ug/L | 501.28 ppb | 00:35:01 |
| 1 | P 214.914† | 3616.8 | 3434.4 | 2372.4 ug/L | 2372.4 ppb | 00:35:21 |
| 1 | Pb 220.353† | 3211.7 | 3257.9 | 492.50 ug/L | 492.50 ppb | 00:35:21 |
| 1 | S 181.975 Axial† | 591.3 | 564.5 | 988.67 ug/L | 988.67 ppb | 00:35:21 |
| 1 | Sb 206.836† | 1227.8 | 1196.3 | 526.14 ug/L | 526.14 ppb | 00:35:21 |
| 1 | Se 196.026† | 605.1 | 619.6 | 511.98 ug/L | 511.98 ppb | 00:35:21 |
| 1 | Si 251.611† | 68067.8 | 67274.4 | 2498.7 ug/L | 2498.7 ppb | 00:35:01 |
| 1 | Sn 189.927† | 2256.7 | 2244.8 | 497.75 ug/L | 497.75 ppb | 00:35:21 |
| 1 | Ti 334.940† | 287656.5 | 287607.7 | 494.68 ug/L | 494.68 ppb | 00:35:01 |
| 1 | Tl 190.801† | 1232.1 | 1252.3 | 487.50 ug/L | 487.50 ppb | 00:35:21 |
| 1 | U 409.014† | 15769.3 | 17742.5 | 520.39 ug/L | 520.39 ppb | 00:35:01 |
| 1 | V 292.402† | 63044.2 | 64223.6 | 501.74 ug/L | 501.74 ppb | 00:35:01 |
| 1 | Zn 213.857† | 42472.3 | 41698.7 | 490.76 ug/L | 490.76 ppb | 00:35:01 |
| 1 | SiO2† | 66937.9 | 66121.1 | 5269.3 ug/L | 5269.3 ppb | 00:36:28 |
| 2 | Sc Radial | 3981.0 | 3981.0 | 98.7 % | | 00:34:23 |
| 2 | Y RADIAL | 4503.5 | 4503.5 | 99.68 % | | 00:34:03 |
| 2 | Al 396.153Radial† | 4533.7 | 4673.6 | 4956.6 ug/L | 4956.6 ppb | 00:34:03 |
| 2 | Ca 317.933Radial† | 2440.5 | 2455.7 | 4989.4 ug/L | 4989.4 ppb | 00:34:23 |
| 2 | Fe 238.204 Radial† | 409.8 | 406.3 | 5095.6 ug/L | 5095.6 ppb | 00:34:23 |
| 2 | K 766.490 Radial† | 27216.1 | 24774.3 | 4939.2 ug/L | 4939.2 ppb | 00:34:03 |
| 2 | Mg 279.077 IEC† | 112.4 | 113.2 | 4944.8 ug/L | 4944.8 ppb | 00:34:23 |
| 2 | Na 589.592 Radial† | 26024.5 | 26831.0 | 10537 ug/L | 10537 ppb | 00:34:03 |
| 2 | Sr 421.552† | 57736.2 | 58432.9 | 497.55 ug/L | 497.55 ppb | 00:34:03 |
| 2 | Sc 361.383 | 835269.9 | 835269.9 | 99.454 % | | 00:35:27 |
| 2 | Y 371.029 | 703430.2 | 703430.2 | 98.234 % | | 00:35:27 |
| 2 | Ag 328.068† | 100569.1 | 100867.8 | 511.62 ug/L | 511.62 ppb | 00:35:32 |
| 2 | As 188.979† | 896.2 | 922.0 | 498.59 ug/L | 498.59 ppb | 00:35:52 |
| 2 | B 249.677† | 17342.3 | 17687.6 | 483.90 ug/L | 483.90 ppb | 00:35:32 |
| 2 | Ba 233.527† | 52964.5 | 53236.7 | 500.32 ug/L | 500.32 ppb | 00:35:32 |
| 2 | Be 313.107† | 1192126.3 | 1202933.6 | 489.53 ug/L | 489.53 ppb | 00:35:27 |
| 2 | Cd 226.502† | 35460.2 | 35821.2 | 505.11 ug/L | 505.11 ppb | 00:35:32 |
| 2 | Co 228.616† | 19544.9 | 19691.1 | 512.57 ug/L | 512.57 ppb | 00:35:32 |
| 2 | Cr 267.716† | 38139.2 | 38253.6 | 499.07 ug/L | 499.07 ppb | 00:35:32 |
| 2 | Cu 324.752† | 159323.1 | 153845.0 | 498.83 ug/L | 498.83 ppb | 00:35:32 |
| 2 | Mn 257.610† | 376191.2 | 377804.0 | 496.00 ug/L | 496.00 ppb | 00:35:27 |
| 2 | Mo 202.031† | 5671.5 | 5688.4 | 500.56 ug/L | 500.56 ppb | 00:35:52 |
| 2 | Ni 231.604† | 16221.6 | 16217.1 | 506.07 ug/L | 506.07 ppb | 00:35:32 |

| | | | | | | |
|---|--------------------|-----------|-----------|-------------|------------|----------|
| 2 | P 214.914† | 3619.0 | 3470.6 | 2397.4 ug/L | 2397.4 ppb | 00:35:52 |
| 2 | Pb 220.353† | 3206.8 | 3283.2 | 496.39 ug/L | 496.39 ppb | 00:35:52 |
| 2 | S 181.975 Axial† | 594.6 | 573.4 | 1004.2 ug/L | 1004.2 ppb | 00:35:52 |
| 2 | Sb 206.836† | 1213.6 | 1193.6 | 525.12 ug/L | 525.12 ppb | 00:35:52 |
| 2 | Se 196.026† | 608.0 | 628.3 | 519.21 ug/L | 519.21 ppb | 00:35:52 |
| 2 | Si 251.611† | 68182.0 | 68030.8 | 2526.8 ug/L | 2526.8 ppb | 00:35:32 |
| 2 | Sn 189.927† | 2238.6 | 2247.8 | 498.44 ug/L | 498.44 ppb | 00:35:52 |
| 2 | Ti 334.940† | 288155.2 | 290820.5 | 500.21 ug/L | 500.21 ppb | 00:35:32 |
| 2 | Tl 190.801† | 1228.6 | 1260.4 | 490.67 ug/L | 490.67 ppb | 00:35:52 |
| 2 | U 409.014† | 15712.3 | 17833.8 | 523.05 ug/L | 523.05 ppb | 00:35:32 |
| 2 | V 292.402† | 63056.1 | 64829.8 | 506.48 ug/L | 506.48 ppb | 00:35:32 |
| 2 | Zn 213.857† | 42536.8 | 42163.9 | 496.24 ug/L | 496.24 ppb | 00:35:32 |
| 2 | SiO2† | 68709.0 | 68532.8 | 5461.8 ug/L | 5461.8 ppb | 00:36:33 |
| 3 | Sc Radial | 4024.3 | 4024.3 | 99.8 % | | 00:34:49 |
| 3 | Y RADIAL | 4450.1 | 4450.1 | 98.50 % | | 00:34:29 |
| 3 | Al 396.153Radial† | 4481.8 | 4572.0 | 4848.7 ug/L | 4848.7 ppb | 00:34:29 |
| 3 | Ca 317.933Radial† | 2468.9 | 2457.5 | 4993.1 ug/L | 4993.1 ppb | 00:34:49 |
| 3 | Fe 238.204 Radial† | 418.3 | 410.3 | 5145.7 ug/L | 5145.7 ppb | 00:34:49 |
| 3 | K 766.490 Radial† | 27025.8 | 24286.3 | 4841.8 ug/L | 4841.8 ppb | 00:34:29 |
| 3 | Mg 279.077 IEC† | 118.5 | 118.1 | 5158.7 ug/L | 5158.7 ppb | 00:34:49 |
| 3 | Na 589.592 Radial† | 25862.0 | 26383.9 | 10361 ug/L | 10361 ppb | 00:34:29 |
| 3 | Sr 421.552† | 57035.9 | 57100.4 | 486.20 ug/L | 486.20 ppb | 00:34:29 |
| 3 | Sc 361.383 | 845317.1 | 845317.1 | 100.65 % | | 00:35:58 |
| 3 | Y 371.029 | 712047.8 | 712047.8 | 99.438 % | | 00:35:58 |
| 3 | Ag 328.068† | 100261.2 | 99360.0 | 504.01 ug/L | 504.01 ppb | 00:36:03 |
| 3 | As 188.979† | 895.5 | 910.5 | 492.40 ug/L | 492.40 ppb | 00:36:23 |
| 3 | B 249.677† | 17276.4 | 17415.0 | 476.42 ug/L | 476.42 ppb | 00:36:03 |
| 3 | Ba 233.527† | 52691.9 | 52332.9 | 491.84 ug/L | 491.84 ppb | 00:36:03 |
| 3 | Be 313.107† | 1206256.5 | 1202725.4 | 489.43 ug/L | 489.43 ppb | 00:35:58 |
| 3 | Cd 226.502† | 35195.7 | 35134.7 | 495.42 ug/L | 495.42 ppb | 00:36:03 |
| 3 | Co 228.616† | 19523.2 | 19436.0 | 505.93 ug/L | 505.93 ppb | 00:36:03 |
| 3 | Cr 267.716† | 38007.6 | 37667.0 | 491.43 ug/L | 491.43 ppb | 00:36:03 |
| 3 | Cu 324.752† | 158628.9 | 151251.2 | 490.42 ug/L | 490.42 ppb | 00:36:03 |
| 3 | Mn 257.610† | 379512.4 | 376607.9 | 494.42 ug/L | 494.42 ppb | 00:35:58 |
| 3 | Mo 202.031† | 5674.6 | 5623.7 | 494.87 ug/L | 494.87 ppb | 00:36:23 |
| 3 | Ni 231.604† | 16213.0 | 16014.6 | 499.75 ug/L | 499.75 ppb | 00:36:03 |
| 3 | P 214.914† | 3626.2 | 3434.6 | 2373.0 ug/L | 2373.0 ppb | 00:36:23 |
| 3 | Pb 220.353† | 3207.8 | 3245.9 | 490.73 ug/L | 490.73 ppb | 00:36:23 |
| 3 | S 181.975 Axial† | 598.9 | 570.7 | 999.40 ug/L | 999.40 ppb | 00:36:23 |
| 3 | Sb 206.836† | 1229.1 | 1194.5 | 525.31 ug/L | 525.31 ppb | 00:36:23 |
| 3 | Se 196.026† | 614.4 | 627.4 | 518.56 ug/L | 518.56 ppb | 00:36:23 |
| 3 | Si 251.611† | 67750.9 | 66787.7 | 2480.6 ug/L | 2480.6 ppb | 00:36:03 |
| 3 | Sn 189.927† | 2245.4 | 2227.8 | 494.00 ug/L | 494.00 ppb | 00:36:23 |
| 3 | Ti 334.940† | 287035.4 | 286264.2 | 492.36 ug/L | 492.36 ppb | 00:36:03 |
| 3 | Tl 190.801† | 1237.3 | 1254.4 | 488.29 ug/L | 488.29 ppb | 00:36:23 |
| 3 | U 409.014† | 15745.0 | 17678.4 | 518.49 ug/L | 518.49 ppb | 00:36:03 |
| 3 | V 292.402† | 62897.1 | 63918.3 | 499.37 ug/L | 499.37 ppb | 00:36:03 |
| 3 | Zn 213.857† | 42375.8 | 41495.5 | 488.34 ug/L | 488.34 ppb | 00:36:03 |
| 3 | SiO2† | 68267.2 | 67272.7 | 5361.3 ug/L | 5361.3 ppb | 00:36:39 |

Mean Data: CCV

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|-------|
| Sc 361.383 | 841253.7 | 100.17 % | 0.630 | | | 0.63% |
| Sc Radial | 4012.1 | 99.5 % | 0.67 | | | 0.68% |
| Y 371.029 | 708102.1 | 98.887 % | 0.6081 | | | 0.61% |
| Y RADIAL | 4471.8 | 98.98 % | 0.621 | | | 0.63% |
| Ag 328.068† | 100018.3 | 507.32 ug/L | 3.900 | 507.32 ppb | 3.900 | 0.77% |
| QC value within limits for Ag 328.068 Recovery = 101.46% | | | | | | |
| Al 396.153Radial† | 4534.4 | 4808.5 ug/L | 171.76 | 4808.5 ppb | 171.76 | 3.57% |
| QC value within limits for Al 396.153Radial Recovery = 96.17% | | | | | | |
| As 188.979† | 911.8 | 493.10 ug/L | 5.175 | 493.10 ppb | 5.175 | 1.05% |
| QC value within limits for As 188.979 Recovery = 98.62% | | | | | | |
| B 249.677† | 17538.7 | 479.82 ug/L | 3.788 | 479.82 ppb | 3.788 | 0.79% |
| QC value within limits for B 249.677 Recovery = 95.96% | | | | | | |
| Ba 233.527† | 52715.0 | 495.42 ug/L | 4.393 | 495.42 ppb | 4.393 | 0.89% |
| QC value within limits for Ba 233.527 Recovery = 99.08% | | | | | | |
| Be 313.107† | 1203529.5 | 489.76 ug/L | 0.493 | 489.76 ppb | 0.493 | 0.10% |
| QC value within limits for Be 313.107 Recovery = 97.95% | | | | | | |
| Ca 317.933Radial† | 2445.6 | 4968.8 ug/L | 38.95 | 4968.8 ppb | 38.95 | 0.78% |

QC value within limits for Ca 317.933 Radial Recovery = 99.38%

| | | | | | | |
|---|----------|-------------|--------|------------|--------|-------|
| Cd 226.502† | 35448.7 | 499.86 ug/L | 4.898 | 499.86 ppb | 4.898 | 0.98% |
| QC value within limits for Cd 226.502 Recovery = 99.97% | | | | | | |
| Co 228.616† | 19558.1 | 509.10 ug/L | 3.329 | 509.10 ppb | 3.329 | 0.65% |
| QC value within limits for Co 228.616 Recovery = 101.82% | | | | | | |
| Cr 267.716† | 37905.4 | 494.53 ug/L | 4.017 | 494.53 ppb | 4.017 | 0.81% |
| QC value within limits for Cr 267.716 Recovery = 98.91% | | | | | | |
| Cu 324.752† | 152398.1 | 494.14 ug/L | 4.287 | 494.14 ppb | 4.287 | 0.87% |
| QC value within limits for Cu 324.752 Recovery = 98.83% | | | | | | |
| Fe 238.204 Radial† | 406.0 | 5092.4 ug/L | 55.01 | 5092.4 ppb | 55.01 | 1.08% |
| QC value within limits for Fe 238.204 Radial Recovery = 101.85% | | | | | | |
| K 766.490 Radial† | 24219.6 | 4828.5 ug/L | 117.87 | 4828.5 ppb | 117.87 | 2.44% |
| QC value within limits for K 766.490 Radial Recovery = 96.57% | | | | | | |
| Mg 279.077 IEC† | 115.0 | 5023.2 ug/L | 117.90 | 5023.2 ppb | 117.90 | 2.35% |
| QC value within limits for Mg 279.077 IEC Recovery = 100.46% | | | | | | |
| Mn 257.610† | 377625.6 | 495.76 ug/L | 1.234 | 495.76 ppb | 1.234 | 0.25% |
| QC value within limits for Mn 257.610 Recovery = 99.15% | | | | | | |
| Mo 202.031† | 5645.7 | 496.80 ug/L | 3.255 | 496.80 ppb | 3.255 | 0.66% |
| QC value within limits for Mo 202.031 Recovery = 99.36% | | | | | | |
| Na 589.592 Radial† | 26328.0 | 10339 ug/L | 209.4 | 10339 ppb | 209.4 | 2.03% |
| QC value within limits for Na 589.592 Radial Recovery = 103.39% | | | | | | |
| Ni 231.604† | 16098.5 | 502.37 ug/L | 3.295 | 502.37 ppb | 3.295 | 0.66% |
| QC value within limits for Ni 231.604 Recovery = 100.47% | | | | | | |
| P 214.914† | 3446.5 | 2380.9 ug/L | 14.25 | 2380.9 ppb | 14.25 | 0.60% |
| QC value within limits for P 214.914 Recovery = 95.24% | | | | | | |
| Pb 220.353† | 3262.3 | 493.21 ug/L | 2.898 | 493.21 ppb | 2.898 | 0.59% |
| QC value within limits for Pb 220.353 Recovery = 98.64% | | | | | | |
| S 181.975 Axial† | 569.6 | 997.42 ug/L | 7.945 | 997.42 ppb | 7.945 | 0.80% |
| QC value within limits for S 181.975 Axial Recovery = 99.74% | | | | | | |
| Sb 206.836† | 1194.8 | 525.53 ug/L | 0.538 | 525.53 ppb | 0.538 | 0.10% |
| QC value within limits for Sb 206.836 Recovery = 105.11% | | | | | | |
| Se 196.026† | 625.1 | 516.59 ug/L | 4.003 | 516.59 ppb | 4.003 | 0.77% |
| QC value within limits for Se 196.026 Recovery = 103.32% | | | | | | |
| Si 251.611† | 67364.3 | 2502.1 ug/L | 23.29 | 2502.1 ppb | 23.29 | 0.93% |
| QC value within limits for Si 251.611 Recovery = 100.08% | | | | | | |
| Sn 189.927† | 2240.1 | 496.73 ug/L | 2.389 | 496.73 ppb | 2.389 | 0.48% |
| QC value within limits for Sn 189.927 Recovery = 99.35% | | | | | | |
| Sr 421.552† | 57040.4 | 485.69 ug/L | 12.121 | 485.69 ppb | 12.121 | 2.50% |
| QC value within limits for Sr 421.552 Recovery = 97.14% | | | | | | |
| Ti 334.940† | 288230.8 | 495.75 ug/L | 4.034 | 495.75 ppb | 4.034 | 0.81% |
| QC value within limits for Ti 334.940 Recovery = 99.15% | | | | | | |
| Tl 190.801† | 1255.7 | 488.82 ug/L | 1.649 | 488.82 ppb | 1.649 | 0.34% |
| QC value within limits for Tl 190.801 Recovery = 97.76% | | | | | | |
| U 409.014† | 17751.5 | 520.65 ug/L | 2.291 | 520.65 ppb | 2.291 | 0.44% |
| QC value within limits for U 409.014 Recovery = 104.13% | | | | | | |
| V 292.402† | 64323.9 | 502.53 ug/L | 3.620 | 502.53 ppb | 3.620 | 0.72% |
| QC value within limits for V 292.402 Recovery = 100.51% | | | | | | |
| Zn 213.857† | 41786.1 | 491.78 ug/L | 4.046 | 491.78 ppb | 4.046 | 0.82% |
| QC value within limits for Zn 213.857 Recovery = 98.36% | | | | | | |
| SiO2† | 67308.9 | 5364.1 ug/L | 96.30 | 5364.1 ppb | 96.30 | 1.80% |
| QC value within limits for SiO2 Recovery = 100.31% | | | | | | |

All analyte(s) passed QC.

Sequence No.: 70

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2010 00:38:48

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 | 4019.2 | 4019.2 | 99.6 % | | 00:41:00 |
| 1 | Y RADIAL | 4405.9 | 4405.9 | 97.52 % | | 00:40:40 |
| 1 | Al 396.153Radial† | -63.4 | 16.0 | 17.043 ug/L | 17.043 ppb | 00:41:00 |
| 1 | Ca 317.933Radial† | 21.1 | 4.0 | 8.1467 ug/L | 8.1467 ppb | 00:41:00 |
| 1 | Fe 238.204 Radial† | 16.3 | 7.4 | 92.542 ug/L | 92.542 ppb | 00:41:00 |
| 1 | K 766.490 Radial† | 2447.7 | -346.7 | -69.214 ug/L | -69.214 ppb | 00:40:40 |
| 1 | Mg 279.077 IEC† | 3.4 | 2.7 | 117.49 ug/L | 117.49 ppb | 00:41:00 |
| 1 | Na 589.592 Radial† | -417.8 | 41.6 | 16.332 ug/L | 16.332 ppb | 00:40:40 |
| 1 | Sr 421.552† | 75.1 | 5.4 | 0.0456 ug/L | 0.0456 ppb | 00:40:40 |
| 1 | Sc 361.383 | 825989.4 | 825989.4 | 98.349 % | | 00:41:57 |
| 1 | Y 371.029 | 703158.4 | 703158.4 | 98.196 % | | 00:41:57 |
| 1 | Ag 328.068† | 121.7 | -129.6 | -0.6260 ug/L | -0.6260 ppb | 00:41:57 |
| 1 | As 188.979† | -25.0 | -4.6 | -2.4471 ug/L | -2.4471 ppb | 00:42:17 |
| 1 | B 249.677† | -359.8 | -115.7 | -3.1934 ug/L | -3.1934 ppb | 00:42:17 |
| 1 | Ba 233.527† | 26.6 | 8.5 | 0.0844 ug/L | 0.0844 ppb | 00:42:17 |
| 1 | Be 313.107† | -4540.4 | -353.9 | -0.1434 ug/L | -0.1434 ppb | 00:41:57 |
| 1 | Cd 226.502† | -173.3 | -9.8 | -0.1476 ug/L | -0.1476 ppb | 00:42:17 |
| 1 | Co 228.616† | -46.1 | -8.0 | -0.2111 ug/L | -0.2111 ppb | 00:42:17 |
| 1 | Cr 267.716† | 101.5 | 8.2 | 0.1158 ug/L | 0.1158 ppb | 00:42:17 |
| 1 | Cu 324.752† | 6544.2 | 301.3 | 0.9795 ug/L | 0.9795 ppb | 00:41:57 |
| 1 | Mn 257.610† | 980.4 | 544.4 | 0.7186 ug/L | 0.7186 ppb | 00:42:17 |
| 1 | Mo 202.031† | 8.1 | -6.0 | -0.5182 ug/L | -0.5182 ppb | 00:42:17 |
| 1 | Ni 231.604† | 79.9 | -12.4 | -0.3862 ug/L | -0.3862 ppb | 00:42:17 |
| 1 | P 214.914† | 195.0 | 30.0 | 21.324 ug/L | 21.324 ppb | 00:42:17 |
| 1 | Pb 220.353† | -53.5 | 4.4 | 0.6531 ug/L | 0.6531 ppb | 00:42:17 |
| 1 | S 181.975 Axial† | 27.3 | 3.3 | 5.8310 ug/L | 5.8310 ppb | 00:42:17 |
| 1 | Sb 206.836† | 29.6 | 3.5 | 1.4854 ug/L | 1.4854 ppb | 00:42:17 |
| 1 | Se 196.026† | -14.9 | 1.8 | 1.7176 ug/L | 1.7176 ppb | 00:42:17 |
| 1 | Si 251.611† | 549.5 | 33.3 | 1.2453 ug/L | 1.2453 ppb | 00:42:17 |
| 1 | Sn 189.927† | 5.5 | 2.5 | 0.5462 ug/L | 0.5462 ppb | 00:42:17 |
| 1 | Ti 334.940† | -1001.7 | 64.8 | 0.1010 ug/L | 0.1010 ppb | 00:41:57 |
| 1 | Tl 190.801† | -26.6 | -2.0 | -0.7609 ug/L | -0.7609 ppb | 00:42:17 |
| 1 | U 409.014† | -1849.5 | 154.7 | 4.5402 ug/L | 4.5402 ppb | 00:41:57 |
| 1 | V 292.402† | -1316.5 | 89.0 | 0.6758 ug/L | 0.6758 ppb | 00:41:57 |
| 1 | Zn 213.857† | 670.3 | 75.1 | 0.8794 ug/L | 0.8794 ppb | 00:42:17 |
| 1 | SiO2† | 1451.7 | 922.7 | 73.730 ug/L | 73.730 ppb | 00:43:28 |
| 2 | Sc Radial | 4042.2 | 4042.2 | 100 % | | 00:41:25 |
| 2 | Y RADIAL | 4477.5 | 4477.5 | 99.10 % | | 00:41:05 |
| 2 | Al 396.153Radial† | -65.7 | 14.1 | 14.980 ug/L | 14.980 ppb | 00:41:25 |
| 2 | Ca 317.933Radial† | 22.2 | 5.0 | 10.117 ug/L | 10.117 ppb | 00:41:25 |
| 2 | Fe 238.204 Radial† | 17.1 | 8.0 | 100.55 ug/L | 100.55 ppb | 00:41:25 |
| 2 | K 766.490 Radial† | 2574.2 | -234.4 | -46.807 ug/L | -46.807 ppb | 00:41:05 |
| 2 | Mg 279.077 IEC† | 1.4 | 0.7 | 29.645 ug/L | 29.645 ppb | 00:41:25 |
| 2 | Na 589.592 Radial† | -402.4 | 59.3 | 23.281 ug/L | 23.281 ppb | 00:41:05 |
| 2 | Sr 421.552† | 46.3 | -23.8 | -0.2030 ug/L | -0.2030 ppb | 00:41:05 |
| 2 | Sc 361.383 | 825425.3 | 825425.3 | 98.282 % | | 00:42:22 |
| 2 | Y 371.029 | 703215.5 | 703215.5 | 98.204 % | | 00:42:22 |
| 2 | Ag 328.068† | 102.7 | -148.9 | -0.7208 ug/L | -0.7208 ppb | 00:42:22 |
| 2 | As 188.979† | -25.7 | -5.4 | -2.8493 ug/L | -2.8493 ppb | 00:42:42 |
| 2 | B 249.677† | -393.2 | -149.9 | -4.1362 ug/L | -4.1362 ppb | 00:42:42 |
| 2 | Ba 233.527† | 14.1 | -4.2 | -0.0356 ug/L | -0.0356 ppb | 00:42:42 |
| 2 | Be 313.107† | -4534.9 | -351.5 | -0.1423 ug/L | -0.1423 ppb | 00:42:22 |
| 2 | Cd 226.502† | -164.0 | -0.5 | -0.0167 ug/L | -0.0167 ppb | 00:42:42 |
| 2 | Co 228.616† | -51.6 | -13.6 | -0.3562 ug/L | -0.3562 ppb | 00:42:42 |
| 2 | Cr 267.716† | 92.0 | -1.3 | -0.0074 ug/L | -0.0074 ppb | 00:42:42 |
| 2 | Cu 324.752† | 6520.5 | 281.8 | 0.9176 ug/L | 0.9176 ppb | 00:42:22 |
| 2 | Mn 257.610† | 1113.8 | 680.9 | 0.9021 ug/L | 0.9021 ppb | 00:42:42 |
| 2 | Mo 202.031† | 14.1 | 0.2 | 0.0257 ug/L | 0.0257 ppb | 00:42:42 |
| 2 | Ni 231.604† | 79.3 | -13.0 | -0.4045 ug/L | -0.4045 ppb | 00:42:42 |

| | | | | | | |
|---|--------------------|----------|----------|--------------|-------------|----------|
| 2 | P 214.914† | 194.3 | 29.5 | 20.944 ug/L | 20.944 ppb | 00:42:42 |
| 2 | Pb 220.353† | -54.0 | 3.9 | 0.5708 ug/L | 0.5708 ppb | 00:42:42 |
| 2 | S 181.975 Axial† | 29.3 | 5.4 | 9.5032 ug/L | 9.5032 ppb | 00:42:42 |
| 2 | Sb 206.836† | 27.2 | 1.1 | 0.4650 ug/L | 0.4650 ppb | 00:42:42 |
| 2 | Se 196.026† | -13.4 | 3.3 | 2.9543 ug/L | 2.9543 ppb | 00:42:42 |
| 2 | Si 251.611† | 674.1 | 160.4 | 5.9731 ug/L | 5.9731 ppb | 00:42:42 |
| 2 | Sn 189.927† | 8.0 | 5.1 | 1.1218 ug/L | 1.1218 ppb | 00:42:42 |
| 2 | Ti 334.940† | -961.3 | 105.2 | 0.1790 ug/L | 0.1790 ppb | 00:42:22 |
| 2 | Tl 190.801† | -29.8 | -5.2 | -2.0091 ug/L | -2.0091 ppb | 00:42:42 |
| 2 | U 409.014† | -1922.5 | 79.0 | 2.3136 ug/L | 2.3136 ppb | 00:42:22 |
| 2 | V 292.402† | -1375.1 | 28.4 | 0.2092 ug/L | 0.2092 ppb | 00:42:22 |
| 2 | Zn 213.857† | 666.2 | 71.4 | 0.8347 ug/L | 0.8347 ppb | 00:42:42 |
| 2 | SiO2† | 592.1 | 49.1 | 3.9232 ug/L | 3.9232 ppb | 00:43:48 |
| 3 | Sc Radial | 4022.2 | 4022.2 | 99.7 % | | 00:41:50 |
| 3 | Y RADIAL | 4501.5 | 4501.5 | 99.63 % | | 00:41:30 |
| 3 | Al 396.153Radial† | -59.6 | 19.9 | 21.177 ug/L | 21.177 ppb | 00:41:50 |
| 3 | Ca 317.933Radial† | 24.4 | 7.3 | 14.848 ug/L | 14.848 ppb | 00:41:50 |
| 3 | Fe 238.204 Radial† | 11.6 | 2.7 | 33.466 ug/L | 33.466 ppb | 00:41:50 |
| 3 | K 766.490 Radial† | 2471.3 | -324.8 | -64.851 ug/L | -64.851 ppb | 00:41:30 |
| 3 | Mg 279.077 IEC† | 2.9 | 2.2 | 95.719 ug/L | 95.719 ppb | 00:41:50 |
| 3 | Na 589.592 Radial† | -398.1 | 61.6 | 24.185 ug/L | 24.185 ppb | 00:41:30 |
| 3 | Sr 421.552† | 73.5 | 3.7 | 0.0311 ug/L | 0.0311 ppb | 00:41:30 |
| 3 | Sc 361.383 | 834276.1 | 834276.1 | 99.336 % | | 00:42:47 |
| 3 | Y 371.029 | 711682.2 | 711682.2 | 99.387 % | | 00:42:47 |
| 3 | Ag 328.068† | 243.7 | -8.1 | -0.0327 ug/L | -0.0327 ppb | 00:42:47 |
| 3 | As 188.979† | -31.2 | -10.5 | -5.6343 ug/L | -5.6343 ppb | 00:43:07 |
| 3 | B 249.677† | -391.1 | -143.6 | -3.9521 ug/L | -3.9521 ppb | 00:43:07 |
| 3 | Ba 233.527† | 23.1 | 4.8 | 0.0475 ug/L | 0.0475 ppb | 00:43:07 |
| 3 | Be 313.107† | -4529.6 | -297.2 | -0.1200 ug/L | -0.1200 ppb | 00:42:47 |
| 3 | Cd 226.502† | -176.2 | -11.0 | -0.1576 ug/L | -0.1576 ppb | 00:43:07 |
| 3 | Co 228.616† | -44.7 | -6.1 | -0.1593 ug/L | -0.1593 ppb | 00:43:07 |
| 3 | Cr 267.716† | 75.2 | -19.3 | -0.2487 ug/L | -0.2487 ppb | 00:43:07 |
| 3 | Cu 324.752† | 6617.0 | 308.5 | 0.9984 ug/L | 0.9984 ppb | 00:42:47 |
| 3 | Mn 257.610† | 1143.9 | 699.1 | 0.9167 ug/L | 0.9167 ppb | 00:43:07 |
| 3 | Mo 202.031† | 15.9 | 1.8 | 0.1642 ug/L | 0.1642 ppb | 00:43:07 |
| 3 | Ni 231.604† | 63.6 | -29.6 | -0.9235 ug/L | -0.9235 ppb | 00:43:07 |
| 3 | P 214.914† | 192.0 | 25.0 | 17.792 ug/L | 17.792 ppb | 00:43:07 |
| 3 | Pb 220.353† | -49.3 | 9.2 | 1.3908 ug/L | 1.3908 ppb | 00:43:07 |
| 3 | S 181.975 Axial† | 31.1 | 6.9 | 12.174 ug/L | 12.174 ppb | 00:43:07 |
| 3 | Sb 206.836† | 25.8 | -0.7 | -0.2653 ug/L | -0.2653 ppb | 00:43:07 |
| 3 | Se 196.026† | -12.1 | 4.8 | 3.9008 ug/L | 3.9008 ppb | 00:43:07 |
| 3 | Si 251.611† | 689.1 | 168.2 | 6.2618 ug/L | 6.2618 ppb | 00:43:07 |
| 3 | Sn 189.927† | 9.7 | 6.7 | 1.4847 ug/L | 1.4847 ppb | 00:43:07 |
| 3 | Ti 334.940† | -917.0 | 160.2 | 0.2670 ug/L | 0.2670 ppb | 00:42:47 |
| 3 | Tl 190.801† | -35.8 | -10.9 | -4.2265 ug/L | -4.2265 ppb | 00:43:07 |
| 3 | U 409.014† | -1800.7 | 222.4 | 6.5402 ug/L | 6.5402 ppb | 00:42:47 |
| 3 | V 292.402† | -1314.3 | 104.5 | 0.8169 ug/L | 0.8169 ppb | 00:42:47 |
| 3 | Zn 213.857† | 654.9 | 52.8 | 0.6268 ug/L | 0.6268 ppb | 00:43:07 |
| 3 | SiO2† | 592.7 | 43.3 | 3.4523 ug/L | 3.4523 ppb | 00:44:08 |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Sc 361.383 | 828563.6 | 98.656 % | | 0.5900 | | | 0.60% |
| Sc Radial | 4027.9 | 99.9 % | | 0.31 | | | 0.31% |
| Y 371.029 | 706018.7 | 98.596 % | | 0.6850 | | | 0.69% |
| Y RADIAL | 4461.6 | 98.75 % | | 1.101 | | | 1.12% |
| Ag 328.068† | -95.5 | -0.4598 ug/L | | 0.37294 | -0.4598 ppb | 0.37294 | 81.10% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 396.153Radial† | 16.6 | 17.733 ug/L | | 3.1560 | 17.733 ppb | 3.1560 | 17.80% |
| QC value within limits for Al 396.153Radial Recovery = Not calculated | | | | | | | |
| As 188.979† | -6.8 | -3.6436 ug/L | | 1.73575 | -3.6436 ppb | 1.73575 | 47.64% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.677† | -136.4 | -3.7606 ug/L | | 0.49973 | -3.7606 ppb | 0.49973 | 13.29% |
| QC value within limits for B 249.677 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 3.0 | 0.0321 ug/L | | 0.06146 | 0.0321 ppb | 0.06146 | 191.65% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -334.2 | -0.1353 ug/L | | 0.01320 | -0.1353 ppb | 0.01320 | 9.76% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933Radial† | 5.4 | 11.037 ug/L | | 3.4442 | 11.037 ppb | 3.4442 | 31.20% |

| | | | | | | |
|--|--------|--------------|---------|-------------|---------|---------|
| QC value within limits for Ca 317.933 Radial Recovery = Not calculated | | | | | | |
| Cd 226.502† | -7.1 | -0.1073 ug/L | 0.07864 | -0.1073 ppb | 0.07864 | 73.29% |
| QC value within limits for Cd 226.502 Recovery = Not calculated | | | | | | |
| Co 228.616† | -9.2 | -0.2422 ug/L | 0.10207 | -0.2422 ppb | 0.10207 | 42.14% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | -4.1 | -0.0468 ug/L | 0.18541 | -0.0468 ppb | 0.18541 | 396.52% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 297.2 | 0.9652 ug/L | 0.04223 | 0.9652 ppb | 0.04223 | 4.37% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204 Radial† | 6.0 | 75.520 ug/L | 36.6398 | 75.520 ppb | 36.6398 | 48.52% |
| QC value within limits for Fe 238.204 Radial Recovery = Not calculated | | | | | | |
| K 766.490 Radial† | -301.9 | -60.291 ug/L | 11.8791 | -60.291 ppb | 11.8791 | 19.70% |
| QC value within limits for K 766.490 Radial Recovery = Not calculated | | | | | | |
| Mg 279.077 IEC† | 1.9 | 80.951 ug/L | 45.7468 | 80.951 ppb | 45.7468 | 56.51% |
| QC value within limits for Mg 279.077 IEC Recovery = Not calculated | | | | | | |
| Mn 257.610† | 641.5 | 0.8458 ug/L | 0.11038 | 0.8458 ppb | 0.11038 | 13.05% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -1.3 | -0.1094 ug/L | 0.36074 | -0.1094 ppb | 0.36074 | 329.60% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 589.592 Radial† | 54.2 | 21.266 ug/L | 4.2971 | 21.266 ppb | 4.2971 | 20.21% |
| QC value within limits for Na 589.592 Radial Recovery = Not calculated | | | | | | |
| Ni 231.604† | -18.3 | -0.5714 ug/L | 0.30507 | -0.5714 ppb | 0.30507 | 53.39% |
| QC value within limits for Ni 231.604 Recovery = Not calculated | | | | | | |
| P 214.914† | 28.2 | 20.020 ug/L | 1.9390 | 20.020 ppb | 1.9390 | 9.69% |
| QC value within limits for P 214.914 Recovery = Not calculated | | | | | | |
| Pb 220.353† | 5.8 | 0.8716 ug/L | 0.45152 | 0.8716 ppb | 0.45152 | 51.81% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| S 181.975 Axial† | 5.2 | 9.1694 ug/L | 3.18469 | 9.1694 ppb | 3.18469 | 34.73% |
| QC value within limits for S 181.975 Axial Recovery = Not calculated | | | | | | |
| Sb 206.836† | 1.3 | 0.5617 ug/L | 0.87936 | 0.5617 ppb | 0.87936 | 156.55% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | 3.3 | 2.8576 ug/L | 1.09484 | 2.8576 ppb | 1.09484 | 38.31% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Si 251.611† | 120.6 | 4.4934 ug/L | 2.81662 | 4.4934 ppb | 2.81662 | 62.68% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |
| Sn 189.927† | 4.8 | 1.0509 ug/L | 0.47329 | 1.0509 ppb | 0.47329 | 45.04% |
| QC value within limits for Sn 189.927 Recovery = Not calculated | | | | | | |
| Sr 421.552† | -4.9 | -0.0421 ug/L | 0.13955 | -0.0421 ppb | 0.13955 | 331.53% |
| QC value within limits for Sr 421.552 Recovery = Not calculated | | | | | | |
| Ti 334.940† | 110.1 | 0.1823 ug/L | 0.08304 | 0.1823 ppb | 0.08304 | 45.55% |
| QC value within limits for Ti 334.940 Recovery = Not calculated | | | | | | |
| Tl 190.801† | -6.0 | -2.3322 ug/L | 1.75523 | -2.3322 ppb | 1.75523 | 75.26% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| U 409.014† | 152.0 | 4.4647 ug/L | 2.11430 | 4.4647 ppb | 2.11430 | 47.36% |
| QC value within limits for U 409.014 Recovery = Not calculated | | | | | | |
| V 292.402† | 73.9 | 0.5673 ug/L | 0.31804 | 0.5673 ppb | 0.31804 | 56.06% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 66.4 | 0.7803 ug/L | 0.13481 | 0.7803 ppb | 0.13481 | 17.28% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| SiO2† | 338.3 | 27.035 ug/L | 40.4398 | 27.035 ppb | 40.4398 | 149.58% |
| QC value within limits for SiO2 Recovery = Not calculated | | | | | | |
| All analyte(s) passed QC. | | | | | | |

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, March 24, 2010 02:25:40

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1799

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 | | 1960.5 | | 1960.535 | 50.160 | 2.6 |
| Mg | 24.0 | | 18238.6 | | 18238.636 | 157.642 | 0.9 |
| Co | 58.9 | | 26360.7 | | 26360.699 | 121.159 | 0.5 |
| Rh | 102.9 | | 49939.1 | | 49939.138 | 319.670 | 0.6 |
| In | 114.9 | | 59742.3 | | 59742.266 | 511.459 | 0.9 |
| Pb | 208.0 | | 29263.3 | | 29263.344 | 310.071 | 1.1 |
| [> Ba | 137.9 | | 51164.7 | | 51164.674 | 342.892 | 0.7 |
| [Ba++ | 69.0 | | 1582.2 | | 0.031 | 0.001 | 2.3 |
| [> Ce | 139.9 | | 66984.3 | | 66984.282 | 548.113 | 0.8 |
| [CeO | 155.9 | | 980.7 | | 0.015 | 0.000 | 2.4 |
| Bkgd | 220.0 | | 29.5 | | 29.500 | 3.162 | 10.7 |

Current Optimization File Data

| Current Value | Description |
|---------------|-------------------------|
| 0.83 | Nebulizer Gas Flow |
| 8.75 | Lens Voltage |
| 1450.00 | ICP RF Power |
| -1800.00 | Analog Stage Voltage |
| 900.00 | Pulse Stage Voltage |
| 30.00 | Discriminator Threshold |
| -6.00 | AC Rod Offset |

Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be | 9 | 21 | 7.0 | 2131.8 |
| Co | 59 | 21 | 7.5 | 26323.6 |
| In | 115 | 21 | 8.3 | 56990.8 |

ICPMS #6 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 | 591 | 2080 | 0.650 |
| Be | 9.0 | 9.0 | 2026 | 2080 | 0.701 |
| Mg | 24.0 | 23.9 | 5678 | 2120 | 0.660 |
| Mg | 25.0 | 25.0 | 5922 | 2080 | 0.759 |
| Mg | 26.0 | 26.0 | 6155 | 2120 | 0.730 |
| Co | 58.9 | 59.0 | 14164 | 2170 | 0.668 |
| Rh | 102.9 | 103.0 | 24873 | 2230 | 0.725 |
| In | 114.9 | 114.9 | 27778 | 2260 | 0.713 |
| Ce | 139.9 | 140.0 | 33862 | 2280 | 0.769 |
| Pb | 206.0 | 205.9 | 49936 | 2420 | 0.779 |
| Pb | 207.0 | 207.0 | 50147 | 2385 | 0.743 |
| Pb | 208.0 | 208.0 | 50439 | 2430 | 0.734 |
| U | 238.1 | 238.0 | 57729 | 2470 | 0.727 |

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, March 24, 2010 12:55:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\Blank.156

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | ug/L | | | 9 |
| > | Sc | 45 | ug/L | | 1026846 | |
| [| Ni | 60 | ug/L | | 127 | |
| [> | Ge | 74 | ug/L | | 177370 | |
| | As | 75 | ug/L | | 507 | |
| | Se | 77 | ug/L | | 5488 | |
| | Se | 82 | ug/L | | -7 | |
| [| Kr | 83 | ug/L | | 110 | |
| [> | Lu | 175 | ug/L | | 105036 | |
| [| Tl | 205 | ug/L | | 152 | |

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 | 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

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, March 24, 2010 12:59:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\Standard 1.157

Concentration Results

| | Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|--------|------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 10.000 | | ug/L | 2.231 | 2047 | 0.002 |
| > | Sc | 45 | | | ug/L | | 1027254 | 1027254.180 |
| [| Ni | 60 | 10.000 | | ug/L | 2.938 | 5775 | 0.005 |
| > | Ge | 74 | | | ug/L | | 178711 | 178711.009 |
| | As | 75 | 10.000 | | ug/L | 8.847 | 5857 | 0.030 |
| | Se | 77 | | | ug/L | | 7003 | 0.008 |
| | Se | 82 | 10.000 | | ug/L | 2.010 | 397 | 0.002 |
| [| Kr | 83 | | | ug/L | | 122 | 0.000 |
| > | Lu | 175 | | | ug/L | | 105158 | 105158.011 |
| | Tl | 205 | 10.000 | | ug/L | 0.780 | 36137 | 0.342 |

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

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, March 24, 2010 13:03:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\Standard 2.158

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be 9 | 100.006 | ug/L | 2.012 | 20640 | 0.020 |
| [> Sc 45 | | ug/L | | 1034136 | 1034135.719 |
| [Ni 60 | 100.014 | ug/L | 1.130 | 57813 | 0.056 |
| [> Ge 74 | | ug/L | | 181568 | 181568.132 |
| As 75 | 100.042 | ug/L | 0.973 | 57253 | 0.312 |
| Se 77 | | ug/L | | 10643 | 0.028 |
| Se 82 | 100.109 | ug/L | 3.541 | 4597 | 0.025 |
| [Kr 83 | | ug/L | | 137 | 0.000 |
| [> Lu 175 | | ug/L | | 105120 | 105119.871 |
| [Tl 205 | 99.999 | ug/L | 1.906 | 359356 | 3.418 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | | | | |
| [> 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

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, March 24, 2010 13:07:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 1.159

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 52.441 ug/L | 2.506 | 10915 | 0.010 |
| > | Sc | 45 | ug/L | | 1042482 | 1042482.242 |
| [| Ni | 60 | 52.633 ug/L | 2.514 | 30727 | 0.029 |
| > | Ge | 74 | ug/L | | 186194 | 186193.838 |
| | As | 75 | 51.639 ug/L | 3.325 | 30567 | 0.161 |
| | Se | 77 | ug/L | | 9477 | 0.020 |
| | Se | 82 | 50.955 ug/L | 2.928 | 2396 | 0.013 |
| [| Kr | 83 | ug/L | | 124 | 0.000 |
| > | Lu | 175 | ug/L | | 106109 | 106108.705 |
| [| Tl | 205 | 50.725 ug/L | 0.659 | 184122 | 1.734 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | 104.882 | | | |
| > | Sc | 45 | | 101.5 | | |
| [| Ni | 60 | 105.266 | | | |
| > | Ge | 74 | | 105.0 | | |
| | As | 75 | 103.278 | | | |
| | Se | 77 | | | | |
| | Se | 82 | 101.911 | | | |
| [| Kr | 83 | | | | |
| > | Lu | 175 | | 101.0 | | |
| [| Tl | 205 | 101.450 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, March 24, 2010 13:11:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 2.160

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 0.021 | ug/L | 102.517 | 13 | 0.000 |
| > | Sc 45 | | ug/L | | 1036847 | 1036847.351 |
| [| Ni 60 | -0.006 | ug/L | 75.092 | 125 | -0.000 |
| > | Ge 74 | | ug/L | | 184586 | 184585.775 |
| | As 75 | -0.071 | ug/L | 213.418 | 486 | -0.000 |
| | Se 77 | | ug/L | | 6487 | 0.004 |
| | Se 82 | -0.010 | ug/L | 1175.517 | -7 | -0.000 |
| [| Kr 83 | | ug/L | | 121 | 0.000 |
| > | Lu 175 | | ug/L | | 106406 | 106406.203 |
| [| Tl 205 | 0.143 | ug/L | 11.436 | 673 | 0.005 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 101.0 | | | |
| [| Ni 60 | | | | | |
| > | Ge 74 | | 104.1 | | | |
| | As 75 | | | | | |
| | Se 77 | | | | | |
| | Se 82 | | | | | |
| [| Kr 83 | | | | | |
| > | Lu 175 | | 101.3 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Wednesday, March 24, 2010 13:15:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 3.161

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 0.594 | ug/L | 3.953 | 132 | 0.000 |
| > | Sc 45 | | ug/L | | 1039547 | 1039547.189 |
| [| Ni 60 | 2.349 | ug/L | 1.661 | 1491 | 0.001 |
| > | Ge 74 | | ug/L | | 184022 | 184022.426 |
| | As 75 | 5.950 | ug/L | 2.035 | 3945 | 0.019 |
| | Se 77 | | ug/L | | 7801 | 0.011 |
| | Se 82 | 5.533 | ug/L | 5.903 | 251 | 0.001 |
| [| Kr 83 | | ug/L | | 115 | 0.000 |
| > | Lu 175 | | ug/L | | 106065 | 106065.416 |
| [| Tl 205 | 1.166 | ug/L | 4.491 | 4377 | 0.040 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be 9 | 118.842 | | | | |
| > | Sc 45 | | 101.2 | | | |
| [| Ni 60 | 117.466 | | | | |
| > | Ge 74 | | 103.8 | | | |
| | As 75 | 118.999 | | | | |
| | Se 77 | | | | | |
| | Se 82 | 110.666 | | | | |
| [| Kr 83 | | | | | |
| > | Lu 175 | | 101.0 | | | |
| [| Tl 205 | 116.554 | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Wednesday, March 24, 2010 13:19:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 4.162

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 0.076 | ug/L | 29.216 | 24 | 0.000 |
| > | Sc 45 | | ug/L | | 1005510 | 1005510.010 |
| [| Ni 60 | 2.495 | ug/L | 4.003 | 1523 | 0.001 |
| > | Ge 74 | | ug/L | | 174561 | 174561.441 |
| | As 75 | 0.308 | ug/L | 107.229 | 667 | 0.001 |
| | Se 77 | | ug/L | | 7882 | 0.014 |
| | Se 82 | -1.426 | ug/L | 30.173 | -70 | -0.000 |
| [| Kr 83 | | ug/L | | 185 | 0.000 |
| > | Lu 175 | | ug/L | | 103949 | 103948.573 |
| [| Tl 205 | 0.027 | ug/L | 20.143 | 248 | 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [| Be 9 | | | | | |
| > | Sc 45 | | 97.9 | | | |
| [| Ni 60 | 92.420 | | | | |
| > | Ge 74 | | 98.4 | | | |
| | As 75 | | | | | |
| | Se 77 | | | | | |
| | Se 82 | | | | | |
| [| Kr 83 | | | | | |
| > | Lu 175 | | 99.0 | | | |
| [| Tl 205 | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, March 24, 2010 13:23:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 5.163

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 20.974 ug/L | 2.842 | 4212 | 0.004 |
| > | Sc | 45 | ug/L | | 1004568 | 1004568.265 |
| [| Ni | 60 | 22.566 ug/L | 2.501 | 12769 | 0.013 |
| > | Ge | 74 | ug/L | | 174555 | 174554.554 |
| | As | 75 | 21.767 ug/L | 3.149 | 12363 | 0.068 |
| | Se | 77 | ug/L | | 8761 | 0.019 |
| | Se | 82 | 21.232 ug/L | 2.574 | 932 | 0.005 |
| [| Kr | 83 | ug/L | | 188 | 0.000 |
| > | Lu | 175 | ug/L | | 104477 | 104477.400 |
| [| Tl | 205 | 19.731 ug/L | 1.526 | 70607 | 0.674 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|---|--------------|--------|------------|---------|------------|---------------|----------------|----------------|--------------|
| [| Be | 9 | 104.871 | | | | | | |
| > | Sc | 45 | | | 97.8 | | | | |
| [| Ni | 60 | 99.408 | | | | | | |
| > | Ge | 74 | | | 98.4 | | | | |
| | As | 75 | 108.835 | | | | | | |
| | Se | 77 | | | | | | | |
| | Se | 82 | 106.160 | | | | | | |
| [| Kr | 83 | | | | | | | |
| > | Lu | 175 | | | 99.5 | | | | |
| [| Tl | 205 | 98.657 | | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 13:27:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 6.164

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 51.395 | ug/L | 1.767 | 10615 | 0.010 |
| > Sc | 45 | | ug/L | | 1034224 | 1034223.838 |
| [Ni | 60 | 52.306 | ug/L | 1.331 | 30300 | 0.029 |
| > Ge | 74 | | ug/L | | 182437 | 182437.184 |
| As | 75 | 50.690 | ug/L | 1.241 | 29404 | 0.158 |
| Se | 77 | | ug/L | | 9335 | 0.020 |
| Se | 82 | 51.092 | ug/L | 1.943 | 2354 | 0.013 |
| [Kr | 83 | | ug/L | | 117 | 0.000 |
| > Lu | 175 | | ug/L | | 106742 | 106742.462 |
| [Tl | 205 | 51.017 | ug/L | 1.223 | 186269 | 1.744 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be | 9 | 102.790 | | | | |
| > Sc | 45 | | 100.7 | | | |
| [Ni | 60 | 104.612 | | | | |
| > Ge | 74 | | 102.9 | | | |
| As | 75 | 101.380 | | | | |
| Se | 77 | | | | | |
| Se | 82 | 102.184 | | | | |
| [Kr | 83 | | | | | |
| > Lu | 175 | | 101.6 | | | |
| [Tl | 205 | 102.035 | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 13:31:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 7.165

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.000 | ug/L | 1631.035 | 9 | 0.000 |
| > Sc | 45 | | ug/L | | 1019951 | 1019950.717 |
| [Ni | 60 | -0.026 | ug/L | 138.369 | 111 | -0.000 |
| > Ge | 74 | | ug/L | | 181376 | 181376.297 |
| As | 75 | -0.207 | ug/L | 221.040 | 397 | -0.001 |
| Se | 77 | | ug/L | | 6830 | 0.007 |
| Se | 82 | -0.166 | ug/L | 153.858 | -14 | -0.000 |
| [Kr | 83 | | ug/L | | 118 | 0.000 |
| > Lu | 175 | | ug/L | | 106433 | 106433.431 |
| [Tl | 205 | 0.151 | ug/L | 10.850 | 702 | 0.005 |

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 | 0.9999 |
| 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 | % Recovery | Dilution | % Dil | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|------------|----------|-------|-----------|-------------------|
| Be | 9 | | | | | | | | | | |
| > Sc | 45 | | | | 99.3 | | | | | | |
| [Ni | 60 | | | | | | | | | | |
| > Ge | 74 | | | | 102.3 | | | | | | |
| As | 75 | | | | | | | | | | |
| Se | 77 | | | | | | | | | | |
| Se | 82 | | | | | | | | | | |
| [Kr | 83 | | | | | | | | | | |
| > Lu | 175 | | | | 101.3 | | | | | | |
| [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#6 - Summary Report

Sample ID: 1202054499

Sample Date/Time: Wednesday, March 24, 2010 13:35:49

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\1202054499.166

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be 9 | -0.001 | ug/L | 2804.163 | 9 | -0.000 |
| [> Sc 45 | | ug/L | | 1084393 | 1084392.864 |
| [Ni 60 | 0.469 | ug/L | 7.885 | 418 | 0.000 |
| [> Ge 74 | | ug/L | | 187500 | 187499.800 |
| [As 75 | -0.277 | ug/L | 153.507 | 375 | -0.001 |
| [Se 77 | | ug/L | | 5984 | 0.001 |
| [Se 82 | -0.132 | ug/L | 242.902 | -13 | -0.000 |
| [Kr 83 | | ug/L | | 119 | 0.000 |
| [> Lu 175 | | ug/L | | 110923 | 110922.861 |
| [Tl 205 | 0.064 | ug/L | 7.931 | 403 | 0.002 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 105.6 | | | |
| [Ni 60 | | | | | |
| [> Ge 74 | | 105.7 | | | |
| [As 75 | | | | | |
| [Se 77 | | | | | |
| [Se 82 | | | | | |
| [Kr 83 | | | | | |
| [> Lu 175 | | 105.6 | | | |
| [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#6 - Summary Report

Sample ID: 1202054504

Sample Date/Time: Wednesday, March 24, 2010 13:39:53

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 958055|40|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\1202054504.167

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 22.906 | ug/L | 0.214 | 4707 | 0.005 |
| > | Sc 45 | | ug/L | | 1027912 | 1027912.263 |
| [| Ni 60 | 39.316 | ug/L | 2.178 | 22660 | 0.022 |
| > | Ge 74 | | ug/L | | 182094 | 182094.152 |
| | As 75 | 29.085 | ug/L | 2.717 | 17058 | 0.091 |
| | Se 77 | | ug/L | | 10448 | 0.026 |
| | Se 82 | 80.554 | ug/L | 4.390 | 3709 | 0.020 |
| [| Kr 83 | | ug/L | | 135 | 0.000 |
| > | Lu 175 | | ug/L | | 106658 | 106657.751 |
| [| Tl 205 | 34.353 | ug/L | 1.001 | 125401 | 1.174 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be 9 | | | | |
| > | Sc 45 | 100.1 | | | |
| [| Ni 60 | | | | |
| > | Ge 74 | 102.7 | | | |
| | As 75 | | | | |
| | Se 77 | | | | |
| | Se 82 | | | | |
| [| Kr 83 | | | | |
| > | Lu 175 | 101.5 | | | |
| [| Tl 205 | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 13:43:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 6.168

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 51.525 | ug/L | 1.848 | 10654 | 0.010 |
| [> Sc | 45 | | ug/L | | 1035495 | 1035494.909 |
| [Ni | 60 | 52.753 | ug/L | 1.693 | 30598 | 0.029 |
| [> Ge | 74 | | ug/L | | 184674 | 184673.945 |
| As | 75 | 51.895 | ug/L | 2.486 | 30449 | 0.162 |
| Se | 77 | | ug/L | | 9530 | 0.021 |
| Se | 82 | 50.964 | ug/L | 5.243 | 2375 | 0.013 |
| [Kr | 83 | | ug/L | | 122 | 0.000 |
| [> Lu | 175 | | ug/L | | 106479 | 106478.822 |
| [Tl | 205 | 50.839 | ug/L | 1.693 | 185154 | 1.738 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [Be | 9 | 103.051 | | | | | |
| [> Sc | 45 | | 100.8 | | | | |
| [Ni | 60 | 105.507 | | | | | |
| [> Ge | 74 | | 104.1 | | | | |
| As | 75 | 103.790 | | | | | |
| Se | 77 | | | | | | |
| Se | 82 | 101.929 | | | | | |
| [Kr | 83 | | | | | | |
| [> Lu | 175 | | 101.4 | | | | |
| [Tl | 205 | 101.679 | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 13:47:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 7.169

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| Be 9 | -0.002 | ug/L | 109.817 | 8 | -0.000 |
| > Sc 45 | | ug/L | | 1005721 | 1005720.667 |
| Ni 60 | -0.018 | ug/L | 56.302 | 114 | -0.000 |
| > Ge 74 | | ug/L | | 179897 | 179897.462 |
| As 75 | 0.433 | ug/L | 66.799 | 756 | 0.001 |
| Se 77 | | ug/L | | 6846 | 0.007 |
| Se 82 | 1.466 | ug/L | 13.625 | 60 | 0.000 |
| Kr 83 | | ug/L | | 139 | 0.000 |
| > Lu 175 | | ug/L | | 103303 | 103302.953 |
| Tl 205 | 0.177 | ug/L | 12.177 | 773 | 0.006 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 97.9 | | | |
| Ni 60 | | | | | |
| > Ge 74 | | 101.4 | | | |
| As 75 | | | | | |
| Se 77 | | | | | |
| Se 82 | | | | | |
| Kr 83 | | | | | |
| > 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#6 - Summary Report

Sample ID: 247899001

Sample Date/Time: Wednesday, March 24, 2010 13:52:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899001.170

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 5.843 | ug/L | 1.065 | 1281 | 0.001 |
| > Sc | 45 | | ug/L | | 1090410 | 1090409.609 |
| [Ni | 60 | 19.714 | ug/L | 1.590 | 12124 | 0.011 |
| > Ge | 74 | | ug/L | | 180221 | 180220.868 |
| [As | 75 | 7.007 | ug/L | 8.477 | 4462 | 0.022 |
| Se | 77 | | ug/L | | 4939 | -0.004 |
| Se | 82 | 2.217 | ug/L | 32.345 | 95 | 0.001 |
| [Kr | 83 | | ug/L | | 245 | 0.001 |
| > Lu | 175 | | ug/L | | 124196 | 124195.548 |
| [Tl | 205 | 0.270 | ug/L | 2.215 | 1326 | 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 |
| Ge | 74 | Linear Thru Zero | |
| As | 75 | Linear Thru Zero | 1.0000 |
| Se | 77 | Linear Thru Zero | |
| Se | 82 | Linear Thru Zero | 0.9999 |
| 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 % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [Be | 9 | | | | | |
| > Sc | 45 | | 106.2 | | | |
| [Ni | 60 | | | | | |
| > Ge | 74 | | 101.6 | | | |
| [As | 75 | | | | | |
| Se | 77 | | | | | |
| Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| > Lu | 175 | | 118.2 | | | |
| [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#6 - Summary Report

Sample ID: 1202054500

Sample Date/Time: Wednesday, March 24, 2010 13:56:07

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\1202054500.171

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 5.089 | ug/L | 2.905 | 1113 | 0.001 |
| [> Sc | 45 | | ug/L | | 1086480 | 1086480.491 |
| [Ni | 60 | 20.752 | ug/L | 3.175 | 12706 | 0.012 |
| [> Ge | 74 | | ug/L | | 177859 | 177858.909 |
| As | 75 | 5.595 | ug/L | 5.625 | 3619 | 0.017 |
| Se | 77 | | ug/L | | 4865 | -0.004 |
| Se | 82 | 1.809 | ug/L | 17.385 | 75 | 0.000 |
| [Kr | 83 | | ug/L | | 219 | 0.001 |
| [> Lu | 175 | | ug/L | | 121277 | 121276.510 |
| [Tl | 205 | 0.236 | ug/L | 4.185 | 1153 | 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 |
| Ge | 74 | Linear Thru Zero | |
| As | 75 | Linear Thru Zero | 1.0000 |
| Se | 77 | Linear Thru Zero | |
| Se | 82 | Linear Thru Zero | 0.9999 |
| 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 | | 105.8 | | | |
| [Ni | 60 | | | | | |
| [> Ge | 74 | | 100.3 | | | |
| As | 75 | | | | | |
| Se | 77 | | | | | |
| Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| [> Lu | 175 | | 115.5 | | | |
| [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#6 - Summary Report

Sample ID: 1202054502

Sample Date/Time: Wednesday, March 24, 2010 14:00:11

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\1202054502.172

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 29.646 | ug/L | 1.749 | 6416 | 0.006 |
| > | Sc 45 | | ug/L | | 1083302 | 1083302.203 |
| [| Ni 60 | 46.910 | ug/L | 2.258 | 28478 | 0.026 |
| > | Ge 74 | | ug/L | | 177941 | 177941.372 |
| | As 75 | 42.362 | ug/L | 0.683 | 24049 | 0.132 |
| | Se 77 | | ug/L | | 5113 | -0.002 |
| | Se 82 | 10.736 | ug/L | 4.290 | 477 | 0.003 |
| [| Kr 83 | | ug/L | | 230 | 0.001 |
| > | Lu 175 | | ug/L | | 122206 | 122206.374 |
| [| Tl 205 | 41.676 | ug/L | 1.202 | 174265 | 1.425 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 105.5 | | | |
| [| Ni 60 | | | | |
| > | Ge 74 | 100.3 | | | |
| | As 75 | | | | |
| | Se 77 | | | | |
| | Se 82 | | | | |
| [| Kr 83 | | | | |
| > | Lu 175 | 116.3 | | | |
| [| Tl 205 | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054503

Sample Date/Time: Wednesday, March 24, 2010 14:04:16

Sample Type:

Sample Description: LANL 6020 ~~SSLT~~ *MSD*

Number of Replicates: 3

Batch ID: 95805510 *3/24/10*

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\1202054503.173

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 30.135 | ug/L | 1.772 | 6497 | 0.006 |
| [> Sc | 45 | | ug/L | | 1078990 | 1078990.086 |
| [Ni | 60 | 45.752 | ug/L | 1.452 | 27669 | 0.026 |
| [> Ge | 74 | | ug/L | | 176910 | 176910.095 |
| [As | 75 | 43.315 | ug/L | 0.972 | 24439 | 0.135 |
| [Se | 77 | | ug/L | | 5006 | -0.003 |
| [Se | 82 | 10.517 | ug/L | 4.629 | 465 | 0.003 |
| [Kr | 83 | | ug/L | | 233 | 0.001 |
| [> Lu | 175 | | ug/L | | 122056 | 122056.473 |
| [Tl | 205 | 41.463 | ug/L | 1.353 | 173154 | 1.417 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 105.1 | | | |
| [Ni | 60 | | | | | |
| [> Ge | 74 | | 99.7 | | | |
| [As | 75 | | | | | |
| [Se | 77 | | | | | |
| [Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| [> Lu | 175 | | 116.2 | | | |
| [Tl | 205 | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054501

Sample Date/Time: Wednesday, March 24, 2010 14:08:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 95805521rmj

Method File: c:\elandata\Method\benlassettl.mth

Dataset File: C:\elandata\Dataset\100323\1202054501.174

Concentration Results

| | Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|---------|------|-------|------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 1.178 | | ug/L | 3.613 | 250 | 0.000 |
| > | Sc | 45 | | | ug/L | | 1023496 | 1023496.104 |
| [| Ni | 60 | 4.100 | | ug/L | 2.710 | 2467 | 0.002 |
| > | Ge | 74 | | | ug/L | | 177145 | 177145.435 |
| [| As | 75 | 0.768 | | ug/L | 13.255 | 932 | 0.002 |
| | Se | 77 | | | ug/L | | 6200 | 0.004 |
| | Se | 82 | 0.899 | | ug/L | 57.571 | 34 | 0.000 |
| [| Kr | 83 | | | ug/L | | 140 | 0.000 |
| > | Lu | 175 | | | ug/L | | 109351 | 109350.712 |
| | Tl | 205 | 0.126 | | ug/L | 3.084 | 630 | 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 | 0.9999 |
| 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 % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| > Sc | 45 | | 99.7 | | | |
| Ni | 60 | | | | | |
| > Ge | 74 | | 99.9 | | | |
| As | 75 | | | | | |
| Se | 77 | | | | | |
| Se | 82 | | | | | |
| Kr | 83 | | | | | |
| > Lu | 175 | | 104.1 | | | |
| 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#6 - Summary Report

Sample ID: 247899002

Sample Date/Time: Wednesday, March 24, 2010 14:12:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rm|

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899002.175

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 2.425 ug/L | 10.133 | 511 | 0.000 |
| > | Sc | 45 | ug/L | | 1038537 | 1038536.738 |
| [| Ni | 60 | 14.195 ug/L | 0.964 | 8351 | 0.008 |
| > | Ge | 74 | ug/L | | 176213 | 176212.936 |
| | As | 75 | 5.893 ug/L | 4.311 | 3747 | 0.018 |
| | Se | 77 | ug/L | | 4831 | -0.004 |
| | Se | 82 | 1.229 ug/L | 26.038 | 48 | 0.000 |
| [| Kr | 83 | ug/L | | 157 | 0.000 |
| > | Lu | 175 | ug/L | | 111794 | 111794.209 |
| [| Tl | 205 | 0.352 ug/L | 1.031 | 1507 | 0.012 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 101.1 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 99.3 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 106.4 | | |
| [| Tl | 205 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899003

Sample Date/Time: Wednesday, March 24, 2010 14:16:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899003.176

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 5.033 ug/L | 4.373 | 1091 | 0.001 |
| > | Sc | 45 | ug/L | | 1076804 | 1076804.007 |
| [| Ni | 60 | 35.544 ug/L | 2.363 | 21475 | 0.020 |
| > | Ge | 74 | ug/L | | 175445 | 175444.550 |
| | As | 75 | 10.014 ug/L | 6.665 | 5990 | 0.031 |
| | Se | 77 | ug/L | | 4569 | -0.005 |
| | Se | 82 | 0.914 ug/L | 20.176 | 34 | 0.000 |
| [| Kr | 83 | ug/L | | 225 | 0.001 |
| > | Lu | 175 | ug/L | | 114663 | 114663.168 |
| [| Tl | 205 | 0.801 ug/L | 1.747 | 3304 | 0.027 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | | | | |
| > | Sc | 45 | | 104.9 | | |
| [| Ni | 60 | | | | |
| > | Ge | 74 | | 98.9 | | |
| | As | 75 | | | | |
| | Se | 77 | | | | |
| | Se | 82 | | | | |
| [| Kr | 83 | | | | |
| > | Lu | 175 | | 109.2 | | |
| [| 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#6 - Summary Report

Sample ID: 247899004

Sample Date/Time: Wednesday, March 24, 2010 14:20:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\benlassettl.mth

Dataset File: C:\elandata\Dataset\100323\247899004.177

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 12.340 | ug/L | 2.428 | 2826 | 0.002 |
| [> Sc | 45 | | ug/L | | 1143602 | 1143602.493 |
| [Ni | 60 | 75.972 | ug/L | 1.652 | 48596 | 0.042 |
| [> Ge | 74 | | ug/L | | 175227 | 175226.533 |
| [As | 75 | 22.340 | ug/L | 3.273 | 12727 | 0.070 |
| [Se | 77 | | ug/L | | 4707 | -0.004 |
| [Se | 82 | -0.510 | ug/L | 147.904 | -29 | -0.000 |
| [Kr | 83 | | ug/L | | 325 | 0.001 |
| [> Lu | 175 | | ug/L | | 113506 | 113505.760 |
| [Tl | 205 | 1.485 | ug/L | 3.102 | 5924 | 0.051 |

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 | 0.9999 |
| 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 % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [Be | 9 | | | | | |
| [> Sc | 45 | | 111.4 | | | |
| [Ni | 60 | | | | | |
| [> Ge | 74 | | 98.8 | | | |
| [As | 75 | | | | | |
| [Se | 77 | | | | | |
| [Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| [> Lu | 175 | | 108.1 | | | |
| [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#6 - Summary Report

Sample ID: 247899005

Sample Date/Time: Wednesday, March 24, 2010 14:24:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899005.178

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 11.644 | ug/L | 1.315 | 2536 | 0.002 |
| > Sc | 45 | | ug/L | | 1087571 | 1087570.575 |
| [Ni | 60 | 55.488 | ug/L | 1.034 | 33793 | 0.031 |
| > Ge | 74 | | ug/L | | 175977 | 175976.683 |
| As | 75 | 14.443 | ug/L | 3.386 | 8441 | 0.045 |
| Se | 77 | | ug/L | | 4269 | -0.007 |
| Se | 82 | 0.167 | ug/L | 128.781 | 1 | 0.000 |
| [Kr | 83 | | ug/L | | 242 | 0.001 |
| > Lu | 175 | | ug/L | | 112312 | 112312.494 |
| [Tl | 205 | 0.969 | ug/L | 2.838 | 3881 | 0.033 |

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 | 0.9999 |
| 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 % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be | 9 | | | | | |
| > Sc | 45 | | 105.9 | | | |
| [Ni | 60 | | | | | |
| > Ge | 74 | | 99.2 | | | |
| As | 75 | | | | | |
| Se | 77 | | | | | |
| Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| > Lu | 175 | | 106.9 | | | |
| [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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 14:28:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 6.179

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 55.516 | ug/L | 1.899 | 10977 | 0.011 |
| [> | Sc 45 | | ug/L | | 990274 | 990273.979 |
| [| Ni 60 | 51.974 | ug/L | 1.853 | 28831 | 0.029 |
| [> | Ge 74 | | ug/L | | 174875 | 174874.634 |
| | As 75 | 52.096 | ug/L | 3.864 | 28948 | 0.163 |
| | Se 77 | | ug/L | | 8009 | 0.015 |
| | Se 82 | 53.398 | ug/L | 2.971 | 2359 | 0.014 |
| [| Kr 83 | | ug/L | | 117 | 0.000 |
| [> | Lu 175 | | ug/L | | 103128 | 103128.338 |
| [| Tl 205 | 51.671 | ug/L | 2.135 | 182249 | 1.766 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [Be 9 | 111.033 | | | | | |
| [> Sc 45 | | 96.4 | | | | |
| [Ni 60 | 103.948 | | | | | |
| [> Ge 74 | | 98.6 | | | | |
| As 75 | 104.193 | | | | | |
| Se 77 | | | | | | |
| Se 82 | 106.797 | | | | | |
| [Kr 83 | | | | | | |
| [> Lu 175 | | 98.2 | | | | |
| [Tl 205 | 103.342 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|---------------------------------|
| QC Std 6 | Be | 9CCV is out of limits (+/- 10%) |

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 14:32:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 7.180

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 0.004 ug/L | 494.970 | 9 | 0.000 |
| > | Sc | 45 | ug/L | | 984436 | 984435.520 |
| [| Ni | 60 | -0.035 ug/L | 26.252 | 103 | -0.000 |
| > | Ge | 74 | ug/L | | 174955 | 174954.573 |
| | As | 75 | -0.100 ug/L | 489.477 | 444 | -0.000 |
| | Se | 77 | ug/L | | 5552 | 0.001 |
| | Se | 82 | 0.729 ug/L | 75.168 | 26 | 0.000 |
| [| Kr | 83 | ug/L | | 127 | 0.000 |
| > | Lu | 175 | ug/L | | 105541 | 105541.183 |
| [| Tl | 205 | 0.131 ug/L | 9.589 | 626 | 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 95.9 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 98.6 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 100.5 | | |
| [| Tl | 205 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899006

Sample Date/Time: Wednesday, March 24, 2010 14:36:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899006.181

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 5.912 ug/L | 2.854 | 1274 | 0.001 |
| > | Sc | 45 | ug/L | | 1072048 | 1072048.140 |
| [| Ni | 60 | 26.541 ug/L | 1.623 | 16003 | 0.015 |
| > | Ge | 74 | ug/L | | 175354 | 175354.244 |
| | As | 75 | 8.465 ug/L | 10.286 | 5140 | 0.026 |
| | Se | 77 | ug/L | | 4303 | -0.006 |
| | Se | 82 | 1.700 ug/L | 46.945 | 69 | 0.000 |
| [| Kr | 83 | ug/L | | 241 | 0.001 |
| > | Lu | 175 | ug/L | | 122664 | 122664.232 |
| [| Tl | 205 | 0.328 ug/L | 4.503 | 1551 | 0.011 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | | | |
| > | Sc | 45 | 104.4 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 98.9 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 116.8 | | |
| [| 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#6 - Summary Report

Sample ID: 247899007

Sample Date/Time: Wednesday, March 24, 2010 14:40:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899007.182

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 2.777 | ug/L | 0.875 | 594 | 0.001 |
| [> Sc | 45 | | ug/L | | 1056144 | 1056144.477 |
| [Ni | 60 | 23.100 | ug/L | 1.425 | 13737 | 0.013 |
| [> Ge | 74 | | ug/L | | 174765 | 174765.326 |
| [As | 75 | 6.817 | ug/L | 1.721 | 4221 | 0.021 |
| [Se | 77 | | ug/L | | 4221 | -0.007 |
| [Se | 82 | 1.099 | ug/L | 25.451 | 42 | 0.000 |
| [Kr | 83 | | ug/L | | 171 | 0.000 |
| [> Lu | 175 | | ug/L | | 112223 | 112222.530 |
| [Tl | 205 | 0.508 | ug/L | 1.060 | 2112 | 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 |
| Ge | 74 | Linear Thru Zero | |
| As | 75 | Linear Thru Zero | 1.0000 |
| Se | 77 | Linear Thru Zero | |
| Se | 82 | Linear Thru Zero | 0.9999 |
| 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 | | 102.9 | | | |
| [Ni | 60 | | | | | |
| [> Ge | 74 | | 98.5 | | | |
| [As | 75 | | | | | |
| [Se | 77 | | | | | |
| [Se | 82 | | | | | |
| [Kr | 83 | | | | | |
| [> Lu | 175 | | 106.8 | | | |
| [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#6 - Summary Report

Sample ID: 247899008

Sample Date/Time: Wednesday, March 24, 2010 14:44:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: C:\elandata\Dataset\100323\247899008.183

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 3.204 ug/L | 1.542 | 675 | 0.001 |
| > | Sc | 45 | ug/L | | 1042410 | 1042409.926 |
| [| Ni | 60 | 15.236 ug/L | 1.000 | 8987 | 0.008 |
| > | Ge | 74 | ug/L | | 175145 | 175144.898 |
| | As | 75 | 7.798 ug/L | 5.594 | 4766 | 0.024 |
| | Se | 77 | ug/L | | 4072 | -0.008 |
| | Se | 82 | 0.408 ug/L | 110.280 | 12 | 0.000 |
| [| Kr | 83 | ug/L | | 158 | 0.000 |
| > | Lu | 175 | ug/L | | 111595 | 111594.967 |
| [| Tl | 205 | 0.320 ug/L | 2.469 | 1384 | 0.011 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 101.5 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 98.7 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 106.2 | | |
| [| 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#6 - Summary Report

Sample ID: 247899009

Sample Date/Time: Wednesday, March 24, 2010 14:49:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899009.184

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 7.595 ug/L | 1.188 | 1601 | 0.002 |
| > | Sc | 45 | ug/L | | 1050657 | 1050657.087 |
| [| Ni | 60 | 20.529 ug/L | 1.566 | 12159 | 0.011 |
| > | Ge | 74 | ug/L | | 173200 | 173199.730 |
| | As | 75 | 6.258 ug/L | 12.282 | 3883 | 0.020 |
| | Se | 77 | ug/L | | 4188 | -0.007 |
| | Se | 82 | 0.621 ug/L | 104.715 | 21 | 0.000 |
| [| Kr | 83 | ug/L | | 160 | 0.000 |
| > | Lu | 175 | ug/L | | 111945 | 111945.411 |
| [| Tl | 205 | 0.338 ug/L | 3.203 | 1457 | 0.012 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 102.3 | | | | |
| [| Ni | 60 | | | | | | |
| > | Ge | 74 | | 97.6 | | | | |
| | As | 75 | | | | | | |
| | Se | 77 | | | | | | |
| | Se | 82 | | | | | | |
| [| Kr | 83 | | | | | | |
| > | Lu | 175 | | 106.6 | | | | |
| [| 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#6 - Summary Report

Sample ID: 247899010

Sample Date/Time: Wednesday, March 24, 2010 14:53:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\247899010.185

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be 9 | 4.264 | ug/L | 1.731 | 907 | 0.001 |
| > Sc 45 | | ug/L | | 1055234 | 1055233.834 |
| [Ni 60 | 23.082 | ug/L | 0.240 | 13716 | 0.013 |
| > Ge 74 | | ug/L | | 175061 | 175061.308 |
| [As 75 | 7.401 | ug/L | 4.660 | 4547 | 0.023 |
| Se 77 | | ug/L | | 4145 | -0.007 |
| Se 82 | 1.176 | ug/L | 24.942 | 45 | 0.000 |
| [Kr 83 | | ug/L | | 175 | 0.000 |
| > Lu 175 | | ug/L | | 114046 | 114046.273 |
| [Tl 205 | 0.360 | ug/L | 3.145 | 1568 | 0.012 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [Be 9 | | | | | |
| > Sc 45 | | 102.8 | | | |
| [Ni 60 | | | | | |
| > Ge 74 | | 98.7 | | | |
| [As 75 | | | | | |
| Se 77 | | | | | |
| Se 82 | | | | | |
| [Kr 83 | | | | | |
| > Lu 175 | | 108.6 | | | |
| [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#6 - Summary Report

Sample ID: 247899011

Sample Date/Time: Wednesday, March 24, 2010 14:57:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899011.186

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 29.984 ug/L | 2.630 | 6249 | 0.006 |
| > | Sc | 45 | ug/L | | 1042921 | 1042921.310 |
| [| Ni | 60 | 24.080 ug/L | 2.151 | 14135 | 0.013 |
| > | Ge | 74 | ug/L | | 174650 | 174649.764 |
| | As | 75 | 5.972 ug/L | 5.078 | 3757 | 0.019 |
| | Se | 77 | ug/L | | 4317 | -0.006 |
| | Se | 82 | 0.283 ug/L | 139.559 | 6 | 0.000 |
| [| Kr | 83 | ug/L | | 150 | 0.000 |
| > | Lu | 175 | ug/L | | 109909 | 109909.360 |
| [| Tl | 205 | 0.246 ug/L | 1.308 | 1084 | 0.008 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 101.6 | | |
| [| Ni | 60 | | | | |
| > | Ge | 74 | | 98.5 | | |
| | As | 75 | | | | |
| | Se | 77 | | | | |
| | Se | 82 | | | | |
| [| Kr | 83 | | | | |
| > | Lu | 175 | | 104.6 | | |
| [| 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#6 - Summary Report

Sample ID: 247899012

Sample Date/Time: Wednesday, March 24, 2010 15:01:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniasse1.mth

Dataset File: C:\elandata\Dataset\100323\247899012.187

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 32.165 ug/L | 2.923 | 6780 | 0.006 |
| > | Sc | 45 | ug/L | | 1055258 | 1055257.769 |
| [| Ni | 60 | 39.999 ug/L | 0.172 | 23675 | 0.022 |
| > | Ge | 74 | ug/L | | 173187 | 173187.426 |
| | As | 75 | 11.880 ug/L | 4.345 | 6918 | 0.037 |
| | Se | 77 | ug/L | | 4435 | -0.005 |
| | Se | 82 | 0.809 ug/L | 73.465 | 29 | 0.000 |
| [| Kr | 83 | ug/L | | 220 | 0.001 |
| > | Lu | 175 | ug/L | | 117941 | 117941.366 |
| [| Tl | 205 | 0.510 ug/L | 2.911 | 2227 | 0.017 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | | |
| > | Ge | 74 | 97.6 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 112.3 | | |
| [| Tl | 205 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899013

Sample Date/Time: Wednesday, March 24, 2010 15:05:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassef1.mth

Dataset File: C:\elandata\Dataset\100323\247899013.188

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 5.351 | ug/L | 3.317 | 1134 | 0.001 |
| [> | Sc 45 | | ug/L | | 1054467 | 1054467.135 |
| [| Ni 60 | 31.456 | ug/L | 1.358 | 18628 | 0.018 |
| [> | Ge 74 | | ug/L | | 173151 | 173151.105 |
| | As 75 | 12.712 | ug/L | 1.906 | 7370 | 0.040 |
| | Se 77 | | ug/L | | 4266 | -0.006 |
| | Se 82 | 0.351 | ug/L | 42.921 | 9 | 0.000 |
| [| Kr 83 | | ug/L | | 199 | 0.001 |
| [> | Lu 175 | | ug/L | | 115011 | 115011.314 |
| [| Tl 205 | 0.453 | ug/L | 0.307 | 1948 | 0.015 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be 9 | | | | | |
| [> | Sc 45 | | 102.7 | | | |
| [| Ni 60 | | | | | |
| [> | Ge 74 | | 97.6 | | | |
| | As 75 | | | | | |
| | Se 77 | | | | | |
| | Se 82 | | | | | |
| [| Kr 83 | | | | | |
| [> | Lu 175 | | 109.5 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 15:09:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 6.189

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 57.502 ug/L | 1.144 | 10963 | 0.011 |
| > | Sc | 45 | ug/L | | 954848 | 954847.913 |
| [| Ni | 60 | 53.008 ug/L | 1.641 | 28349 | 0.030 |
| > | Ge | 74 | ug/L | | 168846 | 168846.062 |
| | As | 75 | 51.234 ug/L | 3.537 | 27492 | 0.160 |
| | Se | 77 | ug/L | | 7684 | 0.015 |
| | Se | 82 | 52.384 ug/L | 1.660 | 2234 | 0.013 |
| [| Kr | 83 | ug/L | | 118 | 0.000 |
| > | Lu | 175 | ug/L | | 101809 | 101808.576 |
| [| Tl | 205 | 52.821 ug/L | 1.817 | 183963 | 1.805 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | 115.004 | | | |
| > | Sc | 45 | | 93.0 | | |
| [| Ni | 60 | 106.017 | | | |
| > | Ge | 74 | | 95.2 | | |
| | As | 75 | 102.468 | | | |
| | Se | 77 | | | | |
| | Se | 82 | 104.768 | | | |
| [| Kr | 83 | | | | |
| > | Lu | 175 | | 96.9 | | |
| [| Tl | 205 | 105.641 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------------|
| QC Std 6 | Be | 9CCV is out of limits (+/- 10%) |

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 15:13:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 7.190

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 0.012 ug/L | 83.353 | 11 | 0.000 |
| > | Sc | 45 | ug/L | | 961191 | 961191.441 |
| [| Ni | 60 | -0.017 ug/L | 188.020 | 110 | -0.000 |
| > | Ge | 74 | ug/L | | 169637 | 169636.707 |
| | As | 75 | -0.116 ug/L | 324.518 | 422 | -0.000 |
| | Se | 77 | ug/L | | 5236 | -0.000 |
| | Se | 82 | -0.227 ug/L | 174.507 | -16 | -0.000 |
| [| Kr | 83 | ug/L | | 113 | 0.000 |
| > | Lu | 175 | ug/L | | 103143 | 103143.426 |
| [| Tl | 205 | 0.133 ug/L | 9.372 | 616 | 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 93.6 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 95.6 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 98.2 | | |
| [| Tl | 205 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899014

Sample Date/Time: Wednesday, March 24, 2010 15:17:32

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\247899014.191

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 2.514 | ug/L | 2.572 | 523 | 0.001 |
| > | Sc 45 | | ug/L | | 1024916 | 1024916.326 |
| [| Ni 60 | 10.797 | ug/L | 1.279 | 6299 | 0.006 |
| > | Ge 74 | | ug/L | | 174725 | 174725.159 |
| | As 75 | 3.825 | ug/L | 6.703 | 2586 | 0.012 |
| | Se 77 | | ug/L | | 4275 | -0.006 |
| | Se 82 | 1.250 | ug/L | 15.812 | 49 | 0.000 |
| [| Kr 83 | | ug/L | | 177 | 0.000 |
| > | Lu 175 | | ug/L | | 115235 | 115234.769 |
| [| Tl 205 | 0.182 | ug/L | 5.019 | 883 | 0.006 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [Be 9 | | | | | |
| > Sc 45 | | 99.8 | | | |
| [Ni 60 | | | | | |
| > Ge 74 | | 98.5 | | | |
| As 75 | | | | | |
| Se 77 | | | | | |
| Se 82 | | | | | |
| [Kr 83 | | | | | |
| > Lu 175 | | 109.7 | | | |
| [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

ICPMS#6 - Summary Report

Sample ID: 247899015

Sample Date/Time: Wednesday, March 24, 2010 15:21:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899015.192

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be 9 | 5.388 | ug/L | 3.587 | 1132 | 0.001 |
| > | Sc 45 | | ug/L | | 1044491 | 1044491.194 |
| [| Ni 60 | 21.828 | ug/L | 2.616 | 12843 | 0.012 |
| > | Ge 74 | | ug/L | | 170735 | 170734.947 |
| | As 75 | 8.409 | ug/L | 4.974 | 4973 | 0.026 |
| | Se 77 | | ug/L | | 4284 | -0.006 |
| | Se 82 | 0.467 | ug/L | 163.896 | 14 | 0.000 |
| [| Kr 83 | | ug/L | | 203 | 0.001 |
| > | Lu 175 | | ug/L | | 115379 | 115378.579 |
| [| Tl 205 | 0.379 | ug/L | 1.080 | 1661 | 0.013 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be 9 | | | | |
| > | Sc 45 | 101.7 | | | |
| [| Ni 60 | | | | |
| > | Ge 74 | 96.3 | | | |
| | As 75 | | | | |
| | Se 77 | | | | |
| | Se 82 | | | | |
| [| Kr 83 | | | | |
| > | Lu 175 | 109.8 | | | |
| [| 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#6 - Summary Report

Sample ID: 247899016

Sample Date/Time: Wednesday, March 24, 2010 15:25:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899016.193

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be 9 | 8.396 | ug/L | 2.457 | 1781 | 0.002 |
| > Sc 45 | | ug/L | | 1058197 | 1058197.419 |
| [Ni 60 | 31.406 | ug/L | 1.242 | 18665 | 0.018 |
| > Ge 74 | | ug/L | | 168977 | 168976.853 |
| As 75 | 9.553 | ug/L | 3.630 | 5524 | 0.030 |
| Se 77 | | ug/L | | 4153 | -0.006 |
| Se 82 | 2.260 | ug/L | 25.572 | 90 | 0.001 |
| [Kr 83 | | ug/L | | 224 | 0.001 |
| > Lu 175 | | ug/L | | 118493 | 118492.583 |
| [Tl 205 | 0.381 | ug/L | 1.211 | 1713 | 0.013 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | 103.1 | | | |
| [Ni 60 | | | | | |
| > Ge 74 | | 95.3 | | | |
| As 75 | | | | | |
| Se 77 | | | | | |
| Se 82 | | | | | |
| [Kr 83 | | | | | |
| > Lu 175 | | 112.8 | | | |
| [Tl 205 | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899017

Sample Date/Time: Wednesday, March 24, 2010 15:29:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\benlassettl.mth

Dataset File: C:\elandata\Dataset\100323\247899017.194

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 8.251 ug/L | 2.201 | 1703 | 0.002 |
| > | Sc | 45 | ug/L | | 1029089 | 1029088.645 |
| [| Ni | 60 | 22.996 ug/L | 1.313 | 13326 | 0.013 |
| > | Ge | 74 | ug/L | | 170243 | 170242.791 |
| | As | 75 | 7.479 ug/L | 5.182 | 4462 | 0.023 |
| | Se | 77 | ug/L | | 4041 | -0.007 |
| | Se | 82 | -0.027 ug/L | 1964.349 | -7 | -0.000 |
| [| Kr | 83 | ug/L | | 167 | 0.000 |
| > | Lu | 175 | ug/L | | 112328 | 112328.361 |
| [| Tl | 205 | 0.338 ug/L | 2.818 | 1461 | 0.012 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 100.2 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 96.0 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 106.9 | | |
| [| Tl | 205 | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899018

Sample Date/Time: Wednesday, March 24, 2010 15:33:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899018.195

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 2.764 ug/L | 1.910 | 574 | 0.001 |
| > | Sc | 45 | ug/L | | 1024707 | 1024706.841 |
| [| Ni | 60 | 20.419 ug/L | 1.487 | 11797 | 0.011 |
| > | Ge | 74 | ug/L | | 171289 | 171289.465 |
| [| As | 75 | 5.361 ug/L | 11.325 | 3353 | 0.017 |
| | Se | 77 | ug/L | | 4191 | -0.006 |
| | Se | 82 | 0.884 ug/L | 64.783 | 32 | 0.000 |
| [| Kr | 83 | ug/L | | 159 | 0.000 |
| > | Lu | 175 | ug/L | | 113042 | 113042.307 |
| [| Tl | 205 | 0.290 ug/L | 0.602 | 1283 | 0.010 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | 99.8 | | |
| [| Ni | 60 | | | |
| > | Ge | 74 | 96.6 | | |
| | As | 75 | | | |
| | Se | 77 | | | |
| | Se | 82 | | | |
| [| Kr | 83 | | | |
| > | Lu | 175 | 107.6 | | |
| [| 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#6 - Summary Report

Sample ID: 247899019

Sample Date/Time: Wednesday, March 24, 2010 15:37:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\beniassetl.mth

Dataset File: C:\elandata\Dataset\100323\247899019.196

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 2.144 ug/L | 8.401 | 448 | 0.000 |
| [> | Sc | 45 | ug/L | | 1025773 | 1025773.265 |
| [| Ni | 60 | 15.464 ug/L | 0.936 | 8974 | 0.009 |
| [> | Ge | 74 | ug/L | | 170213 | 170213.409 |
| [| As | 75 | 4.096 ug/L | 8.530 | 2662 | 0.013 |
| [| Se | 77 | ug/L | | 4059 | -0.007 |
| [| Se | 82 | 0.522 ug/L | 77.643 | 16 | 0.000 |
| [| Kr | 83 | ug/L | | 152 | 0.000 |
| [> | Lu | 175 | ug/L | | 111903 | 111903.450 |
| [| Tl | 205 | 0.230 ug/L | 5.128 | 1043 | 0.008 |

Calibration

| Analyte | Mass Curve 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | | | |
| [> | Sc | 45 | 99.9 | | |
| [| Ni | 60 | | | |
| [> | Ge | 74 | 96.0 | | |
| [| As | 75 | | | |
| [| Se | 77 | | | |
| [| Se | 82 | | | |
| [| Kr | 83 | | | |
| [> | Lu | 175 | 106.5 | | |
| [| 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#6 - Summary Report

Sample ID: 247899020

Sample Date/Time: Wednesday, March 24, 2010 15:41:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\beniasset1.mth

Dataset File: C:\elandata\Dataset\100323\247899020.197

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 15.648 ug/L | 0.889 | 3253 | 0.003 |
| > | Sc | 45 | ug/L | | 1038983 | 1038982.513 |
| [| Ni | 60 | 19.768 ug/L | 1.096 | 11584 | 0.011 |
| > | Ge | 74 | ug/L | | 169320 | 169320.008 |
| | As | 75 | 7.379 ug/L | 3.728 | 4388 | 0.023 |
| | Se | 77 | ug/L | | 4184 | -0.006 |
| | Se | 82 | 0.120 ug/L | 520.061 | -1 | 0.000 |
| [| Kr | 83 | ug/L | | 154 | 0.000 |
| > | Lu | 175 | ug/L | | 111140 | 111139.526 |
| [| Tl | 205 | 0.311 ug/L | 4.133 | 1343 | 0.011 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|--------------|--------|------------|---------|------------|---------------|----------------|----------------|--------------|
| [| Be | 9 | | | | | | |
| > | Sc | 45 | | 101.2 | | | | |
| [| Ni | 60 | | | | | | |
| > | Ge | 74 | | 95.5 | | | | |
| | As | 75 | | | | | | |
| | Se | 77 | | | | | | |
| | Se | 82 | | | | | | |
| [| Kr | 83 | | | | | | |
| > | Lu | 175 | | 105.8 | | | | |
| [| Tl | 205 | | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 15:45:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlasset1.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 6.198

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 56.568 | ug/L | 1.889 | 10966 | 0.011 |
| Sc | 45 | | ug/L | | 970873 | 970872.966 |
| Ni | 60 | 51.618 | ug/L | 0.686 | 28071 | 0.029 |
| Ge | 74 | | ug/L | | 169639 | 169639.012 |
| As | 75 | 50.576 | ug/L | 2.339 | 27280 | 0.158 |
| Se | 77 | | ug/L | | 7752 | 0.015 |
| Se | 82 | 52.182 | ug/L | 3.088 | 2236 | 0.013 |
| Kr | 83 | | ug/L | | 101 | -0.000 |
| Lu | 175 | | ug/L | | 102391 | 102391.412 |
| Tl | 205 | 51.645 | ug/L | 0.714 | 180890 | 1.765 |

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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| 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 |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| Be | 9 | 113.137 | | | | | |
| Sc | 45 | | 94.5 | | | | |
| Ni | 60 | 103.235 | | | | | |
| Ge | 74 | | 95.6 | | | | |
| As | 75 | 101.151 | | | | | |
| Se | 77 | | | | | | |
| Se | 82 | 104.363 | | | | | |
| Kr | 83 | | | | | | |
| Lu | 175 | | 97.5 | | | | |
| Tl | 205 | 103.291 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|--------------------------------|
| QC Std 6 | Be | 9 | CCV is out of limits (+/- 10%) |

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 15:49:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\benlassetl.mth

Dataset File: C:\elandata\Dataset\100323\QC Std 7.199

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.013 | ug/L | 203.556 | 11 | 0.000 |
| > Sc | 45 | | ug/L | | 971562 | 971561.962 |
| Ni | 60 | -0.018 | ug/L | 69.682 | 111 | -0.000 |
| > Ge | 74 | | ug/L | | 169550 | 169550.420 |
| As | 75 | -0.479 | ug/L | 171.741 | 227 | -0.001 |
| Se | 77 | | ug/L | | 5330 | 0.000 |
| Se | 82 | 0.320 | ug/L | 103.142 | 7 | 0.000 |
| Kr | 83 | | ug/L | | 101 | -0.000 |
| > Lu | 175 | | ug/L | | 103285 | 103285.099 |
| Tl | 205 | 0.088 | ug/L | 14.767 | 460 | 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 | 0.9999 |
| Kr | 83Linear Thru Zero | |
| Lu | 175Linear Thru Zero | |
| Tl | 205Linear 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 | | | | 94.6 | | | | | | |
| Ni | 60 | | | | | | | | | | |
| > Ge | 74 | | | | 95.6 | | | | | | |
| As | 75 | | | | | | | | | | |
| Se | 77 | | | | | | | | | | |
| Se | 82 | | | | | | | | | | |
| Kr | 83 | | | | | | | | | | |
| > Lu | 175 | | | | 98.3 | | | | | | |
| Tl | 205 | | | | | | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, March 24, 2010 21:44:13

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100318\Sample.305

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 | | 1536.5 | | 1536.483 | 49.723 | 3.2 |
| Mg | 24.0 | | 19010.2 | | 19010.241 | 185.357 | 1.0 |
| Co | 58.9 | | 25739.2 | | 25739.167 | 116.268 | 0.5 |
| Rh | 102.9 | | 53386.6 | | 53386.570 | 220.780 | 0.4 |
| In | 114.9 | | 61612.8 | | 61612.789 | 609.721 | 1.0 |
| Pb | 208.0 | | 30169.4 | | 30169.427 | 376.230 | 1.2 |
| [> Ba | 137.9 | | 55305.5 | | 55305.458 | 1345.454 | 2.4 |
| [Ba++ | 69.0 | | 1456.5 | | 0.026 | 0.001 | 3.3 |
| [> Ce | 139.9 | | 71357.6 | | 71357.584 | 635.269 | 0.9 |
| [CeO | 155.9 | | 1002.7 | | 0.014 | 0.000 | 2.7 |
| Bkgd | 220.0 | | 23.4 | | 23.400 | 2.275 | 9.7 |

Current Optimization File Data

| Current Value | Description |
|---------------|-------------------------|
| 0.83 | Nebulizer Gas Flow |
| 8.75 | Lens Voltage |
| 1450.00 | ICP RF Power |
| -1800.00 | Analog Stage Voltage |
| 900.00 | Pulse Stage Voltage |
| 30.00 | Discriminator Threshold |
| -6.00 | AC Rod Offset |

Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be | 9 | 21 | 6.3 | 1874.8 |
| Co | 59 | 21 | 7.0 | 25418.9 |
| In | 115 | 21 | 7.8 | 58083.8 |

ICPMS #6 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 | 583 | 2080 | 0.638 |
| Be | 9.0 | 9.0 | 2029 | 2080 | 0.640 |
| Mg | 24.0 | 24.0 | 5676 | 2120 | 0.614 |
| Mg | 25.0 | 25.0 | 5932 | 2080 | 0.727 |
| Mg | 26.0 | 26.1 | 6177 | 2120 | 0.724 |
| Co | 58.9 | 58.9 | 14162 | 2170 | 0.648 |
| Rh | 102.9 | 102.8 | 24854 | 2230 | 0.720 |
| In | 114.9 | 114.9 | 27771 | 2260 | 0.689 |
| Ce | 139.9 | 139.8 | 33843 | 2280 | 0.757 |
| Pb | 206.0 | 206.0 | 49936 | 2420 | 0.711 |
| Pb | 207.0 | 206.9 | 50135 | 2385 | 0.692 |
| Pb | 208.0 | 208.0 | 50439 | 2430 | 0.716 |
| U | 238.1 | 238.0 | 57723 | 2470 | 0.704 |

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, March 24, 2010 21:58:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Blank.001

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | | ug/L | | | 12 |
| Sc | 45 | | ug/L | | | 1096086 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|---------------|-------------------------|
| Be | 9 | Simple Linear | |
| Sc | 45 | Simple Linear | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, March 24, 2010 22:00:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 1.002

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 10.000 | ug/L | 0.467 | 2013 | 0.002 |
| > | Sc | 45 | | ug/L | | 1120400 | 1120400.202 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | | | | | |
| > | Sc | 45 | | | | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, March 24, 2010 22:03:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 2.003

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|--------------|-----------|--------------------|------------------|
| [| Be | 9 | 100.110 ug/L | 0.967 | 22704 | 0.020 |
| > | Sc | 45 | ug/L | | 1129981 | 1129981.005 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [| Be | 9 | | | | |
| > | Sc | 45 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, March 24, 2010 22:05:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 1.004

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------|
| [| Be | 9 | 50.293 | ug/L | 0.848 | 11359 | 0.010 |
| > | Sc | 45 | ug/L | | 1124609 | 1124609.363 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | 100.586 | | | |
| > | Sc | 45 | | 102.6 | | |

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, March 24, 2010 22:07:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 2.005

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | -0.009 | ug/L | 333.184 | 10 | -0.000 |
| 45 | | ug/L | | 1094134 | 1094134.238 | |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [Be | 9 | | | | | |
| 45 | 99.8 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Wednesday, March 24, 2010 22:09:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 3.006

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 0.538 | ug/L | 12.537 | 133 | 0.000 |
| > Sc | 45 | | ug/L | | 1119001 | 1119001.217 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|------|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [Be | 9 | 107.540 | | | | |
| > Sc | 45 | | 102.1 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Wednesday, March 24, 2010 22:12:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 4.007

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.077 | ug/L | 46.960 | 29 | 0.000 |
| Sc | 45 | | ug/L | | 1108636 | 1108636.391 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recovery | Dilution | % Diff | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|------------|----------|--------|-----------|-------------------|
| Be | 9 | | | | | | | | | | |
| Sc | 45 | | | | 101.1 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, March 24, 2010 22:14:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 5.008

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 20.418 | ug/L | 1.268 | 4553 | 0.004 |
| Sc | 45 | | ug/L | | 1108693 | 1108692.782 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | 102.088 | | | | |
| Sc | 45 | | 101.2 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 22:16:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.009

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| | Be | 9 | 50.003 ug/L | 0.867 | 11429 | 0.010 |
| > | Sc | 45 | ug/L | | 1138212 | 1138211.961 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recov | Dilution | % Dif | Duplicate | Rel. % Difference |
|---|--------------|--------|------------|---------|------------|-------|---------|----------|-------|-----------|-------------------|
| | Be | 9 | 100.007 | | | | | | | | |
| > | Sc | 45 | | | 103.8 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 22:18:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.010

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | -0.008 ug/L | 58.286 | 10 | -0.000 |
| Sc | 45 | ug/L | | 1104702 | 1104701.653 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | | | | |
| Sc | 45 | 100.8 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 22:36:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.017

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 53.676 | ug/L | 1.344 | 12080 | 0.011 |
| Sc | 45 | | ug/L | | 1120888 | 1120888.476 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | 107.353 | | | | |
| Sc | 45 | | 102.3 | | | |

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 22:38:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.018

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | -0.010 | ug/L | 207.870 | 9 | -0.000 |
| 45 | | ug/L | | 1079437 | 1079437.227 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [Be | 9 | | | | | |
| 45 | 98.5 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054499

Sample Date/Time: Wednesday, March 24, 2010 22:41:33

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054499.019

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | -0.009 | ug/L | 204.389 | 10 | -0.000 |
| Sc | 45 | | ug/L | | 1096427 | 1096427.321 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 100.0 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054504

Sample Date/Time: Wednesday, March 24, 2010 22:44:09

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 958055|40|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054504.020

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 23.069 | ug/L | 1.005 | 5212 | 0.005 |
| Sc | 45 | | ug/L | | 1123480 | 1123480.019 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 102.5 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899001

Sample Date/Time: Wednesday, March 24, 2010 22:46:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899001.021

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 6.363 | ug/L | 1.326 | 1495 | 0.001 |
| 45 | | ug/L | | 1161377 | 1161377.093 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [Be | 9 | | | | |
| 45 | 106.0 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054500

Sample Date/Time: Wednesday, March 24, 2010 22:49:21

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054500.022

Concentration Results

| Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|-------|------|-------------|-----------|--------------------|------------------|
| Be | 9 | 5.619 | ug/L | 2.314 | 1303 | 0.001 | |
| Sc | 45 | | ug/L | | 1145578 | 1145578.273 | |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 104.5 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054502

Sample Date/Time: Wednesday, March 24, 2010 22:51:58

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054502.023

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| ┌ Be | 9 | 32.392 | ug/L | 1.669 | 7546 | 0.006 |
| └ Sc | 45 | | ug/L | | 1159589 | 1159588.691 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|------|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| ┌ Be | 9 | | | | | |
| └ Sc | 45 | | 105.8 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054503

Sample Date/Time: Wednesday, March 24, 2010 22:54:34

Sample Type:

Sample Description: LANL 6020 ~~SELT~~ MSD

Number of Replicates: 3

Batch ID: 95805510[m]

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054503.024

KUP
3/29/10

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 32.658 ug/L | 0.441 | 7602 | 0.007 |
| Sc | 45 | ug/L | | 1158489 | 1158488.516 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % | Dil Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|------------|---------------------------------|
| Be | 9 | | | | |
| Sc | 45 | 105.7 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202054501

Sample Date/Time: Wednesday, March 24, 2010 22:57:11

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 958055[21m]

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054501.025

KLP
3/29/10

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 1.275 | ug/L | 5.483 | 306 | 0.000 |
| Sc | 45 | | ug/L | | 1148172 | 1148171.595 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike % | Recovery | Dilution % | Duplicate Rel. | % Difference |
|---------|------|--------|------------|---------|------------|---------|----------|------------|----------------|--------------|
| Be | 9 | | | | | | | | | |
| Sc | 45 | | | | 104.8 | | | | | |

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899002

Sample Date/Time: Wednesday, March 24, 2010 22:59:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899002.026

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 2.488 | ug/L | 4.819 | 577 | 0.000 |
| Sc | 45 | | ug/L | | 1131355 | 1131355.093 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 103.2 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 23:02:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.027

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 53.888 ug/L | 0.101 | 12338 | 0.011 |
| > | Sc | 45 | ug/L | | 1140156 | 1140156.431 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recov | Dilution | % Dif | Duplicate Rel. | % Difference |
|---|---------|------|--------|------------|---------|------------|-------|---------|----------|-------|----------------|--------------|
| [| Be | | 9 | 107.775 | | | | | | | | |
| > | Sc | | 45 | | | 104.0 | | | | | | |

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 23:04:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.028

Concentration Results

| Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|--------|------|-------------|-----------|--------------------|------------------|
| Be | 9 | -0.004 | ug/L | 449.181 | 11 | -0.000 | |
| Sc | 45 | | ug/L | | 1107892 | 1107891.898 | |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recovery | Dilution | % Diff | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|------------|----------|--------|-----------|-------------------|
| Be | 9 | | | | | | | | | | |
| Sc | 45 | | | | 101.1 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899003

Sample Date/Time: Wednesday, March 24, 2010 23:06:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899003.029

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 5.303 ug/L | 2.782 | 1249 | 0.001 |
| Sc | 45 | ug/L | | 1162926 | 1162925.550 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be | 9 | | | | |
| Sc | 45 | 106.1 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899004

Sample Date/Time: Wednesday, March 24, 2010 23:09:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899004.030

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 13.098 | ug/L | 3.666 | 3285 | 0.003 |
| > | Sc | 45 | | ug/L | | 1245363 | 1245363.159 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | | 9 | | | | |
| > | Sc | | 45 | 113.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899005

Sample Date/Time: Wednesday, March 24, 2010 23:12:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899005.031

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| └ | Be | 9 | 12.370 ug/L | 0.902 | 2933 | 0.002 |
| └> | Sc | 45 | ug/L | | 1176652 | 1176651.566 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| └ | Be | 9 | | | |
| └> | Sc | 45 | 107.4 | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899006

Sample Date/Time: Wednesday, March 24, 2010 23:14:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899006.032

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 6.432 | ug/L | 2.120 | 1532 | 0.001 |
| > | Sc | 45 | | ug/L | | 1177427 | 1177426.613 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 0.9999 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|------|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [Be | 9 | | | | | |
| > Sc | 45 | | 107.4 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899007

Sample Date/Time: Wednesday, March 24, 2010 23:17:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899007.033

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 2.993 | ug/L | 0.344 | 695 | 0.001 |
| Sc | 45 | | ug/L | | 1136740 | 1136739.507 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 103.7 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899008

Sample Date/Time: Wednesday, March 24, 2010 23:19:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899008.034

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 3.354 | ug/L | 4.072 | 783 | 0.001 |
| Sc | 45 | | ug/L | | 1145509 | 1145509.091 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 104.5 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899009

Sample Date/Time: Wednesday, March 24, 2010 23:22:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rm|

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899009.035

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 8.071 | ug/L | 0.638 | 1866 | 0.002 |
| Sc | 45 | | ug/L | | 1145074 | 1145073.914 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 104.5 | | | |

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, March 24, 2010 23:24:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.036

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 53.763 | ug/L | 1.558 | 12290 | 0.011 |
| Sc | 45 | | ug/L | | 1138445 | 1138444.762 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | 107.526 | | | | |
| Sc | 45 | | 103.9 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, March 24, 2010 23:27:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.037

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | -0.007 | ug/L | 279.920 | 10 | -0.000 |
| Sc | 45 | | ug/L | | 1111347 | 1111346.670 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 0.9999 |
| Sc | 45 | 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 | | | | 101.4 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 25, 2010 01:24:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Blank.064

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | | ug/L | | 9 | |
| Sc | 45 | | ug/L | | 1184527 | |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 25, 2010 01:27:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 1.065

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|----|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [> | Be | 9 | 10.000 | ug/L | 0.969 | 2309 | 0.002 |
| | Sc | 45 | | ug/L | | 1217330 | 1217330.345 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|--------|------------|---------|------------|---------------|----------------|----------------|--------------|
| [> | Be | 9 | | | | | | | |
| | Sc | 45 | | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 25, 2010 01:29:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 2.066

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 100.065 | ug/L | 1.710 | 24149 | 0.020 |
| Sc | 45 | | ug/L | | 1194512 | 1194512.006 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 25, 2010 01:31:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\bs.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 1.067

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 50.325 | ug/L | 1.347 | 12278 | 0.010 |
| > | Sc | 45 | | ug/L | | 1207040 | 1207040.347 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | 100.650 | | | | |
| > | Sc | 45 | | 101.9 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 25, 2010 01:33:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 2.068

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | -0.007 ug/L | 204.122 | 7 | -0.000 |
| Sc | 45 | ug/L | | 1168175 | 1168175.300 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be | 9 | | | | |
| Sc | 45 | 98.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 25, 2010 01:36:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 3.069

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.577 | ug/L | 11.738 | 146 | 0.000 |
| Sc | 45 | | ug/L | | 1176711 | 1176710.889 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be | 9 | 115.470 | | | | |
| Sc | 45 | | 99.3 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 25, 2010 01:38:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 4.070

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.102 | ug/L | 14.317 | 33 | 0.000 |
| Sc | 45 | | ug/L | | 1158313 | 1158313.169 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|---------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 97.8 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, March 25, 2010 01:40:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 5.071

Concentration Results

| Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|--------|------|-------------|-----------|--------------------|------------------|
| Be | 9 | 20.290 | ug/L | 0.880 | 4794 | 0.004 | |
| Sc | 45 | | ug/L | | 1167718 | 1167718.003 | |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recov | Dilution | % Di | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|---------|----------|------|-----------|-------------------|
| Be | 9 | | 101.451 | | | | | | | | |
| Sc | 45 | | | | 98.6 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 01:42:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.072

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 49.239 | ug/L | 1.686 | 11975 | 0.010 |
| > | Sc | 45 | | ug/L | | 1203196 | 1203195.573 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|-------|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | 98.478 | | | | |
| > td< | Sc | 45 | | 101.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 01:45:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.073

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.006 | ug/L | 370.710 | 10 | 0.000 |
| Sc | 45 | | ug/L | | 1177048 | 1177048.388 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | 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 | | 99.4 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899010

Sample Date/Time: Thursday, March 25, 2010 01:47:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899010.074

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| | Be | 9 | 4.092 ug/L | 5.036 | 1021 | 0.001 |
| > | Sc | 45 | ug/L | | 1224818 | 1224818.397 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| | Be | 9 | | | | |
| > | Sc | 45 | 103.4 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899011

Sample Date/Time: Thursday, March 25, 2010 01:50:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899011.075

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 29.365 ug/L | 2.155 | 7078 | 0.006 |
| Sc | 45 | ug/L | | 1191994 | 1191993.515 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | |
| Sc | 45 | 100.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899012

Sample Date/Time: Thursday, March 25, 2010 01:52:55

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899012.076

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 32.058 | ug/L | 2.494 | 7927 | 0.006 |
| Sc | 45 | | ug/L | | 1222797 | 1222796.522 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 103.2 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899013

Sample Date/Time: Thursday, March 25, 2010 01:55:32

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899013.077

Concentration Results

| Analyte | Mass | Conc. | Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|-------|------|-------------|-----------|--------------------|------------------|
| Be | 9 | 5.443 | ug/L | 3.609 | 1326 | 0.001 | |
| Sc | 45 | | ug/L | | 1197625 | 1197625.358 | |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 101.1 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899014

Sample Date/Time: Thursday, March 25, 2010 01:58:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899014.078

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 3.262 | ug/L | 4.820 | 773 | 0.001 |
| Sc | 45 | | ug/L | | 1160662 | 1160662.368 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 98.0 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899015

Sample Date/Time: Thursday, March 25, 2010 02:00:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899015.079

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 5.552 ug/L | 2.582 | 1330 | 0.001 |
| > | Sc | 45 | ug/L | | 1177473 | 1177472.593 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| [| Be | 9 | | | | |
| > | Sc | 45 | 99.4 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899016

Sample Date/Time: Thursday, March 25, 2010 02:03:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899016.080

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 8.465 ug/L | 2.446 | 2088 | 0.002 |
| > | Sc | 45 | ug/L | | 1215506 | 1215505.683 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | | | | |
| > | Sc | 45 | 102.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 02:05:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.081

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 53.316 | ug/L | 0.575 | 12515 | 0.011 |
| Sc | 45 | | ug/L | | 1161371 | 1161370.551 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| Be | 9 | 106.633 | | | | |
| Sc | 45 | | 98.0 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 02:07:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.082

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 0.015 | ug/L | 136.378 | 12 | 0.000 |
| Sc | 45 | | ug/L | | 1149662 | 1149662.087 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recovery | Dilution | % Dil | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|------------|----------|-------|-----------|-------------------|
| Be | 9 | | | | | | | | | | |
| Sc | 45 | | | | 97.1 | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits | Message |
|------------------|---------|------|---------------|---------|
|------------------|---------|------|---------------|---------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899017

Sample Date/Time: Thursday, March 25, 2010 02:10:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2][rmj]

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899017.083

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 8.375 | ug/L | 0.956 | 2005 | 0.002 |
| Sc | 45 | | ug/L | | 1179847 | 1179846.738 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| Be | 9 | | | | | |
| Sc | 45 | | 99.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899018

Sample Date/Time: Thursday, March 25, 2010 02:12:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899018.084

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|------|--------------|------------|-------------|-----------|--------------------|------------------|
| [Be | 9 | 2.677 | ug/L | 8.305 | 643 | 0.001 |
| 45 | | ug/L | | 1173471 | 1173470.958 | |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [Be | 9 | | | | |
| 45 | 99.1 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899019

Sample Date/Time: Thursday, March 25, 2010 02:15:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899019.085

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|---|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [| Be | 9 | 2.195 | ug/L | 2.301 | 521 | 0.000 |
| > | Sc | 45 | | ug/L | | 1156376 | 1156376.196 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [| Be | 9 | | | | | |
| > | Sc | 45 | | 97.6 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 247899020

Sample Date/Time: Thursday, March 25, 2010 02:17:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rm|

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899020.086

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean | |
|----|--------------|------------|-------------|-----------|--------------------|------------------|-------------|
| [> | Be | 9 | 15.666 | ug/L | 3.640 | 3729 | 0.003 |
| | Sc | 45 | | ug/L | | 1175817 | 1175817.060 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | | | | |
| > | Sc | 45 | 99.3 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 02:20:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.087

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Be | 9 | 52.599 | ug/L | 1.176 | 12325 | 0.011 |
| Sc | 45 | | ug/L | | 1159350 | 1159349.795 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Be | 9 | Linear Thru Zero | 1.0000 |
| Sc | 45 | Linear Thru Zero | |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Be | 9 | 105.199 | | | | |
| Sc | 45 | | 97.9 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 02:22:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.088

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [| Be | 9 | 0.013 ug/L | 100.269 | 11 | 0.000 |
| Sc | 45 | ug/L | | 1107349 | 1107349.337 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|--------------------|-------------------------|
| Be | 9Linear Thru Zero | 1.0000 |
| Sc | 45Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [| Be | 9 | | | | |
| Sc | 45 | 93.5 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 25, 2010 02:35:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\Blank.089

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | ug/L | | 117845 | |
| [U | 238 | ug/L | | 49 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|------------------|-------------------------|
| Lu | 175Simple Linear | |
| U | 238Simple Linear | |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [> Lu | 175 | | | | |
| [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#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 25, 2010 02:38:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 1.090

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 117136 | 117135.892 |
| [| U | 238 | 10.000 ug/L | 1.216 | 64210 | 0.548 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std | % Recovery | Int Std | % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|--------|------------|---------|------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | | | | | | |
| [| 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#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 25, 2010 02:41:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\Standard 2.091

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | | ug/L | | 118261 | 118261.027 |
| [U | 238 | 99.878 | ug/L | 0.120 | 576971 | 4.878 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> Lu | 175 | | | | | |
| [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#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 25, 2010 02:44:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 1.092

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 118819 | 118819.303 |
| [| U | 238 | 53.467 ug/L | 1.788 | 310323 | 2.612 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 100.8 | | |
| [| U | 238 | 106.934 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 25, 2010 02:47:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 2.093

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 119677 | 119676.751 |
| [| U | 238 | 0.007 ug/L | 28.348 | 89 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 101.6 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 25, 2010 02:50:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 3.094

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 119103 | 119103.291 |
| [| U | 238 | 0.258 ug/L | 1.841 | 1552 | 0.013 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 101.1 | | |
| [| U | 238 | 129.121 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 25, 2010 02:53:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 4.095

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116813 | 116813.491 |
| [| U | 238 | 0.002 ug/L | 47.265 | 60 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [> | Lu | 175 | | 99.1 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, March 25, 2010 02:56:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 5.096

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 117364 | 117363.721 |
| [| U | 238 | 21.624 ug/L | 0.670 | 124000 | 1.056 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.6 | | |
| [| U | 238 | 108.120 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 02:59:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.097

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 120337 | 120336.626 |
| [| U | 238 | ug/L | 0.672 | 308630 | 2.564 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 102.1 | | |
| [| U | 238 | 105.004 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 03:02:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.098

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | | ug/L | | 120625 | 120625.366 |
| [U | 238 | 0.006 | ug/L | 33.507 | 85 | 0.000 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Lu | 175 | Linear Thru Zero | |
| U | 238 | Linear Thru Zero | 0.9999 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> Lu | 175 | | 102.4 | | | |
| [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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 03:15:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.102

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 119455 | 119454.585 |
| [| U | 238 | 52.921 ug/L | 0.167 | 308825 | 2.585 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 101.4 | | |
| [| U | 238 | 105.842 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 03:18:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.103

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|-----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 118924 | 118923.817 |
| [| U | 238 | 0.009 ug/L | 9.116 | 99 | 0.000 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|-----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 100.9 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 03:42:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.111

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 119094 | 119093.547 |
| [| U | 238 | ug/L | 0.898 | 309571 | 2.599 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 101.1 | | |
| [| U | 238 | 106.422 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 03:46:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.112

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116518 | 116518.421 |
| [| U | 238 | 0.019 ug/L | 7.999 | 159 | 0.001 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 98.9 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 04:13:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.121

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116303 | 116303.341 |
| [| U | 238 | 54.311 ug/L | 1.814 | 308554 | 2.653 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 98.7 | | | |
| [| U | 238 | 108.622 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 04:16:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.122

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116199 | 116199.499 |
| [| U | 238 | 0.011 ug/L | 15.479 | 114 | 0.001 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 98.6 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 04:57:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.132

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 117979 | 117978.696 |
| [| U | 238 | 53.770 ug/L | 0.803 | 309891 | 2.626 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|---------------|----------------|--------------|
| [> | Lu | 175 | | 100.1 | | | |
| [| U | 238 | 107.540 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 05:00:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.133

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 117094 | 117094.113 |
| [| U | 238 | 0.003 ug/L | 36.613 | 67 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| > | Lu | 175 | | 99.4 | | |
| [| 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#6 - Summary Report

Sample ID: 1202054499

Sample Date/Time: Thursday, March 25, 2010 05:03:59

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 958055[2][rm]

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054499.134

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116011 | 116010.984 |
| [| U | 238 | ug/L | 4.417 | 89 | 0.000 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| [> | Lu | 175 | | 98.4 | | |
| [| 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#6 - Summary Report

Sample ID: 1202054504

Sample Date/Time: Thursday, March 25, 2010 05:07:05

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 958055|40|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054504.135

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 119315 | 119315.419 |
| [| U | 238 | 0.555 ug/L | 2.783 | 3284 | 0.027 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [> | Lu | 175 | | 101.2 | | |
| [| 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#6 - Summary Report

Sample ID: 247899001

Sample Date/Time: Thursday, March 25, 2010 05:10:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899001.136

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 132579 | 132578.717 |
| [| U | 238 | ug/L | 1.493 | 25163 | 0.189 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 112.5 | | |
| [| 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#6 - Summary Report

Sample ID: 1202054500

Sample Date/Time: Thursday, March 25, 2010 05:13:18

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 958055|2|rm|

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054500.137

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 131277 | 131276.740 |
| [| U | 238 | 5.040 ug/L | 0.905 | 32371 | 0.246 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 111.4 | | | |
| [| 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#6 - Summary Report

Sample ID: 1202054502

Sample Date/Time: Thursday, March 25, 2010 05:16:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054502.138

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 132619 | 132619.057 |
| [| U | 238 | 28.401 ug/L | 1.057 | 184021 | 1.387 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 112.5 | | |
| [| 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#6 - Summary Report

Sample ID: 1202054503

Sample Date/Time: Thursday, March 25, 2010 05:19:31

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054503.139

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 132535 | 132535.301 |
| [| U | 238 | 28.588 ug/L | 0.398 | 185120 | 1.396 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 112.5 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 05:22:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.140

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 117457 | 117457.399 |
| [| U | 238 | 54.308 ug/L | 0.541 | 311609 | 2.653 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.7 | | |
| [| U | 238 | 108.615 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 05:25:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.141

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 116211 | 116210.936 |
| [| U | 238 | 0.007 ug/L | 13.725 | 86 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 98.6 | | | |
| [| 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#6 - Summary Report

Sample ID: 1202054501

Sample Date/Time: Thursday, March 25, 2010 05:28:48

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\1202054501.142

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 122554 | 122554.011 |
| L | U | 238 | 0.828 ug/L | 0.791 | 5011 | 0.040 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| > | Lu | 175 | | 104.0 | | |
| L | 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#6 - Summary Report

Sample ID: 247899002

Sample Date/Time: Thursday, March 25, 2010 05:31:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899002.143

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 120558 | 120558.120 |
| [| U | 238 | 54.879 ug/L | 1.207 | 323203 | 2.680 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 102.3 | | |
| [| 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#6 - Summary Report

Sample ID: 247899003

Sample Date/Time: Thursday, March 25, 2010 05:35:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899003.144

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 123950 | 123949.737 |
| [| U | 238 | 7.641 ug/L | 1.055 | 46308 | 0.373 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 105.2 | | |
| [| 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#6 - Summary Report

Sample ID: 247899004

Sample Date/Time: Thursday, March 25, 2010 05:38:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899004.145

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 122557 | 122556.741 |
| [| U | 238 | ug/L | 1.069 | 418029 | 3.411 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 104.0 | | |
| [| 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#6 - Summary Report

Sample ID: 247899006

Sample Date/Time: Thursday, March 25, 2010 05:44:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899006.147

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 132429 | 132429.001 |
| [| U | 238 | 11.608 ug/L | 0.821 | 75135 | 0.567 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| > | Lu | 175 | | 112.4 | | |
| [| 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#6 - Summary Report

Sample ID: 247899007

Sample Date/Time: Thursday, March 25, 2010 05:47:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899007.148

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 120842 | 120841.916 |
| [| U | 238 | 20.314 ug/L | 1.056 | 119940 | 0.992 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 102.5 | | |
| [| 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#6 - Summary Report

Sample ID: 247899008

Sample Date/Time: Thursday, March 25, 2010 05:50:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899008.149

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 121159 | 121158.858 |
| [| U | 238 | 59.243 ug/L | 1.050 | 350668 | 2.894 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [> | Lu | 175 | | 102.8 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 05:53:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.150

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 114735 | 114735.390 |
| [| U | 238 | 53.911 ug/L | 1.039 | 302166 | 2.633 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 97.4 | | |
| [| U | 238 | 107.823 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 05:56:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.151

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 115249 | 115249.260 |
| [| U | 238 | 0.004 ug/L | 21.546 | 71 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 97.8 | | | |
| [| 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#6 - Summary Report

Sample ID: 247899010

Sample Date/Time: Thursday, March 25, 2010 06:03:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899010.153

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 120240 | 120240.181 |
| [| U | 238 | 22.926 ug/L | 1.743 | 134668 | 1.120 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 102.0 | | |
| [| 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#6 - Summary Report

Sample ID: 247899014

Sample Date/Time: Thursday, March 25, 2010 06:15:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899014.157

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 122573 | 122573.229 |
| [| U | 238 | 11.073 ug/L | 0.497 | 66347 | 0.541 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 104.0 | | |
| [| 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#6 - Summary Report

Sample ID: 247899015

Sample Date/Time: Thursday, March 25, 2010 06:18:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899015.158

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 122534 | 122533.852 |
| [| U | 238 | 62.783 ug/L | 1.521 | 375768 | 3.067 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 104.0 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 06:21:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.159

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 113654 | 113654.118 |
| [| U | 238 | 54.250 ug/L | 0.590 | 301201 | 2.650 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 96.4 | | | |
| [| U | 238 | 108.499 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 06:24:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.160

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 113467 | 113466.972 |
| [| U | 238 | 0.006 ug/L | 39.760 | 78 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| > | Lu | 175 | | 96.3 | | |
| [| 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#6 - Summary Report

Sample ID: 247899016

Sample Date/Time: Thursday, March 25, 2010 06:27:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055[2]rm]

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899016.161

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 126716 | 126716.496 |
| [| U | 238 | 4.684 ug/L | 0.740 | 29043 | 0.229 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 107.5 | | |
| [| 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#6 - Summary Report

Sample ID: 247899018

Sample Date/Time: Thursday, March 25, 2010 06:33:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rm|

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899018.163

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 121252 | 121251.951 |
| L | U | 238 | 5.660 ug/L | 1.749 | 33558 | 0.276 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| > | Lu | 175 | | 102.9 | | | |
| L | 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#6 - Summary Report

Sample ID: 247899019

Sample Date/Time: Thursday, March 25, 2010 06:36:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|2|rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\247899019.164

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 119620 | 119619.585 |
| [| U | 238 | 4.825 ug/L | 1.000 | 28242 | 0.236 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 101.5 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 25, 2010 06:42:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 6.166

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | | ug/L | | 112896 | 112896.135 |
| [U | 238 | 53.523 | ug/L | 0.474 | 295190 | 2.614 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Lu | 175 | Linear Thru Zero | |
| U | 238 | Linear Thru Zero | 0.9999 |

QC Calculated Values

| Analyte | Mass | QC Std | % Recovery | Int Std | % Recovery | Spike | % Recovery | Dilution | % Diff | Duplicate | Rel. % Difference |
|---------|------|--------|------------|---------|------------|-------|------------|----------|--------|-----------|-------------------|
| [> Lu | 175 | | | | | 95.8 | | | | | |
| [U | 238 | | 107.046 | | | | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 25, 2010 06:46:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.u.mth

Dataset File: C:\elandata\Dataset\100324\100324\QC Std 7.167

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 112311 | 112310.908 |
| [| U | 238 | 0.006 ug/L | 16.525 | 83 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 0.9999 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| > | Lu | 175 | | 95.3 | | | |
| [| 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 #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, March 25, 2010 22:43:40

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100318\Sample.306

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 | | 2316.0 | | 2315.988 | 46.340 | 2.0 |
| Mg | 24.0 | | 26605.8 | | 26605.757 | 397.514 | 1.5 |
| Co | 58.9 | | 35612.5 | | 35612.535 | 243.017 | 0.7 |
| Rh | 102.9 | | 71318.6 | | 71318.603 | 927.372 | 1.3 |
| In | 114.9 | | 76348.1 | | 76348.091 | 817.381 | 1.1 |
| Pb | 208.0 | | 42447.4 | | 42447.374 | 415.016 | 1.0 |
| [> Ba | 137.9 | | 70551.7 | | 70551.711 | 1034.013 | 1.5 |
| [Ba++ | 69.0 | | 1910.1 | | 0.027 | 0.001 | 1.9 |
| [> Ce | 139.9 | | 91805.9 | | 91805.864 | 795.215 | 0.9 |
| [CeO | 155.9 | | 1832.9 | | 0.020 | 0.000 | 1.5 |
| Bkgd | 220.0 | | 17.8 | | 17.800 | 2.308 | 13.0 |

Current Optimization File Data

| Current Value | Description |
|---------------|-------------------------|
| 0.80 | Nebulizer Gas Flow |
| 8.75 | Lens Voltage |
| 1450.00 | ICP RF Power |
| -1800.00 | Analog Stage Voltage |
| 900.00 | Pulse Stage Voltage |
| 30.00 | Discriminator Threshold |
| -6.00 | AC Rod Offset |

Current Autolens Data

| Analyte | Mass | Num of Pts | DAC Value | Maximum Intensity |
|---------|------|------------|-----------|-------------------|
| Be | 9 | 21 | 7.3 | 2985.0 |
| Co | 59 | 21 | 8.0 | 34103.7 |
| In | 115 | 21 | 9.0 | 77537.2 |

ICPMS #6 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 | 2080 | 0.655 |
| Be | 9.0 | 9.1 | 2055 | 2080 | 0.676 |
| Mg | 24.0 | 24.0 | 5674 | 2120 | 0.601 |
| Mg | 25.0 | 25.0 | 5930 | 2080 | 0.677 |
| Mg | 26.0 | 25.9 | 6152 | 2120 | 0.713 |
| Co | 58.9 | 58.9 | 14160 | 2170 | 0.657 |
| Rh | 102.9 | 102.9 | 24847 | 2230 | 0.706 |
| In | 114.9 | 115.0 | 27789 | 2260 | 0.699 |
| Ce | 139.9 | 139.9 | 33848 | 2280 | 0.755 |
| Pb | 206.0 | 206.0 | 49948 | 2420 | 0.746 |
| Pb | 207.0 | 207.0 | 50135 | 2385 | 0.711 |
| Pb | 208.0 | 208.0 | 50439 | 2430 | 0.727 |
| U | 238.1 | 238.1 | 57729 | 2470 | 0.712 |

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 25, 2010 23:39:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\Blank.007

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 99203 | |
| [| U | 238 | ug/L | | 26 | |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| [> | Lu | 175 | | | | |
| [| 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#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 25, 2010 23:42:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\Standard 1.008

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Lu | 175 | | ug/L | | 100494 | 100493.600 |
| U | 238 | 10.000 | ug/L | 1.205 | 53935 | 0.536 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Lu | 175 | Linear Thru Zero | |
| U | 238 | Linear Thru Zero | 1.0000 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| Lu | 175 | | | | | |
| 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#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 25, 2010 23:45:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\Standard 2.009

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|--------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 99977 | 99976.627 |
| [| U | 238 | 100.007 ug/L | 0.802 | 540187 | 5.403 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 25, 2010 23:48:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 1.010

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98148 | 98147.755 |
| [| U | 238 | 54.121 ug/L | 0.090 | 287013 | 2.924 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 98.9 | | | |
| [| U | 238 | 108.242 | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, March 25, 2010 23:52:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.u.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 2.011

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| Lu | 175 | | ug/L | | 96948 | 96947.556 |
| U | 238 | 0.011 | ug/L | 17.119 | 84 | 0.001 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Lu | 175 | Linear Thru Zero | |
| U | 238 | Linear Thru Zero | 1.0000 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|----------------|--------------|
| Lu | 175 | | 97.7 | | | | |
| 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#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 25, 2010 23:55:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.u.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 3.012

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 99178 | 99177.738 |
| [| U | 238 | 0.218 ug/L | 1.805 | 1193 | 0.012 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 100.0 | | |
| [| U | 238 | 108.910 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 25, 2010 23:58:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 4.013

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98268 | 98267.831 |
| [| U | 238 | 0.005 ug/L | 36.082 | 54 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.1 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 26, 2010 00:01:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 5.014

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98559 | 98559.477 |
| [| U | 238 | ug/L | 0.314 | 115886 | 1.176 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.4 | | |
| [| U | 238 | 108.792 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 00:04:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.015

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98667 | 98666.564 |
| [| U | 238 | ug/L | 0.812 | 286821 | 2.907 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.5 | | |
| [| U | 238 | 107.608 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 00:07:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.016

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98475 | 98475.259 |
| [| U | 238 | 0.008 ug/L | 17.468 | 69 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.3 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 00:32:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.024

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 97410 | 97409.634 |
| [| U | 238 | 54.025 ug/L | 0.622 | 284341 | 2.919 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 98.2 | | |
| [| U | 238 | 108.049 | | | |

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 00:35:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.025

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|-----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 96914 | 96914.274 |
| [| U | 238 | 0.012 ug/L | 10.073 | 87 | 0.001 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std | % Recovery | Int Std | % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|-----|--------------|--------|------------|---------|------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | | | 97.7 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 01:02:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.034

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 98702 | 98702.149 |
| [| U | 238 | ug/L | 1.297 | 287135 | 2.909 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| > | Lu | 175 | | 99.5 | | |
| [| U | 238 | 107.688 | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass Out of Limits Message |
|------------------|---------|----------------------------|
|------------------|---------|----------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 01:05:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.035

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 97284 | 97284.462 |
| [| U | 238 | 0.009 ug/L | 25.453 | 71 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| > | Lu | 175 | | 98.1 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 01:36:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.045

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98026 | 98025.507 |
| [| U | 238 | 53.622 ug/L | 0.367 | 284017 | 2.897 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 98.8 | | |
| [| U | 238 | 107.245 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 01:39:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.046

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 98590 | 98590.024 |
| [| U | 238 | 0.008 ug/L | 18.318 | 69 | 0.000 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| > | Lu | 175 | | 99.4 | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 01:54:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.051

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 99711 | 99711.459 |
| [| U | 238 | 53.804 ug/L | 0.596 | 289869 | 2.907 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| [> | Lu | 175 | | 100.5 | | |
| [| U | 238 | 107.608 | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 01:58:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.052

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 97411 | 97411.000 |
| [| U | 238 | 0.011 ug/L | 27.009 | 81 | 0.001 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 98.2 | | |
| [| 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#6 - Summary Report

Sample ID: 247899005

Sample Date/Time: Friday, March 26, 2010 02:03:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100325\247899005.053

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 98802 | 98801.811 |
| [| U | 238 | 34.089 ug/L | 0.386 | 181992 | 1.842 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dif | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|----------------|-----------------------------|
| > | Lu | 175 | | 99.6 | | |
| [| 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#6 - Summary Report

Sample ID: 247899009

Sample Date/Time: Friday, March 26, 2010 02:06:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\247899009.054

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 99111 | 99110.708 |
| [| U | 238 | 37.227 ug/L | 0.951 | 199340 | 2.011 |

Calibration

| Analyte | Mass Curve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.9 | | |
| [| 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#6 - Summary Report

Sample ID: 247899011

Sample Date/Time: Friday, March 26, 2010 02:10:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|40|rm|

Method File: c:\elandata\Method\lu.mth

Dataset File: C:\elandata\Dataset\100325\247899011.055

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | | ug/L | | 97971 | 97971.110 |
| [U | 238 | 69.303 | ug/L | 0.453 | 366857 | 3.744 |

Calibration

| Analyte | Mass | Curve Type | Correlation Coefficient |
|---------|------|------------------|-------------------------|
| Lu | 175 | Linear Thru Zero | |
| U | 238 | Linear Thru Zero | 1.0000 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|---------|------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> Lu | 175 | | | 98.8 | | |
| [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#6 - Summary Report

Sample ID: 247899012

Sample Date/Time: Friday, March 26, 2010 02:13:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|20|rm|

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\247899012.056

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98286 | 98286.315 |
| [| U | 238 | 41.571 ug/L | 2.322 | 220733 | 2.246 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|----|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> | Lu | 175 | | 99.1 | | |
| [| 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#6 - Summary Report

Sample ID: 247899013

Sample Date/Time: Friday, March 26, 2010 02:16:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\l.u.mth

Dataset File: C:\elandata\Dataset\100325\247899013.057

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 99863 | 99863.492 |
| L | U | 238 | 24.811 ug/L | 0.718 | 133892 | 1.340 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Diff | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|------------------|-----------------|-----------------------------|
| > | Lu | 175 | | 100.7 | | |
| L | 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#6 - Summary Report

Sample ID: 247899017

Sample Date/Time: Friday, March 26, 2010 02:19:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\247899017.058

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---|--------------|------------|-------------|-----------|--------------------|------------------|
| > | Lu | 175 | ug/L | | 100177 | 100176.725 |
| L | U | 238 | 36.514 ug/L | 1.715 | 197619 | 1.973 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Di | Duplicate Rel. % Difference |
|---|--------------|-------------------|--------------------|---------------|---------------|-----------------------------|
| > | Lu | 175 | | 101.0 | | |
| L | 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#6 - Summary Report

Sample ID: 247899020

Sample Date/Time: Friday, March 26, 2010 02:22:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 958055|10|rmj

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\247899020.059

Concentration Results

| | Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|----|--------------|------------|-------------|-----------|--------------------|------------------|
| [> | Lu | 175 | ug/L | | 98984 | 98984.072 |
| [| U | 238 | 48.521 ug/L | 0.215 | 259510 | 2.621 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| | Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|----|--------------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> | Lu | 175 | | 99.8 | | | |
| [| 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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 26, 2010 02:25:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\i.u.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 6.060

Concentration Results

| Analyte | Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|---------|------|------------|-------------|-----------|--------------------|------------------|
| [> Lu | 175 | | ug/L | | 97255 | 97254.617 |
| [U | 238 | 54.714 | ug/L | 1.118 | 287479 | 2.956 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| Analyte | Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recov | Dilution % Dil | Duplicate Rel. | % Difference |
|---------|------|-------------------|--------------------|---------------|----------------|----------------|--------------|
| [> Lu | 175 | | | 98.0 | | | |
| [U | 238 | 109.428 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | Mass | Out of Limits Message |
|------------------|---------|------|-----------------------|
|------------------|---------|------|-----------------------|

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 26, 2010 02:28:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w.mth

Dataset File: C:\elandata\Dataset\100325\QC Std 7.061

Concentration Results

| Analyte Mass | Conc. Mean | Report Unit | Conc. RSD | Meas. Intens. Mean | Net Intens. Mean |
|--------------|------------|-------------|-----------|--------------------|------------------|
| [> Lu 175 | | ug/L | | 96280 | 96279.993 |
| [U 238 | 0.012 | ug/L | 2.879 | 86 | 0.001 |

Calibration

| Analyte | MassCurve Type | Correlation Coefficient |
|---------|---------------------|-------------------------|
| Lu | 175Linear Thru Zero | |
| U | 238Linear Thru Zero | 1.0000 |

QC Calculated Values

| Analyte Mass | QC Std % Recovery | Int Std % Recovery | Spike % Recovery | Dilution % Dil | Duplicate Rel. % Difference |
|--------------|-------------------|--------------------|------------------|----------------|-----------------------------|
| [> Lu 175 | | 97.1 | | | |
| [U 238 | | | | | |

QC Out Of Limits

| Measurement Type | Analyte | MassOut of Limits Message |
|------------------|---------|---------------------------|
|------------------|---------|---------------------------|

QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL
 Method Description: 7471A, ILM04 ANALYST JXL1
 Element: Hg

CR 3570

Date: 03/15/2010
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: 031510S1.SIF

Results Data Set Name: 031510S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/15/2010
 Sample ID: Calib Blank

| Repl # | SampleConc μg/L | StndConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.0053 | 0.0053 | 08:38:08 | No |
| 2 | | | 0.0052 | 0.0052 | 08:38:43 | No |
| Mean: | | | 0.0053 | | | |
| SD : | | | 0.0000 | | | |
| %RSD: | | | 0.7490 | | | |

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/15/2010
 Sample ID: S0.2

| Repl # | SampleConc μg/L | StndConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.0025 | 0.0078 | 08:40:05 | No |
| 2 | | | 0.0024 | 0.0077 | 08:40:40 | No |
| Mean: | | | 0.0025 | | | |
| SD : | | | 0.0001 | | | |
| %RSD: | | | 3.1551 | | | |

[Hg] Standard number 1 applied. [0.200]

Correlation Coefficient: 1.00000

Slope: 0.01236

Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/15/2010
 Sample ID: S0.5

| Repl # | SampleConc μg/L | StndConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.0059 | 0.0111 | 08:42:03 | No |
| 2 | | | 0.0058 | 0.0111 | 08:42:38 | No |
| Mean: | | | 0.0058 | | | |
| SD : | | | 0.0001 | | | |
| %RSD: | | | 0.9334 | | | |

[Hg] Standard number 2 applied. [0.500]

Correlation Coefficient: 0.99963

Slope: 0.01163

Intercept : 0.00005

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/15/2010
 Sample ID: S2.0

| Repl # | SampleConc μg/L | StndConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.0240 | 0.0292 | 08:44:03 | No |
| 2 | | | 0.0240 | 0.0293 | 08:44:38 | No |
| Mean: | | | 0.0240 | | | |
| SD : | | | 0.0000 | | | |
| %RSD: | | | | | | |

[Hg] Standard number 3 applied. [2.000]

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Correlation Coefficient: 0.99996
Intercept : -0.00002

Slope: 0.01199

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/15/2010
Sample ID: S5.0

| Repl # | SampleConc µg/L | StndConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.0595 | 0.0648 | 08:46:03 | No |
| 2 | | | 0.0591 | 0.0643 | 08:46:37 | No |
| Mean: | | | 0.0593 | | | |
| SD : | | | 0.0003 | | | |
| %RSD: | | | 0.5149 | | | |

[Hg] Standard number 4 applied. [5.000]

Correlation Coefficient: 0.99998

Slope: 0.01186

Intercept : 0.00005

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/15/2010
Sample ID: S10

| Repl # | SampleConc µg/L | StndConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|------------------|-------------------|----------------|----------|----------------|
| 1 | | | 0.1140 | 0.1193 | 08:48:04 | No |
| 2 | | | 0.1123 | 0.1175 | 08:48:39 | No |
| Mean: | | | 0.1131 | | | |
| SD : | | | 0.0012 | | | |
| %RSD: | | | 1.0792 | | | |

[Hg] Standard number 5 applied. [10.00]

Correlation Coefficient: 0.99971

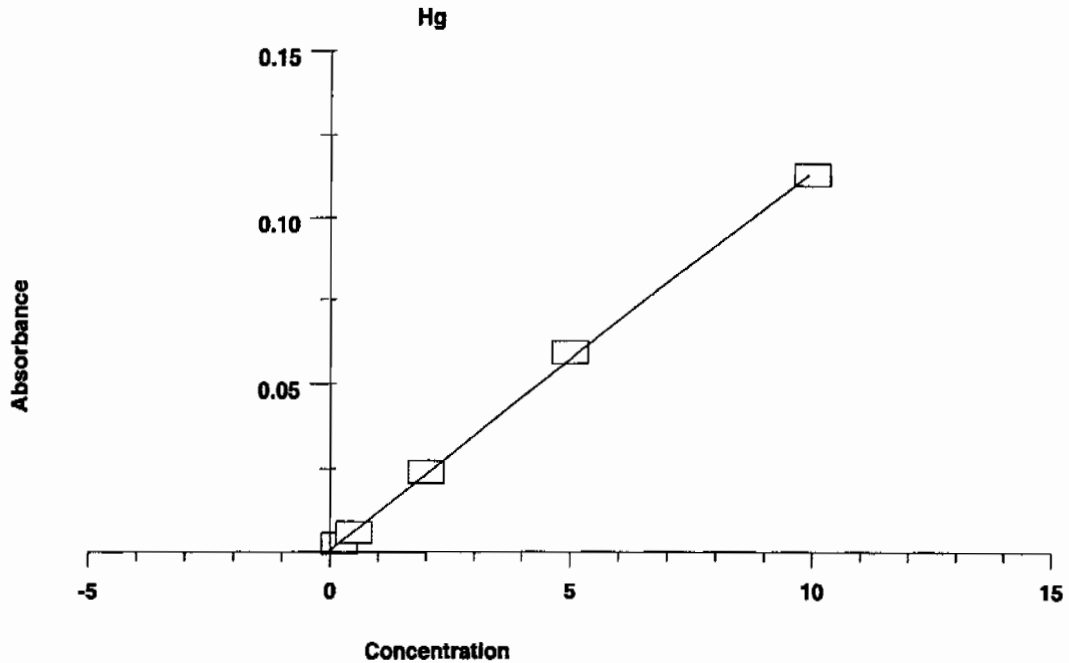
Slope: 0.01136

Intercept : 0.00062

Calibration data for Hg

| Standard ID | Mean Signal (Pk Height) | Entered Concentration (µg/L) | Calculated Concentration (µg/L) | Standard Deviation | %RSD |
|----------------------------------|----------------------------|------------------------------------|---------------------------------------|-----------------------|--------|
| Calib Blank | 0.0053 | --- | ---- | ---- | ---- |
| S0.2 | 0.0025 | 0.200 | 0.163 | 0.0001 | 3.2 |
| S0.5 | 0.0058 | 0.500 | 0.459 | 0.0001 | 0.9 |
| S2.0 | 0.0240 | 2.000 | 2.058 | 0.0000 | ---- |
| S5.0 | 0.0593 | 5.000 | 5.166 | 0.0003 | 0.5 |
| S10 | 0.1131 | 10.000 | 9.908 | 0.0012 | 1.1 |
| Correlation Coefficient: 0.99971 | | Slope: | 0.01136 | Intercept: | 0.0006 |

B-31570



=====

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/15/2010
 Sample ID: ICV

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 5.394 | 5.394 | 0.0619 | 0.0671 | 08:50:07 | No |
| 2 | 5.403 | 5.403 | 0.0620 | 0.0672 | 08:50:41 | No |
| Mean: | 5.399 | 5.399 | 0.0619 | | | |
| SD : | 0.0062 | 0.0062 | 0.0001 | | | |
| %RSD: | 0.1 | 0.1 | 0.1135 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/15/2010
 Sample ID: ICB

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.112 | -0.112 | -0.0007 | 0.0046 | 08:52:03 | No |
| 2 | -0.121 | -0.121 | -0.0008 | 0.0045 | 08:52:39 | No |
| Mean: | -0.116 | -0.116 | -0.0007 | | | |
| SD : | 0.0059 | 0.0059 | 0.0001 | | | |
| %RSD: | 5.1 | 5.1 | 9.5932 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/15/2010
 Sample ID: CRDL

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.159 | 0.159 | 0.0024 | 0.0077 | 08:54:02 | No |
| 2 | 0.136 | 0.136 | 0.0022 | 0.0074 | 08:54:36 | No |
| Mean: | 0.148 | 0.148 | 0.0023 | | | |
| SD : | 0.0164 | 0.0164 | 0.0002 | | | |
| %RSD: | 11.1 | 11.1 | 8.0975 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/15/2010

Sample ID: CCV

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 5.148 | 5.148 | 0.0591 | 0.0643 | 08:56:02 | No |
| 2 | 5.063 | 5.063 | 0.0581 | 0.0634 | 08:56:37 | No |
| Mean: | 5.105 | 5.105 | 0.0586 | | | |
| SD : | 0.0601 | 0.0601 | 0.0007 | | | |
| %RSD: | 1.2 | 1.2 | 1.1651 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/15/2010

Sample ID: CCB

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.082 | -0.082 | -0.0003 | 0.0049 | 08:58:05 | No |
| 2 | -0.083 | -0.083 | -0.0003 | 0.0049 | 08:58:39 | No |
| Mean: | -0.083 | -0.083 | -0.0003 | | | |
| SD : | 0.0005 | 0.0005 | 0.0000 | | | |
| %RSD: | 0.6 | 0.6 | 1.8514 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/15/2010

Sample ID: 1202056115|i||958725|MB

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.124 | -0.124 | -0.0008 | 0.0045 | 09:00:05 | No |
| 2 | -0.123 | -0.123 | -0.0008 | 0.0045 | 09:00:40 | No |
| Mean: | -0.123 | -0.123 | -0.0008 | | | |
| SD : | 0.0007 | 0.0007 | 0.0000 | | | |
| %RSD: | 0.6 | 0.6 | 0.9892 | | | |

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/15/2010

Sample ID: 1202056116|i|10|LCS

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 3.309 | 3.309 | 0.0382 | 0.0435 | 09:02:04 | No |
| 2 | 3.288 | 3.288 | 0.0380 | 0.0432 | 09:02:39 | No |
| Mean: | 3.299 | 3.299 | 0.0381 | | | |
| SD : | 0.0148 | 0.0148 | 0.0002 | | | |
| %RSD: | 0.4 | 0.4 | 0.4412 | | | |

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/15/2010

Sample ID: 247899001|i||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.145 | 0.145 | 0.0023 | 0.0075 | 09:04:05 | No |
| 2 | 0.149 | 0.149 | 0.0023 | 0.0076 | 09:04:40 | No |
| Mean: | 0.147 | 0.147 | 0.0023 | | | |
| SD : | 0.0027 | 0.0027 | 0.0000 | | | |
| %RSD: | 1.9 | 1.9 | 1.3642 | | | |

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/15/2010

Sample ID: 1202056117|i|||DUP

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.148 | 0.148 | 0.0023 | 0.0076 | 09:06:06 | No |
| 2 | 0.135 | 0.135 | 0.0021 | 0.0074 | 09:06:41 | No |
| Mean: | 0.141 | 0.141 | 0.0022 | | | |
| SD : | 0.0094 | 0.0094 | 0.0001 | | | |
| %RSD: | 6.7 | 6.7 | 4.8141 | | | |

=====
 Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 03/15/2010
 Sample ID: 1202056118|i|||MS
 =====

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 2.207 | 2.207 | 0.0257 | 0.0309 | 09:08:09 | No |
| 2 | 2.196 | 2.196 | 0.0256 | 0.0308 | 09:08:43 | No |
| Mean: | 2.202 | 2.202 | 0.0256 | | | |
| SD : | 0.0080 | 0.0080 | 0.0001 | | | |
| %RSD: | 0.4 | 0.4 | 0.3554 | | | |

=====
 Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 03/15/2010
 Sample ID: 1202056120|i|||MSD
 =====

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 2.237 | 2.237 | 0.0260 | 0.0313 | 09:10:07 | No |
| 2 | 2.255 | 2.255 | 0.0262 | 0.0315 | 09:10:42 | No |
| Mean: | 2.246 | 2.246 | 0.0261 | | | |
| SD : | 0.0131 | 0.0131 | 0.0001 | | | |
| %RSD: | 0.6 | 0.6 | 0.5696 | | | |

=====
 Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 03/15/2010
 Sample ID: 1202056119|i|5||SDILT
 =====

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | -0.173 | -0.173 | -0.0013 | 0.0039 | 09:12:02 | No |
| 2 | -0.195 | -0.195 | -0.0016 | 0.0037 | 09:12:37 | No |
| Mean: | -0.184 | -0.184 | -0.0015 | | | |
| SD : | 0.0154 | 0.0154 | 0.0002 | | | |
| %RSD: | 8.4 | 8.4 | 11.8722 | | | |

=====
 Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 03/15/2010
 Sample ID: 247899002|i|||
 =====

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.068 | 0.068 | 0.0014 | 0.0066 | 09:13:59 | No |
| 2 | 0.069 | 0.069 | 0.0014 | 0.0067 | 09:14:33 | No |
| Mean: | 0.069 | 0.069 | 0.0014 | | | |
| SD : | 0.0012 | 0.0012 | 0.0000 | | | |
| %RSD: | 1.7 | 1.7 | 0.9382 | | | |

=====
 Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 03/15/2010
 Sample ID: 247899003|i|||
 =====

| Repl # | SampleConc µg/L | StdndConc µg/L | BlncCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.142 | 0.142 | 0.0022 | 0.0075 | 09:15:56 | No |
| 2 | 0.131 | 0.131 | 0.0021 | 0.0074 | 09:16:30 | No |
| Mean: | 0.137 | 0.137 | 0.0022 | | | |
| SD : | 0.0079 | 0.0079 | 0.0001 | | | |

%RSD: 5.8 5.8 4.1276

=====
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/15/2010
 Sample ID: 247899004|i|||

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.249 | 0.249 | 0.0034 | 0.0087 | 09:17:53 | No |
| 2 | 0.251 | 0.251 | 0.0035 | 0.0087 | 09:18:28 | No |
| Mean: | 0.250 | 0.250 | 0.0035 | | | |
| SD : | 0.0012 | 0.0012 | 0.0000 | | | |
| %RSD: | 0.5 | 0.5 | 0.3924 | | | |

=====
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/15/2010
 Sample ID: CCV

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 5.010 | 5.010 | 0.0575 | 0.0628 | 09:19:53 | No |
| 2 | 5.095 | 5.095 | 0.0585 | 0.0637 | 09:20:28 | No |
| Mean: | 5.052 | 5.052 | 0.0580 | | | |
| SD : | 0.0598 | 0.0598 | 0.0007 | | | |
| %RSD: | 1.2 | 1.2 | 1.1704 | | | |

QC value within specified limits.

=====
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/15/2010
 Sample ID: CCB

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.072 | -0.072 | -0.0002 | 0.0051 | 09:21:56 | No |
| 2 | -0.073 | -0.073 | -0.0002 | 0.0051 | 09:22:31 | No |
| Mean: | -0.072 | -0.072 | -0.0002 | | | |
| SD : | 0.0006 | 0.0006 | 0.0000 | | | |
| %RSD: | 0.9 | 0.9 | 3.6057 | | | |

QC value within specified limits.

=====
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/15/2010
 Sample ID: 247899005|i|||

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.067 | 0.067 | 0.0014 | 0.0066 | 09:23:56 | No |
| 2 | 0.058 | 0.058 | 0.0013 | 0.0065 | 09:24:31 | No |
| Mean: | 0.062 | 0.062 | 0.0013 | | | |
| SD : | 0.0064 | 0.0064 | 0.0001 | | | |
| %RSD: | 10.3 | 10.3 | 5.4725 | | | |

=====
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/15/2010
 Sample ID: 247899006|i|||

| Repl # | SampleConc μg/L | StdConc μg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.102 | 0.102 | 0.0018 | 0.0070 | 09:25:55 | No |
| 2 | 0.103 | 0.103 | 0.0018 | 0.0071 | 09:26:31 | No |
| Mean: | 0.102 | 0.102 | 0.0018 | | | |
| SD : | 0.0012 | 0.0012 | 0.0000 | | | |
| %RSD: | 1.2 | 1.2 | 0.7911 | | | |

=====
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/15/2010
 Sample ID: 247899007|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.083 | 0.083 | 0.0016 | 0.0068 | 09:27:55 | No |
| 2 | 0.069 | 0.069 | 0.0014 | 0.0067 | 09:28:30 | No |
| Mean: | 0.076 | 0.076 | 0.0015 | | | |
| SD : | 0.0097 | 0.0097 | 0.0001 | | | |
| %RSD: | 12.8 | 12.8 | 7.4415 | | | |

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 03/15/2010
Sample ID: 247899008|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | -0.029 | -0.029 | 0.0003 | 0.0055 | 09:29:54 | No |
| 2 | -0.039 | -0.039 | 0.0002 | 0.0054 | 09:30:29 | No |
| Mean: | -0.034 | -0.034 | 0.0002 | | | |
| SD : | 0.0067 | 0.0067 | 0.0001 | | | |
| %RSD: | 19.8 | 19.8 | 32.9672 | | | |

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 03/15/2010
Sample ID: 247899009|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | -0.009 | -0.009 | 0.0005 | 0.0058 | 09:31:53 | No |
| 2 | -0.035 | -0.035 | 0.0002 | 0.0055 | 09:32:27 | No |
| Mean: | -0.022 | -0.022 | 0.0004 | | | |
| SD : | 0.0180 | 0.0180 | 0.0002 | | | |
| %RSD: | 81.9 | 81.9 | 55.3351 | | | |

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 03/15/2010
Sample ID: 247899010|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.015 | 0.015 | 0.0008 | 0.0061 | 09:33:53 | No |
| 2 | 0.003 | 0.003 | 0.0007 | 0.0059 | 09:34:27 | No |
| Mean: | 0.009 | 0.009 | 0.0007 | | | |
| SD : | 0.0087 | 0.0087 | 0.0001 | | | |
| %RSD: | 96.9 | 96.9 | 13.7548 | | | |

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 03/15/2010
Sample ID: 247899011|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.104 | 0.104 | 0.0018 | 0.0071 | 09:35:53 | No |
| 2 | 0.097 | 0.097 | 0.0017 | 0.0070 | 09:36:28 | No |
| Mean: | 0.101 | 0.101 | 0.0018 | | | |
| SD : | 0.0053 | 0.0053 | 0.0001 | | | |
| %RSD: | 5.3 | 5.3 | 3.4313 | | | |

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 03/15/2010
Sample ID: 247899012|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | BlnkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|--------------------|----------------|----------|----------------|
| 1 | 0.015 | 0.015 | 0.0008 | 0.0061 | 09:37:55 | No |
| 2 | -0.001 | -0.001 | 0.0006 | 0.0059 | 09:38:30 | No |
| Mean: | 0.007 | 0.007 | 0.0007 | | | |
| SD : | 0.0116 | 0.0116 | 0.0001 | | | |

%RSD: 161.0 161.0 18.8627

=====

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/15/2010
 Sample ID: 247899013|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.106 | 0.106 | 0.0018 | 0.0071 | 09:39:57 | No |
| 2 | 0.085 | 0.085 | 0.0016 | 0.0068 | 09:40:32 | No |
| Mean: | 0.096 | 0.096 | 0.0017 | | | |
| SD : | 0.0149 | 0.0149 | 0.0002 | | | |
| %RSD: | 15.6 | 15.6 | 9.9255 | | | |

=====

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/15/2010
 Sample ID: 247899014|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.008 | -0.008 | 0.0005 | 0.0058 | 09:41:58 | No |
| 2 | -0.024 | -0.024 | 0.0004 | 0.0056 | 09:42:36 | No |
| Mean: | -0.016 | -0.016 | 0.0004 | | | |
| SD : | 0.0107 | 0.0107 | 0.0001 | | | |
| %RSD: | 67.3 | 67.3 | 27.8489 | | | |

=====

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/15/2010
 Sample ID: CCV

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 4.937 | 4.937 | 0.0567 | 0.0620 | 09:44:09 | No |
| 2 | 5.023 | 5.023 | 0.0577 | 0.0629 | 09:44:44 | No |
| Mean: | 4.980 | 4.980 | 0.0572 | | | |
| SD : | 0.0606 | 0.0606 | 0.0007 | | | |
| %RSD: | 1.2 | 1.2 | 1.2036 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/15/2010
 Sample ID: CCB

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.102 | -0.102 | -0.0005 | 0.0047 | 09:46:12 | No |
| 2 | -0.096 | -0.096 | -0.0005 | 0.0048 | 09:46:47 | No |
| Mean: | -0.099 | -0.099 | -0.0005 | | | |
| SD : | 0.0043 | 0.0043 | 0.0000 | | | |
| %RSD: | 4.3 | 4.3 | 9.5471 | | | |

QC value within specified limits.

=====

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/15/2010
 Sample ID: 247899015|i|||

| Repl # | SampleConc µg/L | StdConc µg/L | BlkCorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.320 | 0.320 | 0.0043 | 0.0095 | 09:48:11 | No |
| 2 | 0.314 | 0.314 | 0.0042 | 0.0094 | 09:48:46 | No |
| Mean: | 0.317 | 0.317 | 0.0042 | | | |
| SD : | 0.0044 | 0.0044 | 0.0000 | | | |
| %RSD: | 1.4 | 1.4 | 1.1723 | | | |

=====

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/15/2010
 Sample ID: 247899016|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | 0.463 | 0.463 | 0.0059 | 0.0111 | 09:50:08 | No |
| 2 | 0.443 | 0.443 | 0.0057 | 0.0109 | 09:50:43 | No |
| Mean: | 0.453 | 0.453 | 0.0058 | | | |
| SD : | 0.0136 | 0.0136 | 0.0002 | | | |
| %RSD: | 3.0 | 3.0 | 2.6717 | | | |

=====
 Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 03/15/2010
 Sample ID: 247899017|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | -0.036 | -0.036 | 0.0002 | 0.0055 | 09:52:04 | No |
| 2 | -0.039 | -0.039 | 0.0002 | 0.0054 | 09:52:39 | No |
| Mean: | -0.037 | -0.037 | 0.0002 | | | |
| SD : | 0.0021 | 0.0021 | 0.0000 | | | |
| %RSD: | 5.6 | 5.6 | 12.0546 | | | |

=====
 Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 03/15/2010
 Sample ID: 247899018|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | -0.037 | -0.037 | 0.0002 | 0.0055 | 09:54:00 | No |
| 2 | -0.051 | -0.051 | 0.0000 | 0.0053 | 09:54:35 | No |
| Mean: | -0.044 | -0.044 | 0.0001 | | | |
| SD : | 0.0102 | 0.0102 | 0.0001 | | | |
| %RSD: | 23.0 | 23.0 | 100.0346 | | | |

=====
 Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 03/15/2010
 Sample ID: 247899019|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | 0.554 | 0.554 | 0.0069 | 0.0122 | 09:55:57 | No |
| 2 | 0.547 | 0.547 | 0.0068 | 0.0121 | 09:56:31 | No |
| Mean: | 0.550 | 0.550 | 0.0069 | | | |
| SD : | 0.0053 | 0.0053 | 0.0001 | | | |
| %RSD: | 1.0 | 1.0 | 0.8738 | | | |

=====
 Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 03/15/2010
 Sample ID: 247899020|i|||

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | 0.071 | 0.071 | 0.0014 | 0.0067 | 09:57:53 | No |
| 2 | 0.065 | 0.065 | 0.0014 | 0.0066 | 09:58:28 | No |
| Mean: | 0.068 | 0.068 | 0.0014 | | | |
| SD : | 0.0044 | 0.0044 | 0.0000 | | | |
| %RSD: | 6.4 | 6.4 | 3.5515 | | | |

=====
 Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 03/15/2010
 Sample ID: 1202056691|i||959028|MB

| Repl # | SampleConc µg/L | StdndConc µg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-------------------|-------------------|----------------|----------|----------------|
| 1 | -0.165 | -0.165 | -0.0013 | 0.0040 | 09:59:50 | No |
| 2 | -0.168 | -0.168 | -0.0013 | 0.0040 | 10:00:25 | No |
| Mean: | -0.167 | -0.167 | -0.0013 | | | |
| SD : | 0.0017 | 0.0017 | 0.0000 | | | |

%RSD: 1.0 1.0 1.5102

=====
 Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 03/15/2010
 Sample ID: 247728001|i|||

| Repl # | SampleConc μg/L | StdConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.105 | 0.105 | 0.0018 | 0.0071 | 10:01:49 | No |
| 2 | 0.102 | 0.102 | 0.0018 | 0.0070 | 10:02:24 | No |
| Mean: | 0.104 | 0.104 | 0.0018 | | | |
| SD : | 0.0021 | 0.0021 | 0.0000 | | | |
| %RSD: | 2.0 | 2.0 | 1.3145 | | | |

=====
 Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 03/15/2010
 Sample ID: 247728002|i|||

| Repl # | SampleConc μg/L | StdConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 0.249 | 0.249 | 0.0034 | 0.0087 | 10:03:47 | No |
| 2 | 0.252 | 0.252 | 0.0035 | 0.0087 | 10:04:22 | No |
| Mean: | 0.250 | 0.250 | 0.0035 | | | |
| SD : | 0.0021 | 0.0021 | 0.0000 | | | |
| %RSD: | 0.9 | 0.9 | 0.6995 | | | |

=====
 Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 03/15/2010
 Sample ID: 1202064271|i||962314|MB

| Repl # | SampleConc μg/L | StdConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.186 | -0.186 | -0.0015 | 0.0038 | 10:05:46 | No |
| 2 | -0.183 | -0.183 | -0.0015 | 0.0038 | 10:06:20 | No |
| Mean: | -0.185 | -0.185 | -0.0015 | | | |
| SD : | 0.0019 | 0.0019 | 0.0000 | | | |
| %RSD: | 1.0 | 1.0 | 1.4829 | | | |

=====
 Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 03/15/2010
 Sample ID: CCV

| Repl # | SampleConc μg/L | StdConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | 4.809 | 4.809 | 0.0552 | 0.0605 | 10:07:46 | No |
| 2 | 4.779 | 4.779 | 0.0549 | 0.0602 | 10:08:20 | No |
| Mean: | 4.794 | 4.794 | 0.0551 | | | |
| SD : | 0.0214 | 0.0214 | 0.0002 | | | |
| %RSD: | 0.4 | 0.4 | 0.4414 | | | |

QC value within specified limits.

=====
 Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 03/15/2010
 Sample ID: CCB

| Repl # | SampleConc μg/L | StdConc μg/L | Blncorr Signal | Peak Height | Time | Peak Stored |
|--------|--------------------|-----------------|-------------------|----------------|----------|----------------|
| 1 | -0.128 | -0.128 | -0.0008 | 0.0044 | 10:09:48 | No |
| 2 | -0.128 | -0.128 | -0.0008 | 0.0044 | 10:10:22 | No |
| Mean: | -0.128 | -0.128 | -0.0008 | | | |
| SD : | 0.0001 | 0.0001 | 0.0000 | | | |
| %RSD: | | | | | | |

QC value within specified limits.

=====
 Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 03/15/2010
 Sample ID: 1202064272|i||LCS

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

| | | | | | |
|-------------------------------------|------------|----------------------------|---------------|--------------|-------------|
| Batch ID: 958052.0 | | Verified by: | | | |
| Analyst: Francena Armstrong | | | | | |
| Method: SW846 3050B | | | | | |
| Lab SOP: GL-MA-E-009 REV# 19 | | | | | |
| Instrument: Sartorius Balance B-001 | | | | | |
| Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
| LCS | 1202054498 | Metals Soil LCS SRM ICP/Hg | U1062540-1 | .512 | g |
| MS | 1202054496 | Metals Spike Mix I | U1100205-01 | .25 | mL |
| MS | 1202054496 | Metals Spike Mix II | U1100205-06 | .25 | mL |
| MSD | 1202054497 | Metals Spike Mix I | U1100205-01 | .25 | mL |
| MSD | 1202054497 | 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 1 |
|------------------------------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 1202054493 MB | 02-MAR-2010 14:30:00 | Soil | 0.56 | 50 | 89.28571 | |
| 1202054498 LCS | 02-MAR-2010 14:30:00 | Soil | 0.512 | 50 | 97.65625 | |
| 247899001 | 02-MAR-2010 14:30:00 | Soil | 0.522 | 50 | 95.78544 | |
| 1202054494 DUP (247899001) | 02-MAR-2010 14:30:00 | Soil | 0.533 | 50 | 93.80863 | |
| 1202054495 SDILT (247899001) | 02-MAR-2010 14:30:00 | Soil | 0.522 | 50 | 95.78544 | |
| 1202054496 MS (247899001) | 02-MAR-2010 14:30:00 | Soil | 0.553 | 50 | 90.41591 | |
| 1202054497 MSD (247899001) | 02-MAR-2010 14:30:00 | Soil | 0.536 | 50 | 93.28358 | |
| 247899002 | 02-MAR-2010 14:30:00 | Soil | 0.592 | 50 | 84.45946 | |
| 247899003 | 02-MAR-2010 14:30:00 | Soil | 0.521 | 50 | 95.96929 | |
| 247899004 | 02-MAR-2010 14:30:00 | Soil | 0.591 | 50 | 84.60237 | |
| 247899005 | 02-MAR-2010 14:30:00 | Soil | 0.548 | 50 | 91.24088 | |
| 247899006 | 02-MAR-2010 14:30:00 | Soil | 0.53 | 50 | 94.33962 | |
| 247899007 | 02-MAR-2010 14:30:00 | Soil | 0.502 | 50 | 99.60159 | |
| 247899008 | 02-MAR-2010 14:30:00 | Soil | 0.552 | 50 | 90.57971 | |
| 247899009 | 02-MAR-2010 14:30:00 | Soil | 0.574 | 50 | 87.10801 | |
| 247899010 | 02-MAR-2010 14:30:00 | Soil | 0.504 | 50 | 99.20635 | |
| 247899011 | 02-MAR-2010 14:30:00 | Soil | 0.508 | 50 | 98.4252 | |
| 247899012 | 02-MAR-2010 14:30:00 | Soil | 0.536 | 50 | 93.28358 | |
| 247899013 | 02-MAR-2010 14:30:00 | Soil | 0.519 | 50 | 96.33911 | |
| 247899014 | 02-MAR-2010 14:30:00 | Soil | 0.531 | 50 | 94.16196 | |
| 247899015 | 02-MAR-2010 14:30:00 | Soil | 0.557 | 50 | 89.76661 | |
| 247899016 | 02-MAR-2010 14:30:00 | Soil | 0.556 | 50 | 89.92806 | |
| 247899017 | 02-MAR-2010 14:30:00 | Soil | 0.516 | 50 | 96.89922 | |

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Prep Logbook

| | | | | | | | | | |
|-------------|-------------------------|--------------|--|------|------------|----------------------------|---------------|--------------|-------------|
| Batch ID: | 958052.0 | Verified by: | | Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
| Analyst: | Francena Armstrong | | | LCS | 1202054498 | Metals Soil LCS SRM ICP/Hg | U1062540-1 | .512 | g |
| Method: | SW846 3050B | | | MS | 1202054496 | Metals Spike Mix I | U1100205-01 | .25 | mL |
| Lab SOP: | GL-MA-E-009 REV# 19 | | | MS | 1202054496 | Metals Spike Mix II | U1100205-06 | .25 | mL |
| Instrument: | Sartorius Balance B-001 | | | MSD | 1202054497 | Metals Spike Mix I | U1100205-01 | .25 | mL |
| | | | | MSD | 1202054497 | 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 1 |
|-----------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 247899018 | 02-MAR-2010 14:30:00 | Soil | 0.593 | 50 | 84.31703 | |
| 247899019 | 02-MAR-2010 14:30:00 | Soil | 0.547 | 50 | 91.40768 | |
| 247899020 | 02-MAR-2010 14:30:00 | Soil | 0.557 | 50 | 89.76661 | |

| Reagent/Solvent Lot ID | Description | Amount | Comments: |
|------------------------|-------------------|---------|-------------------------------|
| 1274969 | Nitric Acid CONC. | 1.25 mL | Brown, soil w/rocky material. |
| 1274973 | HYDROCHLORIC ACID | 10 mL | |

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 958054.0 Verified by: _____
 Analyst: Francena Armstrong
 Method: SW846 3050B
 Lab SOP: GL-MA-E-009 REV# 19
 Instrument: Sartorius Balance B-001

| Sample ID | Run Date | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check |
|------------------------------|----------------------|--------------------|-------------------|--------------------|----------|
| 1202054499 MB | 02-MAR-2010 14:30:00 | 0.504 | 50 | 99.20635 | |
| 1202054504 LCS | 02-MAR-2010 14:30:00 | 0.552 | 50 | 90.57971 | |
| 247899001 | 02-MAR-2010 14:30:00 | 0.507 | 50 | 98.61933 | |
| 1202054500 DUP (247899001) | 02-MAR-2010 14:30:00 | 0.511 | 50 | 97.84736 | |
| 1202054501 SDILT (247899001) | 02-MAR-2010 14:30:00 | 0.507 | 50 | 98.61933 | |
| 1202054502 MS (247899001) | 02-MAR-2010 14:30:00 | 0.528 | 50 | 94.69697 | |
| 1202054503 MSD (247899001) | 02-MAR-2010 14:30:00 | 0.544 | 50 | 91.91176 | |
| 247899002 | 02-MAR-2010 14:30:00 | 0.505 | 50 | 99.00099 | |
| 247899003 | 02-MAR-2010 14:30:00 | 0.545 | 50 | 91.74312 | |
| 247899004 | 02-MAR-2010 14:30:00 | 0.532 | 50 | 93.98496 | |
| 247899005 | 02-MAR-2010 14:30:00 | 0.557 | 50 | 89.76661 | |
| 247899006 | 02-MAR-2010 14:30:00 | 0.541 | 50 | 92.42144 | |
| 247899007 | 02-MAR-2010 14:30:00 | 0.592 | 50 | 84.45946 | |
| 247899008 | 02-MAR-2010 14:30:00 | 0.507 | 50 | 98.61933 | |
| 247899009 | 02-MAR-2010 14:30:00 | 0.556 | 50 | 89.92806 | |
| 247899010 | 02-MAR-2010 14:30:00 | 0.539 | 50 | 92.76438 | |
| 247899011 | 02-MAR-2010 14:30:00 | 0.521 | 50 | 95.96929 | |
| 247899012 | 02-MAR-2010 14:30:00 | 0.535 | 50 | 93.45794 | |
| 247899013 | 02-MAR-2010 14:30:00 | 0.58 | 50 | 86.2069 | |
| 247899014 | 02-MAR-2010 14:30:00 | 0.512 | 50 | 97.65625 | |
| 247899015 | 02-MAR-2010 14:30:00 | 0.513 | 50 | 97.46589 | |
| 247899016 | 02-MAR-2010 14:30:00 | 0.512 | 50 | 97.65625 | |
| 247899017 | 02-MAR-2010 14:30:00 | 0.54 | 50 | 92.59259 | |
| 247899018 | 02-MAR-2010 14:30:00 | 0.581 | 50 | 86.05852 | |
| 247899019 | 02-MAR-2010 14:30:00 | 0.524 | 50 | 95.41985 | |
| 247899020 | 02-MAR-2010 14:30:00 | 0.501 | 50 | 99.8004 | |

| Type | Sample Id | Description | Serial Number | Spike Amt | Units | Comments: |
|-------|------------|---------------------------------|---------------|-----------|-------|-------------------------------|
| LCS | 1202054504 | Metals Soil LCS SRM ICPMS | U062540-MS | .552 | g | |
| MS | 1202054502 | ICP-MS Spike for soil products. | U091015-A | .5 | mL | Brown, soil w/rocky material. |
| MS | 1202054502 | ICP-MS Spike for Soil Products | U091015-B | .5 | mL | |
| MSD | 1202054503 | ICP-MS Spike for soil products. | U091015-A | .5 | mL | |
| MSD | 1202054503 | ICP-MS Spike for Soil Products | U091015-B | .5 | mL | |
| REGNT | All | Hydrogen Peroxide 30% | 1250038-02 | 1.5 | mL | |
| REGNT | All | Nitric Acid CONC. | 1274969 | 5 | mL | |

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958722.0
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: Sartorius Balance B-001

Verified by: _____

| Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
|------|------------|---|---------------|--------------|-------------|
| LCS | 1202056116 | Metals LCS Soil SRM | U1031809A | .209 | g |
| MS | 1202056118 | Mercury soil working intermediate standard for MS | WHG100312-14 | .3 | mL |
| MSD | 1202056120 | Mercury soil working intermediate standard for MS | WHG100312-14 | .3 | mL |

| Sample ID | Run Date | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check 1 |
|------------------------------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 1202056115 MB | 12-MAR-2010 21:00:00 | Soil | 0.54 | 30 | 55.55556 | |
| 1202056116 LCS | 12-MAR-2010 21:00:00 | Soil | 0.209 | 30 | 143.54067 | |
| 247899001 | 12-MAR-2010 21:00:00 | Soil | 0.552 | 30 | 54.34783 | |
| 1202056117 DUP (247899001) | 12-MAR-2010 21:00:00 | Soil | 0.526 | 30 | 57.03422 | |
| 1202056118 MS (247899001) | 12-MAR-2010 21:00:00 | Soil | 0.541 | 30 | 55.45287 | |
| 1202056120 MSD (247899001) | 12-MAR-2010 21:00:00 | Soil | 0.583 | 30 | 51.45798 | |
| 1202056119 SDILT (247899001) | 12-MAR-2010 21:00:00 | Soil | 0.552 | 30 | 54.34783 | |
| 247899002 | 12-MAR-2010 21:00:00 | Soil | 0.559 | 30 | 53.66726 | |
| 247899003 | 12-MAR-2010 21:00:00 | Soil | 0.548 | 30 | 54.74453 | |
| 247899004 | 12-MAR-2010 21:00:00 | Soil | 0.59 | 30 | 50.84746 | |
| 247899005 | 12-MAR-2010 21:00:00 | Soil | 0.583 | 30 | 51.45798 | |
| 247899006 | 12-MAR-2010 21:00:00 | Soil | 0.549 | 30 | 54.64481 | |
| 247899007 | 12-MAR-2010 21:00:00 | Soil | 0.571 | 30 | 52.5394 | |
| 247899008 | 12-MAR-2010 21:00:00 | Soil | 0.529 | 30 | 56.71078 | |
| 247899009 | 12-MAR-2010 21:00:00 | Soil | 0.54 | 30 | 55.55556 | |
| 247899010 | 12-MAR-2010 21:00:00 | Soil | 0.586 | 30 | 51.19454 | |
| 247899011 | 12-MAR-2010 21:00:00 | Soil | 0.522 | 30 | 57.47126 | |
| 247899012 | 12-MAR-2010 21:00:00 | Soil | 0.509 | 30 | 58.9391 | |
| 247899013 | 12-MAR-2010 21:00:00 | Soil | 0.517 | 30 | 58.02708 | |
| 247899014 | 12-MAR-2010 21:00:00 | Soil | 0.511 | 30 | 58.70841 | |
| 247899015 | 12-MAR-2010 21:00:00 | Soil | 0.5 | 30 | 60 | |
| 247899016 | 12-MAR-2010 21:00:00 | Soil | 0.6 | 30 | 50 | |
| 247899017 | 12-MAR-2010 21:00:00 | Soil | 0.577 | 30 | 51.99307 | |
| 247899018 | 12-MAR-2010 21:00:00 | Soil | 0.565 | 30 | 53.09735 | |
| 247899019 | 12-MAR-2010 21:00:00 | Soil | 0.557 | 30 | 53.85996 | |
| 247899020 | 12-MAR-2010 21:00:00 | Soil | 0.505 | 30 | 59.40594 | |

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Prep Logbook

| | | | | | |
|-------------|-------------------------|---|---------------|--------------|-------------|
| Batch ID: | 958722.0 | Verified by: | | | |
| Analyst: | Tara Griffin | | | | |
| Method: | SW846 7471A Prep | | | | |
| Lab SOP: | GL-MA-E-010 REV# 23 | | | | |
| Instrument: | Sartorius Balance B-001 | | | | |
| Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
| LCS | 1202056116 | Metals LCS Soil SRM | UI031809A | .209 | g |
| MS | 1202056118 | Mercury soil working intermediate standard for MS | WHG100312-14 | .3 | mL |
| MSD | 1202056120 | Mercury soil working intermediate standard for MS | WHG100312-14 | .3 | mL |

| Sample ID | Run Date | Matrix | Initial Weight (g) | Final Volume (mL) | Prep Factor (mL/g) | pH Check | 1 |
|-----------|----------|--------|--------------------|-------------------|--------------------|----------|---|
|-----------|----------|--------|--------------------|-------------------|--------------------|----------|---|

| Reagent/Solvent Lot ID | Description | Amount | Comments: |
|------------------------|---|----------|---|
| 1255532-C | Hg reducing agent | 2 mL | Sample 247899001 is a dry rocky brown soil. |
| 1274391-1 | NITRIC ACID | .375 mL | Digestion Start Date: 12-MAR-10 21:00 |
| 1277235-A | Hydrochloric Acid Conc. | 1.125 mL | Digestion End Date: 12-MAR-10 21:30 |
| 1277238-C | 5% KMnO4 solution | 7.5 mL | |
| WHG100312-07 | Mercury Working Standard 1st Source CAL S 0.2/CRA | 30 uL | |
| WHG100312-08 | Mercury Working Standard 1st Source CAL S 0.5 | 75 uL | |
| WHG100312-09 | Mercury Working 1st Source CAL S 2.0 | 300 uL | |
| WHG100312-10 | Mercury Working 1st Source CAL S 5.0/CCV | 750 uL | |
| WHG100312-11 | Mercury Working 1st Source CAL S 10.0 | 1.5 mL | |
| WHG100312-12 | Mercury Working 2nd Source S 5.0/ICV | 750 uL | |

DATA EXCEPTION REPORT

| | | | |
|--------------------------------|--|--|-----------------------------|
| Mo.Day Yr. 26-MAR-10 | Division: Industrial | Quality Criteria: Specifications | Type: Process |
| Instrument Type: ICP | Test / Method: SW846 3050B/6010B | Matrix Type: Solid | Client Code: LANL |
| Batch ID: 958053 | Sample Numbers: See Below | | |

Potentially affected work order(s)(SDG): 247899(10-2010)

Application Issues:

Failed Recovery for MS/PS
Failed RPD for MS/MSD, or PS/PSD
Failed RPD for DUP
Failed Recovery for LCS/LCSD
Method Blank contamination
Failed Recovery for MSD/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|--|
| <p>1. Failed Recovery for MS/PS: QC 1202054496MS</p> <p>2. Failed RPD for DUP: QC 1202054494DUP</p> <p>3. Failed RPD for MS/MSD, or PS/PSD: QC 1202054497MSD</p> <p>4. Failed Recovery for LCS/LCSD: QC 1202054498LCS</p> <p>5. Failed Recovery for MSD/PSD: QC 1202054497MSD</p> <p>6. Method Blank Contamination: QC 1202054493MB</p> | <p>1./5. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for magnesium and potassium 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,barium,calcium,chromium,copper,iron,magnesium,manganese,potassium, vanadium and zinc 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. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.</p> <p>4. 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> <p>6. The samples in this SDG contained the above noted analytes at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.</p> |

Originator's Name:

Helen Camello 26-MAR-10

Data Validator/Group Leader:

Louise Smith 26-MAR-10

DATA EXCEPTION REPORT

| | | | |
|---|---|--|-----------------------------|
| Mo. Day Yr. 26-MAR-10 | Division: Industrial | Quality Criteria: Specifications | Type: Process |
| Instrument Type: ICP/MS | Test / Method: SW846 3050B/6020 | Matrix Type: Solid | Client Code: LANL |
| Batch ID: 958055 | Sample Numbers: See Below | | |
| Potentially affected work order(s)(SDG): 247899(10-2010) Application Issues: Failed Recovery for MS/PS Failed RPD for DUP Failed Recovery for LCS/LCSD Failed Recovery for MSD/PSD | | | |
| Specification and Requirements | | DER Disposition: | |
| Exception Description: 1. Failed RPD for DUP: QC 1202054500DUP | | The sample and sample duplicate failed outside the control limits for U due to possible sample homogeneity and/or matrix interferences. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. | |

Originator's Name:

Rose Jenkins 27-MAR-10

Data Validator/Group Leader:

Jamie Johnson 27-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 **Expres:** 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: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

| | | | |
|----------------|----------------------|----------------|----------------------|
| Analyte | Concentration | Analyte | Concentration |
| Silica | 2139 mg/L | Silicon | 1000 mg/L |

Serial ID: UI091217-12 **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

| | | | |
|----------------|----------------------|----------------|----------------------|
| Analyte | Concentration | Analyte | Concentration |
| Antimony | 2 mg/L | Silver | 2 mg/L |
| Tin | 2 mg/L | Tungsten | 2 mg/L |

Standard Logbook

| | | | |
|----------------|----------------------|----------------|----------------------|
| Analyte | Concentration | Analyte | Concentration |
| 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 |

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si

Standard Logbook

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: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
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: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
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 |
| Uranium | 20 mg/L | Vanadium | 20 mg/L |
| Zinc | 20 mg/L | | |

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI

Standard Logbook

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: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMS CalSPIKEB **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 |

Standard Logbook

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
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: IHG100312-01 **Opened:** 12-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 12-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 13-MAR-10 **Solvent :** 1mL HNO3 + Type1 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: IHG100312-02 **Opened:** 12-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 13-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167641-02 | Mercury | 999.7 mg/L | .05 mL | 250 mL | 200 ug/L |

Serial ID: WHG100312-07 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-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. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-01 | Mercury | 200 ug/L | 30 uL | 30 mL | .2 ug/L |

Serial ID: WHG100312-08 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-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. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-01 | Mercury | 200 ug/L | 75 uL | 30 mL | .5 ug/L |

Serial ID: WHG100312-09 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-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. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-01 | Mercury | 200 ug/L | 300 uL | 30 mL | 2 ug/L |

Serial ID: WHG100312-10 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-01 | Mercury | 200 ug/L | 750 uL | 30 mL | 5 ug/L |

Serial ID: WHG100312-11 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

| Parent Material | Analyte | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-01 | Mercury | 200 ug/L | 1.5 mL | 30 mL | 10 ug/L |

Serial ID: WHG100312-12 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-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. | Allquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| IHG100312-02 | Mercury | 200 ug/L | 750 uL | 30 mL | 5 ug/L |

Serial ID: WHG100312-14 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-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. | Allquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| UHG1167639-01 | Mercury | 1000 mg/L | .05 mL | 250 mL | 200 ug/L |

Serial ID: WI100325-42 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WI100325-44 | Aluminum | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Antimony | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Arsenic | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Barium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Beryllium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Boron | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Cadmium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Calcium | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Chromium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Cobalt | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Copper | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Iron | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Lead | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Magnesium | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Manganese | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Molybdenum | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Nickel | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Phosphorous | 5000 ug/L | 10 mL | 100 mL | 500 ug/L |
| WI100325-44 | Potassium | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Selenium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Silica | 10698 ug/L | 10 mL | 100 mL | 1069 ug/L |
| WI100325-44 | Silicon | 5000 ug/L | 10 mL | 100 mL | 500 ug/L |
| WI100325-44 | Silver | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Sodium | 10000 ug/L | 10 mL | 100 mL | 1000 ug/L |
| WI100325-44 | Strontium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Sulfur | 2000 ug/L | 10 mL | 100 mL | 200 ug/L |
| WI100325-44 | Thallium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Tin | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Titanium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Uranium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Vanadium | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |
| WI100325-44 | Zinc | 1000 ug/L | 10 mL | 100 mL | 100 ug/L |

Serial ID: WI100325-43 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| 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 |
| 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: WI100325-44 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1289705
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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| 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 |
| 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: WI100325-45 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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 |

Standard Logbook

Serial ID: WI100325-46 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1289705
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
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 |

Standard Logbook

Serial ID: WI100325-47 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL &1%HNO3-1289705
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 |
| 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: WMS100323-04AB **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 23-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCL - 1289731
Employee: Rose Jenkins
Supplier: GEL

Standard Logbook

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

| Parent Material | Analyte | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|-------------|
| WMS100323-04B | Aluminum | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Antimony | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Arsenic | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Barium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Beryllium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Boron | 200 ug/l | 5 mL | 50 mL | 20 ug/l |
| WMS100323-04B | Cadmium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Calcium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Chromium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Cobalt | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Copper | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Iron | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Lead | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Lithium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Magnesium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Manganese | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Molybdenum | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Nickel | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Phosphorous | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Potassium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Selenium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Silver | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Sodium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100323-04B | Strontium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Thallium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Thorium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Tin | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Titanium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Tungsten | 100 ug/L | 5 mL | 50 mL | 10 ug/L |
| WMS100323-04B | Uranium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Vanadium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Zinc | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100323-04B | Zirconium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |

Serial ID: WMS100323-04B **Opened:** 23-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 23-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 24-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1289731
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Standard Logbook

| 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 |
| 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: WMS100323-05B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 23-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| UI100317-06 | Aluminum | 2020 mg/L | .125 mL | 50 mL | 5050 ug/L |
| UI100317-06 | Calcium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI100317-06 | Iron | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Magnesium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Phosphorous | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Potassium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Sodium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-07 | Arsenic | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Barium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Beryllium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Boron | 40 mg/L | .125 mL | 50 mL | 100 ug/L |
| UI100317-07 | Cadmium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Chromium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Cobalt | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Copper | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lead | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lithium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Manganese | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Nickel | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Selenium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Strontium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thallium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thorium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Uranium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Vanadium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Zinc | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Antimony | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Molybdenum | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Silver | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tin | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Titanium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tungsten | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Zirconium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |

Serial ID: WMS100323-06B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 23-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins **Verified:** 06-MAR-10
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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| 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 |

Serial ID: WMS100323-07B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 23-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 24-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1289731
Supplier: GEL
Description: ICPMS ICSA
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|------------|--------------|---------|------------|--------------|
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Serial ID: WMS100323-08B **Opened:** 23-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 23-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 24-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
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 |
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Serial ID: WMS100324-04 **Opened:** 24-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 25-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1289731
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 |
| 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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| 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: WMS100324-04AB **Opened:** 24-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 24-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

| Parent Material | Analyte | Parent Conc. | Allquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WMS100324-04 | Aluminum | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Antimony | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Arsenic | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Barium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Beryllium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Boron | 200 ug/l | 5 mL | 50 mL | 20 ug/l |
| WMS100324-04 | Cadmium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Calcium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Chromium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Cobalt | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Copper | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Iron | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Lead | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Lithium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Magnesium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Manganese | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Molybdenum | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Nickel | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Phosphorous | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Potassium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Selenium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Silver | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Sodium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04 | Strontium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Thallium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Thorium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Tin | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Titanium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Tungsten | 100 ug/L | 5 mL | 50 mL | 10 ug/L |
| WMS100324-04 | Uranium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Vanadium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04 | Zinc | 100 ug/l | 5 mL | 50 mL | 10 ug/l |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WMS100324-04 | Zirconium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Aluminum | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Antimony | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Arsenic | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Barium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Beryllium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Boron | 200 ug/l | 5 mL | 50 mL | 20 ug/l |
| WMS100324-04B | Cadmium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Calcium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Chromium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Cobalt | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Copper | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Iron | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Lead | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Lithium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Magnesium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Manganese | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Molybdenum | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Nickel | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Phosphorous | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Potassium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Selenium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Silver | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Sodium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100324-04B | Strontium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Thallium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Thorium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Tin | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Titanium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Tungsten | 100 ug/L | 5 mL | 50 mL | 10 ug/L |
| WMS100324-04B | Uranium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Vanadium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Zinc | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100324-04B | Zirconium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |

Serial ID: WMS100324-04B **Opened:** 24-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 25-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1289731
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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| 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 |
| 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: WMS100324-05B **Opened:** 24-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 24-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|----------|--------------|---------|------------|-------------|
| UI100317-06 | Aluminum | 2020 mg/L | .125 mL | 50 mL | 5050 ug/L |
| UI100317-06 | Calcium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Iron | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI100317-06 | Magnesium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Phosphorous | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Potassium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Sodium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-07 | Arsenic | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Barium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Beryllium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Boron | 40 mg/L | .125 mL | 50 mL | 100 ug/L |
| UI100317-07 | Cadmium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Chromium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Cobalt | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Copper | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lead | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lithium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Manganese | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Nickel | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Selenium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Strontium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thallium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thorium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Uranium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Vanadium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Zinc | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Antimony | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Molybdenum | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Silver | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tin | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Titanium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tungsten | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Zirconium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |

Serial ID: WMS100324-06B **Opened:** 24-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 24-MAR-10 **Pipet Id :** 3820544
Type: Working **Expres:** 25-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins **Verified:** 06-MAR-10
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 |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|-------------|
| 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 |

Serial ID: WMS100324-07B **Opened:** 24-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 24-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 25-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1289731
Supplier: GEL
Description: ICPMS ICSA
Comments: None

| Parent Material | Analyte | Parent Conc. | Alliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|----------|------------|--------------|
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Serial ID: WMS100324-08B **Opened:** 24-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 24-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 25-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
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 |
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Serial ID: WMS100325-04AB **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 25-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| WMS100325-04B | Aluminum | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Antimony | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Arsenic | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Barium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Beryllium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Boron | 200 ug/l | 5 mL | 50 mL | 20 ug/l |
| WMS100325-04B | Cadmium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Calcium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Chromium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Cobalt | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Copper | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Iron | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Lead | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Lithium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Magnesium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Manganese | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Molybdenum | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Nickel | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Phosphorous | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Potassium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Selenium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Silver | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Sodium | 10000 ug/l | 5 mL | 50 mL | 1000 ug/l |
| WMS100325-04B | Strontium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Thallium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Thorium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Tin | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Titanium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Tungsten | 100 ug/L | 5 mL | 50 mL | 10 ug/L |
| WMS100325-04B | Uranium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Vanadium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-----------|--------------|---------|------------|-------------|
| WMS100325-04B | Zinc | 100 ug/l | 5 mL | 50 mL | 10 ug/l |
| WMS100325-04B | Zirconium | 100 ug/l | 5 mL | 50 mL | 10 ug/l |

Serial ID: WMS100325-04B **Opened:** 25-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 26-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1289731
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 |
| 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 |

Standard Logbook

Serial ID: WMS100325-05B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICV
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|-------------|
| UI100317-06 | Aluminum | 2020 mg/L | .125 mL | 50 mL | 5050 ug/L |
| UI100317-06 | Calcium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Iron | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Magnesium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Phosphorous | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Potassium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-06 | Sodium | 2000 mg/L | .125 mL | 50 mL | 5000 ug/L |
| UI100317-07 | Arsenic | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Barium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Beryllium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Boron | 40 mg/L | .125 mL | 50 mL | 100 ug/L |
| UI100317-07 | Cadmium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Chromium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Cobalt | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Copper | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lead | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Lithium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Manganese | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Nickel | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Selenium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Strontium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thallium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Thorium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Uranium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Vanadium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-07 | Zinc | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Antimony | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Molybdenum | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Silver | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tin | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Titanium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Tungsten | 20 mg/L | .125 mL | 50 mL | 50 ug/L |
| UI100317-08 | Zirconium | 20 mg/L | .125 mL | 50 mL | 50 ug/L |

Standard Logbook

Serial ID: WMS100325-06B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1289731
Employee: Rose Jenkins **Verified:** 06-MAR-10
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: WMS100325-07B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-MAR-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1289731
Supplier: GEL
Description: ICPMS ICSA
Comments: None

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|-------------|--------------|---------|------------|--------------|
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

Serial ID: WMS100325-08B **Opened:** 25-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-MAR-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 26-MAR-10 **Solvent :** 2%HNO3/1%HCl- 1289731
Employee: Rose Jenkins
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 |
| UI100318-11 | Aluminum | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Calcium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Chloride | 10000 mg/L | 5 mL | 50 mL | 1000000 ug/L |
| UI100318-11 | Iron | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Magnesium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Molybdenum | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |
| UI100318-11 | Phosphorous | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Potassium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sodium | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Sulfur | 1000 mg/L | 5 mL | 50 mL | 100000 ug/L |
| UI100318-11 | Titanium | 20 mg/L | 5 mL | 50 mL | 2000 ug/L |

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: 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

Standard Logbook

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.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: 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: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1274973 **Opened:** 24-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 24-FEB-10 **Preservative Id :** 5 none
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1277235-A **Opened:** 01-MAR-10 **Lot Number :** J02039
Name: B-HCl-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 01-MAR-11
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-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: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1289705 **Opened:** 22-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 12-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 28-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1289731 **Opened:** 22-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 22-MAR-10
Type: Reagent/Solvent **Expires:** 29-MAR-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Standard Logbook

| Parent Material | Analyte | Parent Conc. | Aliquot | Final Vol. | Final Conc. |
|-----------------|---------|--------------|---------|------------|-------------|
| 1100721TCLP | I-HNO3 | 69.0-70.0 | 180 mL | 9 l | N/A |
| 1277916 | I-HCL | 36.5-38.0 | 90 mL | 9 l | N/A |

General Chemistry

Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2010**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 957578 **Method:** SW9012A Cyanide and Total

Prep Batch : 957577 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|------------------|--|
| 247899001 | RE15-10-7896 |
| 247899002 | RE15-10-7894 |
| 247899003 | RE15-10-7900 |
| 247899004 | RE15-10-7898 |
| 247899005 | RE15-10-7897 |
| 247899006 | RE15-10-7895 |
| 247899007 | RE15-10-7899 |
| 247899008 | RE15-10-7893 |
| 247899009 | RE15-10-8011 |
| 247899010 | RE15-10-8004 |
| 247899011 | RE15-10-8009 |
| 247899012 | RE15-10-8003 |
| 247899013 | RE15-10-8007 |
| 247899014 | RE15-10-8002 |
| 247899015 | RE15-10-8010 |
| 247899016 | RE15-10-8006 |
| 247899017 | RE15-10-8001 |
| 247899018 | RE15-10-8012 |
| 247899019 | RE15-10-8008 |
| 247899020 | RE15-10-8005 |
| 1202053284 | Method Blank (MB) |
| 1202053285 | 247899001(RE15-10-7896) Sample Duplicate (DUP) |
| 1202053286 | 247899002(RE15-10-7894) Sample Duplicate (DUP) |
| 1202053287 | 247899001(RE15-10-7896) Matrix Spike (MS) |
| 1202053288 | 247899002(RE15-10-7894) Matrix Spike (MS) |
| 1202053289 | 247899001(RE15-10-7896) Matrix Spike Duplicate (MSD) |
| 1202053290 | 247899002(RE15-10-7894) Matrix Spike Duplicate (MSD) |
| 1202053291 | 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: 247899001 (RE15-10-7896) and 247899002 (RE15-10-7894).

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. 1202053286 (RE15-10-7894) and 247899002 (RE15-10-7894).

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: 1202053291 (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:

03/22/2010

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: 10-2010 GEL Work Order: 247899

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

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7896
Sample ID: 247899001
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 5.93%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 65.7 | 242 | ug/kg | 1 | AXC2 | 03/04/10 | 1413 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7894
Sample ID: 247899002
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 26.9%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 101 | 87.8 | 323 | ug/kg | 1 | AXC2 | 03/04/10 | 1416 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7900
Sample ID: 247899003
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 8.17%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 69.9 | 257 | ug/kg | 1 | AXC2 | 03/04/10 | 1423 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 Pl. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7898
Sample ID: 247899004
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 15.4%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 77.3 | 284 | ug/kg | 1 | AXC2 | 03/04/10 | 1424 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7897
Sample ID: 247899005
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 16.2%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 78.0 | 287 | ug/kg | 1 | AXC2 | 03/04/10 | 1425 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7895
Sample ID: 247899006
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 9.86%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 74.0 | 272 | ug/kg | 1 | AXC2 | 03/04/10 | 1426 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7899
Sample ID: 247899007
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 18.4%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 83.4 | 307 | ug/kg | 1 | AXC2 | 03/04/10 | 1427 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-7893
Sample ID: 247899008
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 28%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 97.7 | 87.4 | 321 | ug/kg | 1 | AXC2 | 03/04/10 | 1428 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8011
Sample ID: 247899009
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 14.7%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | | 272 | 70.0 | 257 | ug/kg | 1 | AXC2 | 03/04/10 | 1429 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8004
Sample ID: 247899010
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 11.8%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 72.7 | 267 | ug/kg | 1 | AXC2 | 03/04/10 | 1429 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8009
Sample ID: 247899011
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 23.5%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 149 | 79.4 | 292 | ug/kg | 1 | AXC2 | 03/04/10 | 1430 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8003
Sample ID: 247899012
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 24.7%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 85.2 | 313 | ug/kg | 1 | AXC2 | 03/04/10 | 1431 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8007
Sample ID: 247899013
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 24.6%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 129 | 88.4 | 325 | ug/kg | 1 | AXC2 | 03/04/10 | 1436 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8002
Sample ID: 247899014
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 8.04%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 63.7 | 234 | ug/kg | 1 | AXC2 | 03/04/10 | 1437 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8010
Sample ID: 247899015
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 10.6%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 74.6 | 274 | ug/kg | 1 | AXC2 | 03/04/10 | 1438 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8006
Sample ID: 247899016
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 7.09%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 71.8 | 264 | ug/kg | 1 | AXC2 | 03/04/10 | 1438 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8001
Sample ID: 247899017
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 29.4%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 89.2 | 328 | ug/kg | 1 | AXC2 | 03/04/10 | 1439 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

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 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8012
Sample ID: 247899018
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 5.71%

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 | 70.7 | 260 | ug/kg | 1 | AXC2 | 03/04/10 | 1440 | 957578 | 1 |
|----------------|---|----|------|-----|-------|---|------|----------|------|--------|---|

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

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Project: LANL ER Project

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8008
Sample ID: 247899019
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 10.9%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | U | ND | 73.3 | 270 | ug/kg | 1 | AXC2 | 03/04/10 | 1441 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

| Method | Description | Analyst Comments |
|--------|-------------|------------------|
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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: March 22, 2010

Client SDG: 10-2010

Client Sample ID: RE15-10-8005
Sample ID: 247899020
Matrix: R
Collect Date: 18-FEB-10 12:00
Receive Date: 24-FEB-10
Collector: Client
Moisture: 17.9%

Project: LANL01004
Client ID: LANL010

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|--|-----------|--------|------|-----|-------|----|---------|----------|------|--------|--------|
| Flow Injection Analysis | | | | | | | | | | | |
| <i>SW9012A Cyanide, Total "Dry Weight Corrected"</i> | | | | | | | | | | | |
| Cyanide, Total | J | 108 | 78.1 | 287 | ug/kg | 1 | AXC2 | 03/04/10 | 1442 | 957578 | 1 |

The following Prep Methods were performed

| Method | Description | Analyst | Date | Time | Prep Batch |
|------------------|------------------|---------|----------|------|------------|
| SW846 9010B Prep | SW846 9010B Prep | AXS5 | 03/04/10 | 1000 | 957577 |

The following Analytical Methods were performed

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

Quality Control Summary

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QC Summary

Report Date: March 22, 2010

Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
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Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 247899

| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|--------------------------------|-----------|--------|------|-----|-------|-------|--------|------------|----------|----------|-------|
| Flow Injection Analysis | | | | | | | | | | | |
| Batch | 957578 | | | | | | | | | | |
| QC1202053285 | 247899001 | DUP | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | AXC2 | 03/04/10 | 14:14 |
| QC1202053286 | 247899002 | DUP | | | | | | | | | |
| Cyanide, Total | | J | 101 | J | 138 | ug/kg | 31.4 ^ | (+/-342) | | 03/04/10 | 14:17 |
| QC1202053291 | LCS | | | | | | | | | | |
| Cyanide, Total | | 67900 | | | 45800 | ug/kg | 67.4 | (32%-157%) | | 03/04/10 | 14:12 |
| QC1202053284 | MB | | | | | | | | | | |
| Cyanide, Total | | | U | | 250 | ug/kg | | | | 03/04/10 | 14:11 |
| QC1202053287 | 247899001 | MS | | | | | | | | | |
| Cyanide, Total | | 5110 | U | ND | 5110 | ug/kg | 100 | (26%-158%) | | 03/04/10 | 14:14 |
| QC1202053288 | 247899002 | MS | | | | | | | | | |
| Cyanide, Total | | 6000 | J | 101 | 5250 | ug/kg | 85.7 | (26%-158%) | | 03/04/10 | 14:18 |
| QC1202053289 | 247899001 | MSD | | | | | | | | | |
| Cyanide, Total | | 5320 | U | ND | 5300 | ug/kg | 3.72 | 99.8 | (0%-30%) | 03/04/10 | 14:15 |
| QC1202053290 | 247899002 | MSD | | | | | | | | | |
| Cyanide, Total | | 6000 | J | 101 | 5690 | ug/kg | 8.12 | 93.1 | (0%-30%) | 03/04/10 | 14:19 |

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: 247899

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 | | | | | | | | | | |
| UJ | 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: 22-MAR-2010 10:07

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2010

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 | 04-MAR-2010 14:05:55 | OM_3-4-2010_13-55-23 | 151 | 150 | 101 | (90%-110%) | Yes |
| CCV | 04-MAR-2010 14:20:13 | OM_3-4-2010_13-55-23 | 103 | 100 | 103 | (90%-110%) | Yes |
| CCV | 04-MAR-2010 14:32:38 | OM_3-4-2010_13-55-23 | 104 | 100 | 104 | (90%-110%) | Yes |
| CCV | 04-MAR-2010 14:45:01 | OM_3-4-2010_13-55-23 | 104 | 100 | 104 | (90%-110%) | Yes |

| Sample Type | Run Date | Data File | Result | Limits | Within Limits |
|-------------|-----------------------------|-----------------------------|--------------|-----------|---------------|
| ICB | 04-MAR-2010 14:07:45 | OM_3-4-2010_13-55-23 | -1.31 | 10 | Yes |
| CCB | 04-MAR-2010 14:22:04 | OM_3-4-2010_13-55-23 | -1.38 | 10 | Yes |
| CCB | 04-MAR-2010 14:34:28 | OM_3-4-2010_13-55-23 | -1.42 | 10 | Yes |
| CCB | 04-MAR-2010 14:46:51 | OM_3-4-2010_13-55-23 | -1.45 | 10 | Yes |

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

| | | | | | |
|--------------------|-------------------------|---|---------------|--------------|-------------|
| Batch ID: 957577.0 | | Verified by: | | | |
| Analyst: | Alan Stanley | | | | |
| Method: | SW/846 9010B Prep | | | | |
| Lab SOP: | GL-GC-E-067 REV# 13 | | | | |
| Instrument: | Sartorius Balance B-007 | | | | |
| Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
| LCS | 1202053291 | Total Cyanide Solid LCS | URF1200957-01 | .25 | g |
| MS | 1202053287 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MS | 1202053288 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MSD | 1202053289 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MSD | 1202053290 | 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 |
|----------------------------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 1202053284 MB | 04-MAR-2010 10:00:00 | Soil | 0.5 | 25 | 50 | >12 |
| 1202053291 LCS | 04-MAR-2010 10:00:00 | Soil | 0.25 | 25 | 100 | >12 |
| 247899001 | 04-MAR-2010 10:00:00 | Soil | 0.55 | 25 | 45.45455 | >12 |
| 1202053285 DUP (247899001) | 04-MAR-2010 10:00:00 | Soil | 0.5 | 25 | 50 | >12 |
| 1202053287 MS (247899001) | 04-MAR-2010 10:00:00 | Soil | 0.52 | 25 | 48.07692 | >12 |
| 1202053289 MSD (247899001) | 04-MAR-2010 10:00:00 | Soil | 0.5 | 25 | 50 | >12 |
| 247899002 | 04-MAR-2010 10:00:00 | Soil | 0.53 | 25 | 47.16981 | >12 |
| 1202053286 DUP (247899002) | 04-MAR-2010 10:00:00 | Soil | 0.5 | 25 | 50 | >12 |
| 1202053288 MS (247899002) | 04-MAR-2010 10:00:00 | Soil | 0.57 | 25 | 43.85965 | >12 |
| 1202053290 MSD (247899002) | 04-MAR-2010 10:00:00 | Soil | 0.57 | 25 | 43.85965 | >12 |
| 247899003 | 04-MAR-2010 10:00:00 | Soil | 0.53 | 25 | 47.16981 | >12 |
| 247899004 | 04-MAR-2010 10:00:00 | Soil | 0.52 | 25 | 48.07692 | >12 |
| 247899005 | 04-MAR-2010 10:00:00 | Soil | 0.52 | 25 | 48.07692 | >12 |
| 247899006 | 04-MAR-2010 10:00:00 | Soil | 0.51 | 25 | 49.01961 | >12 |
| 247899007 | 04-MAR-2010 10:00:00 | Soil | 0.5 | 25 | 50 | >12 |
| 247899008 | 04-MAR-2010 10:00:00 | Soil | 0.54 | 25 | 46.2963 | >12 |
| 247899009 | 04-MAR-2010 10:00:00 | Soil | 0.57 | 25 | 43.85965 | >12 |
| 247899010 | 04-MAR-2010 10:00:00 | Soil | 0.53 | 25 | 47.16981 | >12 |
| 247899011 | 04-MAR-2010 10:00:00 | Soil | 0.56 | 25 | 44.64286 | >12 |
| 247899012 | 04-MAR-2010 10:00:00 | Soil | 0.53 | 25 | 47.16981 | >12 |
| 247899013 | 04-MAR-2010 10:00:00 | Soil | 0.51 | 25 | 49.01961 | >12 |

Prep Logbook

Batch ID: 957577.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

| Type | Sample Id | Description | Serial Number | Spike Amount | Spike Units |
|------|------------|---|---------------|--------------|-------------|
| LCS | 1202053291 | Total Cyanide Solid LCS | URF1200957-01 | .25 | g |
| MS | 1202053287 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MS | 1202053288 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MSD | 1202053289 | Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV | URF1269274-02 | .025 | mL |
| MSD | 1202053290 | 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 |
|-----------|----------------------|--------|--------------------|-------------------|--------------------|------------|
| 247899014 | 04-MAR-2010 10:00:00 | Soil | 0.58 | 25 | 43.10345 | >12 |
| 247899015 | 04-MAR-2010 10:00:00 | Soil | 0.51 | 25 | 49.01961 | >12 |
| 247899016 | 04-MAR-2010 10:00:00 | Soil | 0.51 | 25 | 49.01961 | >12 |
| 247899017 | 04-MAR-2010 10:00:00 | Soil | 0.54 | 25 | 46.2963 | >12 |
| 247899018 | 04-MAR-2010 10:00:00 | Soil | 0.51 | 25 | 49.01961 | >12 |
| 247899019 | 04-MAR-2010 10:00:00 | Soil | 0.52 | 25 | 48.07692 | >12 |
| 247899020 | 04-MAR-2010 10:00:00 | Soil | 0.53 | 25 | 47.16981 | >12 |

| Reagent/Solvent Lot ID | Description | Amount | Comments: |
|------------------------|-----------------------------------|----------|-----------|
| 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 | |
| W/CN100302-07 | 150 ppb CN Distilled ICV Standard | .0375 mL | |

This is runlog Lachat1

| Sample ID | Batch | Dilution | Analyst | Runtime | Dataset |
|--------------|--------|----------|---------|-------------------|----------------------|
| 200 ppb | | 1 | axc2 | 3/4/2010 13:58:46 | OM_3-4-2010_13-55-23 |
| 150 ppb | | 1 | axc2 | 3/4/2010 13:59:38 | OM_3-4-2010_13-55-23 |
| 100 ppb | | 1 | axc2 | 3/4/2010 14:00:30 | OM_3-4-2010_13-55-23 |
| 50 ppb | | 1 | axc2 | 3/4/2010 14:01:23 | OM_3-4-2010_13-55-23 |
| 10 ppb | | 1 | axc2 | 3/4/2010 14:02:16 | OM_3-4-2010_13-55-23 |
| CRDL 5.0 ppb | | 1 | axc2 | 3/4/2010 14:03:10 | OM_3-4-2010_13-55-23 |
| ICAL-00 | | 1 | axc2 | 3/4/2010 14:04:04 | OM_3-4-2010_13-55-23 |
| ICV | | 1 | axc2 | 3/4/2010 14:05:55 | OM_3-4-2010_13-55-23 |
| ICB | | 1 | axc2 | 3/4/2010 14:07:45 | OM_3-4-2010_13-55-23 |
| CRDL | | 1 | axc2 | 3/4/2010 14:09:35 | OM_3-4-2010_13-55-23 |
| 1202053284 | 957578 | 1 | axc2 | 3/4/2010 14:11:25 | OM_3-4-2010_13-55-23 |
| 1202053291 | 957578 | 25 | axc2 | 3/4/2010 14:12:18 | OM_3-4-2010_13-55-23 |
| 247899001 | 957578 | 1 | axc2 | 3/4/2010 14:13:11 | OM_3-4-2010_13-55-23 |
| 1202053285 | 957578 | 1 | axc2 | 3/4/2010 14:14:05 | OM_3-4-2010_13-55-23 |
| 1202053287 | 957578 | 1 | axc2 | 3/4/2010 14:14:58 | OM_3-4-2010_13-55-23 |
| 1202053289 | 957578 | 1 | axc2 | 3/4/2010 14:15:51 | OM_3-4-2010_13-55-23 |
| 247899002 | 957578 | 1 | axc2 | 3/4/2010 14:16:44 | OM_3-4-2010_13-55-23 |
| 1202053286 | 957578 | 1 | axc2 | 3/4/2010 14:17:36 | OM_3-4-2010_13-55-23 |
| 1202053288 | 957578 | 1 | axc2 | 3/4/2010 14:18:29 | OM_3-4-2010_13-55-23 |
| 1202053290 | 957578 | 1 | axc2 | 3/4/2010 14:19:21 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 14:20:13 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 14:22:04 | OM_3-4-2010_13-55-23 |
| 247899003 | 957578 | 1 | axc2 | 3/4/2010 14:23:52 | OM_3-4-2010_13-55-23 |
| 247899004 | 957578 | 1 | axc2 | 3/4/2010 14:24:44 | OM_3-4-2010_13-55-23 |
| 247899005 | 957578 | 1 | axc2 | 3/4/2010 14:25:35 | OM_3-4-2010_13-55-23 |
| 247899006 | 957578 | 1 | axc2 | 3/4/2010 14:26:28 | OM_3-4-2010_13-55-23 |
| 247899007 | 957578 | 1 | axc2 | 3/4/2010 14:27:19 | OM_3-4-2010_13-55-23 |
| 247899008 | 957578 | 1 | axc2 | 3/4/2010 14:28:13 | OM_3-4-2010_13-55-23 |
| 247899009 | 957578 | 1 | axc2 | 3/4/2010 14:29:06 | OM_3-4-2010_13-55-23 |
| 247899010 | 957578 | 1 | axc2 | 3/4/2010 14:29:59 | OM_3-4-2010_13-55-23 |
| 247899011 | 957578 | 1 | axc2 | 3/4/2010 14:30:53 | OM_3-4-2010_13-55-23 |
| 247899012 | 957578 | 1 | axc2 | 3/4/2010 14:31:46 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 14:32:38 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 14:34:28 | OM_3-4-2010_13-55-23 |
| 247899013 | 957578 | 1 | axc2 | 3/4/2010 14:36:18 | OM_3-4-2010_13-55-23 |
| 247899014 | 957578 | 1 | axc2 | 3/4/2010 14:37:11 | OM_3-4-2010_13-55-23 |
| 247899015 | 957578 | 1 | axc2 | 3/4/2010 14:38:03 | OM_3-4-2010_13-55-23 |
| 247899016 | 957578 | 1 | axc2 | 3/4/2010 14:38:56 | OM_3-4-2010_13-55-23 |
| 247899017 | 957578 | 1 | axc2 | 3/4/2010 14:39:48 | OM_3-4-2010_13-55-23 |
| 247899018 | 957578 | 1 | axc2 | 3/4/2010 14:40:41 | OM_3-4-2010_13-55-23 |
| 247899019 | 957578 | 1 | axc2 | 3/4/2010 14:41:33 | OM_3-4-2010_13-55-23 |
| 247899020 | 957578 | 1 | axc2 | 3/4/2010 14:42:25 | OM_3-4-2010_13-55-23 |
| 1202053292 | 957580 | 1 | axc2 | 3/4/2010 14:43:17 | OM_3-4-2010_13-55-23 |
| 1202053299 | 957580 | 25 | axc2 | 3/4/2010 14:44:08 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 14:45:01 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 14:46:51 | OM_3-4-2010_13-55-23 |
| 247907001 | 957580 | 1 | axc2 | 3/4/2010 14:48:41 | OM_3-4-2010_13-55-23 |
| 1202053293 | 957580 | 1 | axc2 | 3/4/2010 14:49:35 | OM_3-4-2010_13-55-23 |
| 1202053295* | 957580 | 1 | axc2 | 3/4/2010 14:50:28 | OM_3-4-2010_13-55-23 |
| 1202053297 | 957580 | 1 | axc2 | 3/4/2010 14:51:22 | OM_3-4-2010_13-55-23 |
| 247907002 | 957580 | 1 | axc2 | 3/4/2010 14:52:15 | OM_3-4-2010_13-55-23 |
| 1202053294 | 957580 | 1 | axc2 | 3/4/2010 14:53:09 | OM_3-4-2010_13-55-23 |
| 1202053296 | 957580 | 1 | axc2 | 3/4/2010 14:54:02 | OM_3-4-2010_13-55-23 |
| 1202053298* | 957580 | 1 | axc2 | 3/4/2010 14:54:55 | OM_3-4-2010_13-55-23 |
| 247907003* | 957580 | 1 | axc2 | 3/4/2010 14:55:47 | OM_3-4-2010_13-55-23 |
| 247907004 | 957580 | 1 | axc2 | 3/4/2010 14:56:40 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 14:57:33 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 14:59:22 | OM_3-4-2010_13-55-23 |

| | | | | | | |
|------------|--------|---|------|----------|----------|----------------------|
| 1202053295 | 957580 | 1 | axc2 | 3/4/2010 | 15:01:12 | OM_3-4-2010_13-55-23 |
| 1202053298 | 957580 | 1 | axc2 | 3/4/2010 | 15:02:05 | OM_3-4-2010_13-55-23 |
| 247907003 | 957580 | 1 | axc2 | 3/4/2010 | 15:02:58 | OM_3-4-2010_13-55-23 |
| 247907004 | 957580 | 1 | axc2 | 3/4/2010 | 15:03:50 | OM_3-4-2010_13-55-23 |
| 247907005 | 957580 | 1 | axc2 | 3/4/2010 | 15:04:43 | OM_3-4-2010_13-55-23 |
| 247907006 | 957580 | 1 | axc2 | 3/4/2010 | 15:05:35 | OM_3-4-2010_13-55-23 |
| 247907007 | 957580 | 1 | axc2 | 3/4/2010 | 15:06:28 | OM_3-4-2010_13-55-23 |
| 247907008 | 957580 | 1 | axc2 | 3/4/2010 | 15:07:20 | OM_3-4-2010_13-55-23 |
| 247907009 | 957580 | 1 | axc2 | 3/4/2010 | 15:08:11 | OM_3-4-2010_13-55-23 |
| 247907010 | 957580 | 1 | axc2 | 3/4/2010 | 15:09:06 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 | 15:09:58 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 | 15:11:48 | OM_3-4-2010_13-55-23 |
| 247907011 | 957580 | 1 | axc2 | 3/4/2010 | 15:13:39 | OM_3-4-2010_13-55-23 |
| 247907012 | 957580 | 1 | axc2 | 3/4/2010 | 15:14:32 | OM_3-4-2010_13-55-23 |
| 247907013 | 957580 | 1 | axc2 | 3/4/2010 | 15:15:27 | OM_3-4-2010_13-55-23 |
| 247907014 | 957580 | 1 | axc2 | 3/4/2010 | 15:16:20 | OM_3-4-2010_13-55-23 |
| 247907015 | 957580 | 1 | axc2 | 3/4/2010 | 15:17:13 | OM_3-4-2010_13-55-23 |
| 247907016 | 957580 | 1 | axc2 | 3/4/2010 | 15:18:07 | OM_3-4-2010_13-55-23 |
| 247907017 | 957580 | 1 | axc2 | 3/4/2010 | 15:18:59 | OM_3-4-2010_13-55-23 |
| 248045012 | 957580 | 1 | axc2 | 3/4/2010 | 15:19:52 | OM_3-4-2010_13-55-23 |
| 248045013 | 957580 | 1 | axc2 | 3/4/2010 | 15:20:45 | OM_3-4-2010_13-55-23 |
| 248045014 | 957580 | 1 | axc2 | 3/4/2010 | 15:21:38 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 | 15:22:30 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 | 15:24:20 | OM_3-4-2010_13-55-23 |
| 1202060243 | 960499 | 1 | axc2 | 3/4/2010 | 15:26:09 | OM_3-4-2010_13-55-23 |
| 1202060250 | 960499 | 1 | axc2 | 3/4/2010 | 15:27:01 | OM_3-4-2010_13-55-23 |
| 247908001 | 960499 | 1 | axc2 | 3/4/2010 | 15:27:53 | OM_3-4-2010_13-55-23 |
| 247908002 | 960499 | 1 | axc2 | 3/4/2010 | 15:28:47 | OM_3-4-2010_13-55-23 |
| 247908003 | 960499 | 1 | axc2 | 3/4/2010 | 15:29:41 | OM_3-4-2010_13-55-23 |
| 247997001 | 960499 | 1 | axc2 | 3/4/2010 | 15:30:34 | OM_3-4-2010_13-55-23 |
| 248001001 | 960499 | 1 | axc2 | 3/4/2010 | 15:31:29 | OM_3-4-2010_13-55-23 |
| 248034001 | 960499 | 1 | axc2 | 3/4/2010 | 15:32:22 | OM_3-4-2010_13-55-23 |
| 248038001 | 960499 | 1 | axc2 | 3/4/2010 | 15:33:15 | OM_3-4-2010_13-55-23 |
| 1202060244 | 960499 | 1 | axc2 | 3/4/2010 | 15:34:09 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 | 15:35:01 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 | 15:36:53 | OM_3-4-2010_13-55-23 |
| 1202060246 | 960499 | 1 | axc2 | 3/4/2010 | 15:38:42 | OM_3-4-2010_13-55-23 |
| 1202060248 | 960499 | 1 | axc2 | 3/4/2010 | 15:39:36 | OM_3-4-2010_13-55-23 |
| 248038002 | 960499 | 1 | axc2 | 3/4/2010 | 15:40:29 | OM_3-4-2010_13-55-23 |
| 1202060245 | 960499 | 1 | axc2 | 3/4/2010 | 15:41:22 | OM_3-4-2010_13-55-23 |
| 1202060247 | 960499 | 1 | axc2 | 3/4/2010 | 15:42:15 | OM_3-4-2010_13-55-23 |
| 1202060249 | 960499 | 1 | axc2 | 3/4/2010 | 15:43:07 | OM_3-4-2010_13-55-23 |
| 248039001 | 960499 | 1 | axc2 | 3/4/2010 | 15:44:01 | OM_3-4-2010_13-55-23 |
| 248046001 | 960499 | 1 | axc2 | 3/4/2010 | 15:44:52 | OM_3-4-2010_13-55-23 |
| 248046002 | 960499 | 1 | axc2 | 3/4/2010 | 15:45:45 | OM_3-4-2010_13-55-23 |
| 248053001 | 960499 | 1 | axc2 | 3/4/2010 | 15:46:39 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 | 15:47:31 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 | 15:49:22 | OM_3-4-2010_13-55-23 |
| 248053002 | 960499 | 1 | axc2 | 3/4/2010 | 15:51:13 | OM_3-4-2010_13-55-23 |
| 248053003 | 960499 | 1 | axc2 | 3/4/2010 | 15:52:07 | OM_3-4-2010_13-55-23 |
| CCV | | 1 | axc2 | 3/4/2010 | 15:52:59 | OM_3-4-2010_13-55-23 |
| CCB | | 1 | axc2 | 3/4/2010 | 15:54:49 | OM_3-4-2010_13-55-23 |

Original Run Filename: OM_3-4-2010_13-55-23.OMN created 3/4/2010 13:55:23
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-4-2010_13-55-23.OMN last modified 3/4/2010 15:55:54
 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 TCYANIDE | | Detection Time | ADF | MDF | Description |
|---|------|---------|-----------------------|-----------|-------------------|-----|-------|--------------|
| | | | Conc. (ug/L) | Area (Vs) | | | | |
| WCN100304-01 | 1 | S1 | 200 | 9.08 | 3/4/2010@13:58:46 | | | 200 ppb |
| WCN100304-02 | 1 | S2 | 150 | 6.91 | 3/4/2010@13:59:38 | | | 150 ppb |
| WCN100304-03 | 1 | S3 | 100 | 4.35 | 3/4/2010@14:00:30 | | | 100 ppb |
| WCN100304-04 | 1 | S4 | 50.0 | 2.45 | 3/4/2010@14:01:23 | | | 50 ppb |
| WCN100304-05 | 1 | S5 | 10.0 | 0.578 | 3/4/2010@14:02:16 | | | 10 ppb |
| WCN100304-06 | 1 | S6 | 5.00 | 0.340 | 3/4/2010@14:03:10 | | | CRDL 5.0 ppb |
| WCN100304-08 | 1 | S7 | 0.00 | 0.0240 | 3/4/2010@14:04:04 | | | 0.0 ppb |
| DQM Test: Minimum Correlation Coefficient | | | | | | | | |
| Result: | | | 0.99948 > 0.99500 | | | | | |
| Message | | | Pass | | | | | |
| Action | | | Continue | | | | | |
| WCN100304-07 | 1 | S8 | 151 | 6.88 | 3/4/2010@14:05:55 | | | ICV |
| Known Conc: | | | 150 | | | | | |
| DQM Test: > + Percent Relative Difference | | | | | | | | |
| Result: | | | 0.8 < 10.0 | | | | | |
| Message | | | ICV Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Percent Relative Difference | | | | | | | | |
| Result: | | | 0.8 < 10.0 | | | | | |
| Message | | | ICV Passed | | | | | |
| Action | | | Continue | | | | | |
| Calibration: | | | Table/Fig. 1 | | | | | |
| WCN100304-08 | 1 | S7 | -1.31 | 0.0240 | 3/4/2010@14:07:45 | | | ICB/CCB |
| Known Conc: | | | 0.00 | | | | | |
| DQM Test: > + Concentration Limit | | | | | | | | |
| Result: | | | -1.31 < 5.01 | | | | | |
| Message | | | ICB/CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | | | |
| Result: | | | -1.31 > -5.01 | | | | | |
| Message | | | ICB/CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| WCN100304-06 | 1 | S6 | 5.86 | 0.346 | 3/4/2010@14:09:35 | | | CRDL |
| Known Conc: | | | 5.00 | | | | | |
| DQM Test: > + Concentration Limit | | | | | | | | |
| Result: | | | 5.86 < 7.50 | | | | | |
| Message | | | CRDL Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | | | |
| Result: | | | 5.86 > 2.50 | | | | | |
| Message | | | Pass | | | | | |
| Action | | | None | | | | | |
| 1202053284 957578 MB | 1 | 1 | -2.31 | -0.0206 | 3/4/2010@14:11:25 | | | |
| 1202053291 LCS | 1 | 2 | 18.3 | 0.904 | 3/4/2010@14:12:18 | | 25.00 | |
| 247899001 | 1 | 3 | -0.820 | 0.0461 | 3/4/2010@14:13:11 | | | |
| 1202053285 DUP | 1 | 4 | -0.872 | 0.0438 | 3/4/2010@14:14:05 | | | |
| 1202053287 MS | 1 | 5 | 100 | 4.59 | 3/4/2010@14:14:58 | | | |
| 1202053289 MSD | 1 | 6 | 99.8 | 4.57 | 3/4/2010@14:15:51 | | | |
| 247899002 | 1 | 7 | 1.56 | 0.153 | 3/4/2010@14:16:44 | | | |
| 1202053286 DUP | 1 | 8 | 2.02 | 0.174 | 3/4/2010@14:17:36 | | | |
| 1202053288 MS | 1 | 9 | 87.4 | 4.01 | 3/4/2010@14:18:29 | | | |
| 1202053290 MSD | 1 | 10 | 94.8 | 4.35 | 3/4/2010@14:19:21 | | | |
| WCN100304-03 | 1 | S3 | 103 | 4.72 | 3/4/2010@14:20:13 | | | CCV |
| Known Conc: | | | 100 | | | | | |
| DQM Test: > + Percent Relative Difference | | | | | | | | |
| Result: | | | 3.1 < 10.0 | | | | | |

| | | | | | | | | |
|---|---|----|---------------|--------|-------------------|--|-------|-----|
| Message | | | CCV Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Percent Relative Difference | | | | | | | | |
| Result: | | | 3.1 < 10.0 | | | | | |
| Message | | | CCV Passed | | | | | |
| Action | | | Continue | | | | | |
| WCN100304-08 | 1 | S7 | -1.38 | 0.0208 | 3/4/2010@14:22:04 | | | CCB |
| Known Conc: | | | 0.00 | | | | | |
| DQM Test: > + Concentration Limit | | | | | | | | |
| Result: | | | -1.38 < 5.00 | | | | | |
| Message | | | CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | | | |
| Result: | | | -1.38 > -5.00 | | | | | |
| Message | | | CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| 247899003 | 1 | 11 | -0.646 | 0.0540 | 3/4/2010@14:23:52 | | | |
| 247899004 | 1 | 12 | -0.530 | 0.0592 | 3/4/2010@14:24:44 | | | |
| 247899005 | 1 | 13 | -1.15 | 0.0313 | 3/4/2010@14:25:35 | | | |
| 247899006 | 1 | 14 | 0.280 | 0.0956 | 3/4/2010@14:26:28 | | | |
| 247899007 | 1 | 15 | 0.0899 | 0.0871 | 3/4/2010@14:27:19 | | | |
| 247899008 | 1 | 16 | 1.52 | 0.151 | 3/4/2010@14:28:13 | | | |
| 247899009 | 1 | 17 | 5.29 | 0.321 | 3/4/2010@14:29:06 | | | |
| 247899010 | 1 | 18 | 0.0677 | 0.0861 | 3/4/2010@14:29:59 | | | |
| 247899011 | 1 | 19 | 2.55 | 0.198 | 3/4/2010@14:30:53 | | | |
| 247899012 | 1 | 20 | -0.401 | 0.0650 | 3/4/2010@14:31:46 | | | |
| WCN100304-03 | 1 | S3 | 104 | 4.77 | 3/4/2010@14:32:38 | | | 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 | | | | | |
| WCN100304-08 | 1 | S7 | -1.42 | 0.0192 | 3/4/2010@14:34:28 | | | CCB |
| Known Conc: | | | 0.00 | | | | | |
| DQM Test: > + Concentration Limit | | | | | | | | |
| Result: | | | -1.42 < 5.00 | | | | | |
| Message | | | CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | | | |
| Result: | | | -1.42 > -5.00 | | | | | |
| Message | | | CCB Passed | | | | | |
| Action | | | Continue | | | | | |
| 247899013 | 1 | 21 | 1.98 | 0.172 | 3/4/2010@14:36:18 | | | |
| 247899014 | 1 | 22 | -0.282 | 0.0703 | 3/4/2010@14:37:11 | | | |
| 247899015 | 1 | 23 | -0.685 | 0.0522 | 3/4/2010@14:38:03 | | | |
| 247899016 | 1 | 24 | -1.13 | 0.0322 | 3/4/2010@14:38:56 | | | |
| 247899017 | 1 | 25 | 0.385 | 0.100 | 3/4/2010@14:39:48 | | | |
| 247899018 | 1 | 26 | -0.640 | 0.0543 | 3/4/2010@14:40:41 | | | |
| 247899019 | 1 | 27 | 0.0545 | 0.0855 | 3/4/2010@14:41:33 | | | |
| 247899020 | 1 | 28 | 1.88 | 0.168 | 3/4/2010@14:42:25 | | | |
| 1202053292 957580 MB | 1 | 29 | -1.43 | 0.0185 | 3/4/2010@14:43:17 | | | |
| 1202053299 LCS | 1 | 30 | 18.7 | 0.924 | 3/4/2010@14:44:08 | | 25.00 | |
| WCN100304-03 | 1 | S3 | 104 | 4.75 | 3/4/2010@14:45:01 | | | 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 | | | | | |
| WCN100304-08 | 1 | S7 | -1.45 | 0.0178 | 3/4/2010@14:46:51 | | | CCB |
| Known Conc: | | | 0.00 | | | | | |

| | | | | | | |
|---|----------------|----|--------|--------|-------------------|-----|
| DQM Test: > + Concentration Limit | | | | | | |
| Result: | -1.45 < 5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | |
| Result: | -1.45 > -5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |
| 247907001 | 1 | 31 | 0.423 | 0.102 | 3/4/2010@14:48:41 | |
| 1202053293 DUP | 1 | 32 | 3.32 | 0.232 | 3/4/2010@14:49:35 | |
| 1202053295 MS | 1 | 33 | 45.9 | 2.15 | 3/4/2010@14:50:28 | |
| 1202053297 MSD | 1 | 34 | 66.1 | 3.06 | 3/4/2010@14:51:22 | |
| 247907002 | 1 | 35 | -0.678 | 0.0526 | 3/4/2010@14:52:15 | |
| 1202053294 DUP | 1 | 36 | -0.764 | 0.0487 | 3/4/2010@14:53:09 | |
| 1202053296 MS | 1 | 37 | 44.0 | 2.06 | 3/4/2010@14:54:02 | |
| 1202053298 MSD | 1 | 38 | 36.8 | 1.74 | 3/4/2010@14:54:55 | |
| 247907003 | 1 | 39 | 147 | 6.70 | 3/4/2010@14:55:47 | |
| 247907004 | 1 | 40 | 515 | 23.2 | 3/4/2010@14:56:40 | |
| WCN100304-03 | 1 | S3 | 105 | 4.80 | 3/4/2010@14:57:33 | 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 | | | | | |
| WCN100304-08 | 1 | S7 | -0.946 | 0.0405 | 3/4/2010@14:59:22 | CCB |
| Known Conc: | | | 0.00 | | | |
| DQM Test: > + Concentration Limit | | | | | | |
| Result: | -0.946 < 5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | |
| Result: | -0.946 > -5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |
| 1202053295 MS | 1 | 33 | 48.1 | 2.24 | 3/4/2010@15:01:12 | |
| 1202053298 MSD | 1 | 38 | 41.0 | 1.93 | 3/4/2010@15:02:05 | |
| 247907003 | 1 | 39 | -0.540 | 0.0588 | 3/4/2010@15:02:58 | |
| 247907004 | 1 | 40 | -0.705 | 0.0513 | 3/4/2010@15:03:50 | |
| 247907005 | 1 | 41 | 0.810 | 0.119 | 3/4/2010@15:04:43 | |
| 247907006 | 1 | 42 | -1.32 | 0.0235 | 3/4/2010@15:05:35 | |
| 247907007 | 1 | 43 | -0.570 | 0.0574 | 3/4/2010@15:06:28 | |
| 247907008 | 1 | 44 | 0.767 | 0.118 | 3/4/2010@15:07:20 | |
| 247907009 | 1 | 45 | -1.10 | 0.0334 | 3/4/2010@15:08:11 | |
| 247907010 | 1 | 46 | -0.113 | 0.0779 | 3/4/2010@15:09:06 | |
| WCN100304-03 | 1 | S3 | 103 | 4.72 | 3/4/2010@15:09:58 | CCV |
| Known Conc: | | | 100 | | | |
| DQM Test: > + Percent Relative Difference | | | | | | |
| Result: | 3.1 < 10.0 | | | | | |
| Message | CCV Passed | | | | | |
| Action | Continue | | | | | |
| DQM Test: < - Percent Relative Difference | | | | | | |
| Result: | 3.1 < 10.0 | | | | | |
| Message | CCV Passed | | | | | |
| Action | Continue | | | | | |
| WCN100304-08 | 1 | S7 | -1.40 | 0.0200 | 3/4/2010@15:11:48 | CCB |
| Known Conc: | | | 0.00 | | | |
| DQM Test: > + Concentration Limit | | | | | | |
| Result: | -1.40 < 5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |
| DQM Test: < - Concentration Limit | | | | | | |
| Result: | -1.40 > -5.00 | | | | | |
| Message | CCB Passed | | | | | |
| Action | Continue | | | | | |

| | | | | | | | |
|---|---|----|----------------|----------|-------------------|--|-----|
| 247907011 | 1 | 47 | 0.796 | 0.119 | 3/4/2010@15:13:39 | | |
| 247907012 | 1 | 48 | -0.529 | 0.0593 | 3/4/2010@15:14:32 | | |
| 247907013 | 1 | 49 | -0.631 | 0.0547 | 3/4/2010@15:15:27 | | |
| 247907014 | 1 | 50 | -1.12 | 0.0329 | 3/4/2010@15:16:20 | | |
| 247907015 | 1 | 51 | -0.547 | 0.0584 | 3/4/2010@15:17:13 | | |
| 247907016 | 1 | 52 | -0.602 | 0.0560 | 3/4/2010@15:18:07 | | |
| 247907017 | 1 | 53 | -0.0840 | 0.0793 | 3/4/2010@15:18:59 | | |
| 248045012 | 1 | 54 | 2.35 | 0.189 | 3/4/2010@15:19:52 | | |
| 248045013 | 1 | 55 | 0.0806 | 0.0867 | 3/4/2010@15:20:45 | | |
| 248045014 | 1 | 56 | -0.941 | 0.0407 | 3/4/2010@15:21:38 | | |
| WCN100304-03 | 1 | S3 | 103 | 4.71 | 3/4/2010@15:22:30 | | 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 | | | | |
| WCN100304-08 | 1 | S7 | -1.05 | 0.0360 | 3/4/2010@15:24:20 | | 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 | | | | |
| 1202060243 960499 MB | 1 | 57 | -1.44 | 0.0185 | 3/4/2010@15:26:09 | | |
| 1202060250 LCS | 1 | 58 | 54.7 | 2.54 | 3/4/2010@15:27:01 | | |
| 247908001 | 1 | 59 | -1.24 | 0.0273 | 3/4/2010@15:27:53 | | |
| 247908002 | 1 | 60 | -1.23 | 0.0275 | 3/4/2010@15:28:47 | | |
| 247908003 | 1 | 61 | -1.31 | 0.0241 | 3/4/2010@15:29:41 | | |
| 247997001 | 1 | 62 | -1.39 | 0.0205 | 3/4/2010@15:30:34 | | |
| 248001001 | 1 | 63 | -1.27 | 0.0260 | 3/4/2010@15:31:29 | | |
| 248034001 | 1 | 64 | -1.28 | 0.0256 | 3/4/2010@15:32:22 | | |
| 248038001 | 1 | 65 | -1.45 | 0.0180 | 3/4/2010@15:33:15 | | |
| 1202060244 DUP | 1 | 66 | -1.77 | 0.00344 | 3/4/2010@15:34:09 | | |
| WCN100304-03 | 1 | S3 | 103 | 4.72 | 3/4/2010@15:35:01 | | CCV |
| Known Conc: | | | 100 | | | | |
| DQM Test: > + Percent Relative Difference | | | | | | | |
| Result: | | | 3.1 < 10.0 | | | | |
| Message | | | CCV Passed | | | | |
| Action | | | Continue | | | | |
| DQM Test: < - Percent Relative Difference | | | | | | | |
| Result: | | | 3.1 < 10.0 | | | | |
| Message | | | CCV Passed | | | | |
| Action | | | Continue | | | | |
| WCN100304-08 | 1 | S7 | -0.945 | 0.0405 | 3/4/2010@15:36:53 | | CCB |
| Known Conc: | | | 0.00 | | | | |
| DQM Test: > + Concentration Limit | | | | | | | |
| Result: | | | -0.945 < 5.00 | | | | |
| Message | | | CCB Passed | | | | |
| Action | | | Continue | | | | |
| DQM Test: < - Concentration Limit | | | | | | | |
| Result: | | | -0.945 > -5.00 | | | | |
| Message | | | CCB Passed | | | | |
| Action | | | Continue | | | | |
| 1202060246 MS | 1 | 67 | 115 | 5.25 | 3/4/2010@15:38:42 | | |
| 1202060248 MSD | 1 | 68 | 113 | 5.14 | 3/4/2010@15:39:36 | | |
| 248038002 | 1 | 69 | -1.15 | 0.0315 | 3/4/2010@15:40:29 | | |
| 1202060245 DUP | 1 | 70 | -1.85 | -3.69e-4 | 3/4/2010@15:41:22 | | |
| 1202060247 MS | 1 | 71 | 106 | 4.86 | 3/4/2010@15:42:15 | | |
| 1202060249 MSD | 1 | 72 | 117 | 5.36 | 3/4/2010@15:43:07 | | |
| 248039001 | 1 | 73 | -0.969 | 0.0395 | 3/4/2010@15:44:01 | | |
| 248046001 | 1 | 74 | -1.39 | 0.0206 | 3/4/2010@15:44:52 | | |

| | | | | | | | |
|---|---|----|---------------|---------|-------------------|--|-----|
| 248046002 | 1 | 75 | -1.19 | 0.0296 | 3/4/2010@15:45:45 | | |
| 248053001 | 1 | 76 | -1.46 | 0.0172 | 3/4/2010@15:46:39 | | |
| WCN100304-03 | 1 | S3 | 105 | 4.80 | 3/4/2010@15:47:31 | | 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 | | | | |
| WCN100304-08 | 1 | S7 | -1.39 | 0.0205 | 3/4/2010@15:49:22 | | 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 | | | | |
| 248053002 | 1 | 77 | -1.84 | 3.13e-4 | 3/4/2010@15:51:13 | | |
| 248053003 | 1 | 78 | -1.69 | 0.00722 | 3/4/2010@15:52:07 | | |
| WCN100304-03 | 1 | S3 | 104 | 4.77 | 3/4/2010@15:52:59 | | 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 | | | | |
| WCN100304-08 | 1 | S7 | -1.14 | 0.0318 | 3/4/2010@15:54:49 | | CCB |
| Known Conc: | | | 0.00 | | | | |
| DQM Test: > + Concentration Limit | | | | | | | |
| Result: | | | -1.14 < 5.00 | | | | |
| Message | | | CCB Passed | | | | |
| Action | | | Continue | | | | |
| DQM Test: < - Concentration Limit | | | | | | | |
| Result: | | | -1.14 > -5.00 | | | | |
| Message | | | CCB Passed | | | | |
| Action | | | Continue | | | | |

Analyte Properties Table for OM_3-4-2010_13-55-23.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 |

Channel 1: Current View

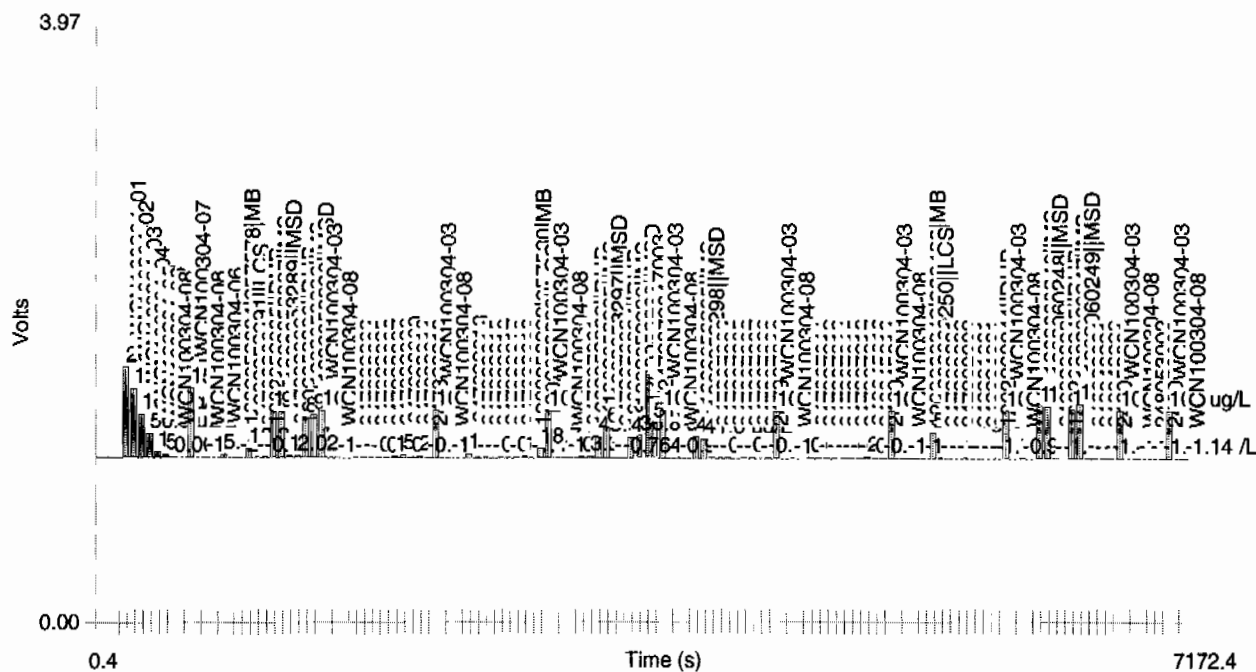


Table 1: TCYANIDE

| | Conc. (ug/L) | Rep | Peak Area (Volt-s) | Peak Height (Volts) | % Residual | Detection Date | Detection Time |
|---|--------------|-----|--------------------|---------------------|------------|----------------|----------------|
| 1 | 200 | 1 | 9.08 | 0.603 | -0.2 | 3/4/2010 | 13:59:49 |
| 2 | 150 | 1 | 6.91 | 0.459 | -1.3 | 3/4/2010 | 14:00:41 |
| 3 | 100 | 1 | 4.35 | 0.290 | 4.9 | 3/4/2010 | 14:01:33 |
| 4 | 50.0 | 1 | 2.45 | 0.161 | -4.8 | 3/4/2010 | 14:02:26 |
| 5 | 10.0 | 1 | 0.578 | 0.0367 | -7.9 | 3/4/2010 | 14:03:19 |
| 6 | 5.00 | 1 | 0.340 | 0.0210 | -9.3 | 3/4/2010 | 14:04:13 |
| 7 | 0.00 | 1 | 0.0240 | 7.56e-4 | | 3/4/2010 | 14:05:07 |

Figure 1: TCYANIDE

